



Evaluation of the Alpururulam Healthy Skin and Community Wellness project and the Utopia Homeland Community Gardens project, September 2014



Human Capital Alliance

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Acknowledgements

We acknowledge this country as belonging to the Aboriginal and Torres Strait Islander peoples of Australia. Australia is the only place in the world where Aboriginal and Torres Strait Islander Australians belong. There is no place in Australia where this is not true.

We acknowledge and appreciate the time and efforts of the many Urapuntja and Alpururulam community members who made themselves available to provide valuable information for the evaluation.

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Executive summary

Background

The Northern Territory Medicare Local (NTML) successfully applied for funding under the *Preventative Health Initiative* (PHI) component of the Commonwealth Government's *Rural Primary Health Services* (RPHS) program in 2009 to conduct two innovative preventative health projects. The two projects were both located in remote communities in the Barkly region of the Northern Territory:

- A healthy skin project in the Alpururulam (Lake Nash) community; and,
- A project to improve capacity for health eating in the Urapuntja (Utopia) Homelands communities.

The projects needed to address demonstrated high health care needs and utilise a community capacity building approach — which develops local solutions for local health issues.

The specific aim of the **Lake Nash Healthy Skin and Community Wellness** project has been to utilise a 'whole of community approach' to prevention through community education and a range of early intervention and preventative initiatives, encompassing a broad based multidisciplinary, and multi-agency approach. While the initial project activities focused on healthy skin, over time the activities have broadened to cover other health issues including nutrition. Project activities started in earnest in late 2011.

Key aims of the **Utopia Community Gardens** project were to enhance management of chronic diseases in the community's population, especially diabetes, through helping individuals make better lifestyle choices, improving access to fresh foods, and increased exercise — primarily through community gardening activities and knowledge sharing especially around a garden environment. The project was initiated in April 2010.

The NTML, keen to understand better the outcomes of their preventative health initiatives and seeking to inform management decisions on future activities, initiated an evaluation of the two projects. Human Capital Alliance was commissioned in April 2014 to undertake the evaluation research but effectively commenced data gathering at the end of July 2014 when Ethics Approval was granted.

Alpururulam Healthy Skin project

The Alpururulam Healthy Skin and Community Wellness project arose out of a pressing need to address preventable illness in a community exposed to high rates of skin infections and serious risk of heart and renal disease in children. The local health service manager and her community colleagues reasoned that it would be far better to work on intervening in this cycle of disease rather than just treating illness once established. This is sound logic and in its three years of active operation to date the project has achieved significant progress in reducing the incidence of scabies and skin infections through awareness-raising and influencing community behaviour to improve home and personal hygiene. With these improvements the project has more recently embarked on broader health promotion work in the areas of nutrition and physical activity.

Like all exploratory projects of this nature there have been stops and starts, strong features and more limited elements. The most positive aspects have centred around its strategic focus on inter-sectoral engagement to draw a broad range of community organisations into collective action. In particular there has been excellent focus on taking preventative work into the school community where hygiene awareness and behaviour change has been most marked. This represents a major step in re-orienting health resources towards the maintenance of health. Weaker areas have included a failure to monitor progress through utilization of key health data, and an inability to advocate successfully for the completion of the much needed community laundry facility at Alpurrurulam. A developing project area has been community engagement on improving nutrition in the community in the face of high rates of diabetes which has association with poor diet – this work is yet to demonstrate significant change in behaviour despite strong efforts to raise awareness.

It is recommended that the Alpurrurulam project be extended for another significant period. At this stage efforts need to be re-doubled to influence community behaviour in the areas of nutrition and physical activity, and this may necessitate boosting the range of allied health professionals involved in the project. Importantly the project must continue to prioritise skilling of local community people to be the flag-bearers for raising community awareness and promoting healthier lifestyles.

Utopia Gardens project

The gardens project arose from an identified need for the community to be eating healthier food to address a rise in a range of chronic diseases but especially diabetes. While some lack of knowledge in the community of healthy food choices was acknowledged, the main problem conceived was access to affordable fruit and vegetables. The project was intended to increase access through the cultivation and harvesting of community gardens.

Community gardens have a potted history across many remote communities throughout the NT, including in less harsh high rainfall environments of the Top End. Gardens have often commenced with great enthusiasm but have failed to be sustained when external support is withdrawn. In truth, the Utopia Gardens project represents a microcosmic example of the arguments for and against such projects — with many gardens established but only a few functioning with vigor and likely to be self sustaining in the absence of external support.

In choosing to focus on the successful gardens though and not the disappointments, the project can be judged kindly, and a case made for further investment. From the project the following positive outcomes have resulted:

- A core of gardeners (green thumbs) who have considerable unrecognised skill and could be developed further as teachers in their communities;
- A greater awareness, especially amongst people living around gardens, but more broadly across the communities, of the importance of healthy food and what constitutes healthy eating;
- A latent enthusiasm for gardens even in those communities without a successful garden that is almost certainly holding more hidden potential green thumbs;
- An awareness within the Store governance of the potentially important role the Store can play in the community's health; and,

- A pervading idea for a commercial garden project that has percolated through the main stakeholder organisations and is waiting to be gestated.

Like the Alpururulam project the Utopia Gardens project has its weaknesses. Chief amongst those has been an inconsistency in implementation, a failure to properly record the project activities and monitor the progress in outcomes it was seeking, and perhaps most telling, an inability to make progress visible to the community and stakeholders and to appropriately 'celebrate' the successes.

Still, it is recommended that the project be continued, but with prime responsibility transferred to an existing community organisation. In the short term the project should consolidate and build on its strong points — the capacity of its gardeners, the relationship with the school and other service organisations, the evolving influence in the Store. In the longer term it must look to developing genuine food security through better application of appropriate technology and an appropriately scaled garden project while still supporting the sustainability of individual community gardens.

The NTML's role

The two projects managed by NTML have been together an innovative initiative seeking to explore the much neglected space of health promotion and preventative work in remote Aboriginal health. Without being perfect, NTML's management has nevertheless maintained relatively consistent effort within two projects over a four to five year period where locally employed and managed resources might have been expected to be challenged. While some of the project objectives were not achieved, this might just require acknowledgement that health promotion requires a long-term community development focus for the achievement of health gain.

In the future the NTML role will require some restructuring of project management and support in the direction of building relevant strategic partnerships to support health promotion, particularly with local Aboriginal organisations, the NT Department of Health and the Barkly Shire. It will also be essential to draw health and other strategic data to monitor project impact and for reporting purposes. Project planning must centre around annual community based forums for best effect with frank appraisal of the past year's performance and clear objectives and measures laid out for the coming 12 months.

1. Background to the evaluation

Human Capital Alliance (International) Pty Ltd (HCA) was contracted by the NTML to undertake an evaluation of the following two projects:

1. Lake Nash (Alpurrurulam) Skin Disease and Community Wellness project;
2. Utopia (Urapuntja) Homeland Community Gardens project.

The NTML is a not-for-profit public company limited by guarantee. The NTML's mission is to 'Lead development and coordination of an equitable, comprehensive primary health care system and an engaged health workforce driven by community needs'. Through a procurement process, the NTML works collaboratively with health service providers to strengthen the capacity of the primary health care system. The NTML is a partnership between Aboriginal Medical Services Alliance Northern Territory (AMSANT), the Northern Territory Department of Health and the former General Practice Network Northern Territory (GPNNT) - now the Associate Membership Committee (AMC).

The two projects noted above were funded under the PHI component of the RPHS program, which states that the focus of funding should be on primary care services in "remote and very remote" communities, through preventative health activities, addressing demonstrated high health care needs¹. Projects funded from this source are required to²:

*"... utilise a community capacity building approach. This approach develops **local** solutions for **local** health issues ..."* (emphasis added by author)

A 'community capacity building' approach has been defined as³:

"... the increase in community groups' abilities to define, evaluate, analyse and act on health (or any other) concerns of importance to their members."

Essential characteristics of projects funded under the PHI component include:

- a focus on health needs that have been identified by the local community;
- designed with a wide range of community input to establish locally appropriate 'value for money' solutions to community identified health need; and,
- flexibility so that preventative health programs and activities respond to local needs and make best use of the available workforce.

The aim of the **Lake Nash Healthy Skin and Community Wellness** project has been to utilise a 'whole of community approach' to prevention through community education and a range of early intervention and preventative initiatives, encompassing a broad based multidisciplinary, and multi-agency approach. Activities started in earnest in February 2012.

Key aims of the **Utopia Community Gardens** project are to enhance management of chronic diseases through better lifestyle choices, access to fresh foods, and increased

¹ Department of Health and Ageing (2010) *Rural Primary Health Services Program: Preventative Health Initiative Operational Guidelines*. Commonwealth of Australia

² Ibid

³ Laverack, G, (2004) *Health promotion practice: power and empowerment*. Sage Publications: London

exercise through community gardening and knowledge sharing. The project was initiated in April 2010.

Both these projects were initiated on the basis of locally defined needs and locally developed solutions.

The evaluation focuses on activities and outcomes relating to the project during 2012-14. It is expected that the evaluation will contribute immediately to improved decision making on future similar projects, and in the longer term build the evidence base in this area where available literature is still limited. From a management perspective, the NTML will benefit from the evaluation in terms of future decision making around multi-year preventative health projects.

2. Evaluation approach

The methodology for the evaluation was the same for the two communities, although data collected varied somewhat according to the differing project objectives and expected outcomes. Accordingly each project is reported as a separate section of this report. The evaluation approach broadly included:

1. An evaluation of the projects' **implementation** using a broad management audit approach⁴;
2. An evaluation of the projects' **impact** through analysis of selected data and targeted consultations; and,
3. Goal free collection of qualitative data in order to especially explore issues that were not directly related to the objectives or outcomes, that is that were 'unintended'.

The evaluation methodology is detailed in Appendix A to this report and the steps are summarized below.

- Ethics application and approval received from Central Australian Human Research Ethics Committee
- Literature / document review
- Site visits which included a management audit comprising observations, interviews (stakeholders / community) and service statistics
- Analysis – interpretation of findings informed by reference to Ottawa Charter
- Final evaluation report.

Some differences in the generic approach were adopted in the two project sites the result of different geographic circumstances (a dispersed versus centralized community arrangement), varying levels of English language capability and of course the different objectives and project activities (for instance the gardens project lent itself to greater observation of outcomes). Some of these variations in method approach are detailed in Appendix A.

⁴ Chemlinsky, E. (1985) Comparing and contrasting auditing and evaluation, *Evaluation Review*, 9 (4):483-503

3. Report on Alpururulam Project - Healthy Skin and Community Wellness

A. Project background and description

The Alpururulam community became a 'community living area' in 1991, through which a small area of land was excised from Lake Nash Station enabling the traditional owners to live there, many residing in the location, by a significant water hole, all of their lives. Situated approximately 700 kilometers north-east of Alice Springs near the border with Queensland. It has a permanent population of approximately six hundred residents, and a transient population of approximately one hundred people. The community members have shown resilience and patience, successfully applying for Native Title in 2001 which was declared in 2012, allowing them rights to access, and hunt, gather and fish on the land and waters, the right to conduct cultural activities and ceremonies, the right to camp on the land, erect shelters and others structures and secures their right to negotiate over any future acts such as mining.

This project at Alpururulam was funded by the Commonwealth under the PHI stream of the RPHS Program. The RPHS Program had the following objectives:-

1. Provide access to supplementary allied health and primary care services
2. Promote coordinated multidisciplinary approaches to primary health care services
3. Establish effective community consultation for planning, implementing, reviewing programs
4. Provide access to health promotion and preventative health programs
5. Encourage rural and remote Australians to modify behaviours for better health and well-being.

The PHI stream under the RPHS focuses on the fourth objective, providing health promotion and preventative programs. Funding under PHI has been targeted to remote and very remote communities which demonstrate high health needs and limited access to health services – Alpururulam is certainly such a community.

The specific aims of the Alpururulam Healthy Skin and Community Wellness Project under the PHI have been to:

- Provide a comprehensive approach to addressing severe skin conditions which affect general health and well-being
- Employ a 'whole of community' approach to scabies prevention through community education and a range of early intervention and prevention measures
- Increase general health literacy through community education
- Raise awareness of the need to maintain good health through effective standards of hygiene

It was agreed under the service contract that community capacity building at Alpururulam would be achieved through: involving a number of key community and external stakeholders; collaborating with the community to identify interventions that would build community capacity; address the overarching issues of skin disease and environmental health through

community education on personal and household hygiene; and via managing community laundry facilities to ensure sustainability and availability to the community.

Funding

A budget of \$592,690 GST exclusive over four years from May 2010 to June 2014

Chronology of key project activity and events

A summary of this history helps to place the Project into a context of constant organisational change which have highlighted the years of its operation.

Mid 2009	Alpurrurulam Clinic Manager receives information about the PHI funding round
Late 2009	Application prepared with GPNNT and approved by Commonwealth
May 2010	Project awarded and funding received
2010	Difficulties recruiting project officer
Late 2010	First project officer recruited
Early 2011	Cyclone Yasi and heavy flooding prevents Project activity over the wet season
Mid 2011	Project Officer experiences difficulties in community consultation
July 2011	Significant unspent funds from 2010-11 are rolled over
Oct 2011	Project Officer resigns
Nov 2011	Second project officer recruited and comes on board
Early 2012	GPNNT transitioned over to the NTML and the PHI program shifted across to the NTML
Early 2012	Project expands its focus beyond skin health and hygiene to include nutrition
2012-13	Extra Allied Health resources provided – diabetes educator and podiatrist
Early 2013	NT Health restructure and Barkly Regional Health Services Coordinator position abolished
June 2013	Isa Skills (RJCP) ceased operations at Alpurrurulam and Rainbow Gateway takes over
Mid 2013	Strong Women Strong Babies Strong Culture (SWSBSC) program created at Alpurrurulam as a consequence of Project partnership and collaboration
Late 2013	Two SWSBSC workers commence work at Alpurrurulam
Late 2013	School Principal resigns
Late 2013	Community policeman posted elsewhere
Mid 2014	Government announcement that Medicare Locals will be replaced by Primary Health Organisations by mid 2015

As can be seen, the period from 2009 to 2014 has been marked by organisational instability and re-invention all around. This follows on from the restructuring of Local Governance in the NT in 2007-08 and the impact of the Emergency Intervention into Aboriginal Affairs in the

Territory in 2008. The instability is unlikely to stop any time soon with the NT Medicare Local, the auspicing body for this Commonwealth funded project, finishes its operations in June 2015. Clearly the project period has been challenging, with established relationships lost and new ones having to be formed on a frequent basis. Yet through all this the project has remained influential with important benefits accruing to the community.

Specific methodology applied to the Alpururulam evaluation

Beyond the analysis of key project documents (planning and trip reports, minutes) the Alpururulam evaluation utilized extensive stakeholder interviewing to gather information and perspectives. A list of those interviewed can be provided on request and illustrates the broad range of stakeholders canvassed.

To a lesser extent information was obtained from a focus group conducted as part of a project Healthy Lifestyle Committee Meeting. An outline of the focus group process, participants and outcomes can be seen at Appendix A.

For this project a review of health data was also considered highly relevant and data was sought in the following areas:

- Growth Awareness Action (GAA) data over recent years for 0 – 5 year olds
- Primary Care Information System (PCIS) data for
 - childhood renal infections
 - presentations for skin sores and scabies
 - childhood anaemia
 - failure to thrive rates
 - diabetes rates
- Rheumatic Heart Disease Register data for rates of rheumatic fever

To date it has not been possible to access any of this health data and this represents a key limitation for monitoring the impact of the project, and clearly limits this evaluation. Data on rates of trachoma in children at Alpururulam has been received and could be considered a marker of children's hygiene.

B. Effectiveness – Achievement of objectives

Objective 1: Reducing scabies and skin infections at Alpururulam

This project objective was assessed via review of the regular project and trip reports, interviews with a range of stakeholders associated with the project, the project focus group, and utilizing health clinic data on presentations for skin infections at Alpururulam.

Project and trip reports

For 2012-13 the following activities associated with reducing scabies and skin infections at Alpururulam were noted:

- Baby bathing kits provided for mums with newborns
- Whole of community Healthy Lifestyle Event 21 to 25 May 2013, with over 200 community participants
- Purchase of three industrial washing machines to be used in the Community Laundry
- Home-maker domestic skills training undertaken for local women through Isa Skills

- Production of the Alpururulam Healthy Skin DVD and planning for its launch
- Healthy Skin activities for 0-5s working with the Pre-school and Families as First Teachers (FAFT)
- Our Healthy Skin Story book produced with the Alpururulam school kids
- Delivery of skin health and rheumatic heart disease health education at Alpururulam school

Stakeholder interviews

The stakeholder interviews conducted in August 2014 tested people's perspectives on the following themes:

- Awareness of health promotion resources on scabies and skin health used at Alpururulam
- Effectiveness of project resources and health promotion activities focus on skin health
- Effectiveness of other health promotion activities
- Opinions on whether or not scabies and skin infections have reduced in recent years

Awareness of health promotion resources used for skin health at Alpururulam.

All interviewees were aware of at least one resource. The most common resources referred to were the posters placed around the community on healthy skin, and the Healthy Skin DVD made at Alpururulam. The following is a list of all resources noted:-

- The Healthy Skin DVD - Alpururulam
- 'Our Healthy Skin Story' booklet – Alpururulam school
- 'Soapy the Bug' with glow powder.
- The Menzies flip chart on Scabies and Skin Health
- The Menzies DVD on Skin Health from East Arnhem
- Skin health and hygiene posters – Alpururulam
- Jimmy the puppet doll (good food/bad food and hygiene)
- Jerry the Germ – NT Health Dept.
- Baby Book (zero to six months) – included hygiene information and messages.

As can be seen, several of these resources were developed elsewhere and brought in for use at Alpururulam, but others were developed in the community for local application. Some were developed with the assistance of local people and the ideas and art work of school children with a view to strengthening the interest and impact of the materials for local residents.

Effectiveness of project resources and health promotion activities focused on skin health

All stakeholders believe the project and its resources have had at least some positive impact on skin health in the community. Most agree that a good deal of effort has been applied to the project in terms of developing resources and working with other stakeholders.

“There have been good practical resources developed and there have been strong service provider partnerships”

The strongest effects have been claimed for work undertaken at the Alpururulam school and pre-school, as attested by the following comment:-

“The school and pre-school work has been very effective. There’s better attendance now at the Pre-school and the kids are much cleaner when they attend. The community, the parents, are now involved at the pre-school”

It seems apparent that this school-based activity has also increased awareness of the need for quick treatment of scabies and skin sores with the kids now knowing about the need for hand-washing and mums knowing they need to report any scabies infections. One local resident advised that:-

“These health promotion programs are a good way to go and they can make a difference with people understanding better what the problems are”.

But others were uncertain about the level of knowledge of skin health issues beyond the school environs. In particular some seemed concerned about the health of older people and the knowledge their carers have of hygiene and skin disease.

Effectiveness of other health promotion activities

Several respondents alluded to work undertaken by the project relating to nutrition, and in particular the efforts to educate residents about the need to reduce intake of sugary drinks. One advised:-

“The sugary drinks campaign has certainly raised awareness of the problems of sugary drinks, but I’m not so sure how much behaviour has changed as a result”

However, another felt the work must be having some effect. He recounted how he had been at the Store with his 8 year old nephew and offered to buy him a coke. To his surprise the boy responded “...no, I’ll have a juice. I don’t want coke”. It was felt some families at least are buying more juice now and have reduced their consumption of sugary products, but perhaps others had not as yet.

Another respondent felt there had been effective nutrition work undertaken at the Store with playgroups and talks with young mums regarding new and healthy foods.

“There are more fruit and vegetables sold now and the data will probably back this up”

One important initiative stated as influencing the effectiveness of the health promotion work was the formation of the Alpururulam Healthy Lifestyle Committee which has met regularly over the past two years and which is said to have been an important forum for participating community organisations to discuss broader health issues and to make joint plans on how to address these determinants of health.

But there are still some doubts about broader nutrition knowledge in the community:-

“I’m not really sure how much people know about nutrition and good tucka out in the community. We talk a lot about it here at the school and the kids get good nutritious

meals for breakfast and lunch, but we need to get more information out into the community”

This person suggested the need for more special days out in the community to highlight these issues to make sure the message is getting across. This sentiment is supported by views expressed at the Project Focus Group where it was felt more activities like the cooking competitions and talks with the footy players will help take the messages to other groups of people.

Opinions on whether or not scabies and skin infections have reduced in recent years

For those respondents who do not actually live at Alpururulam, or who only visit rarely, all felt on the basis of anecdote that the skin situation has improved in the community. One respondent sensed there is now much more awareness in the community regarding the problems associated with skin infections, and she felt in her time at the community the standard of skin health looks much improved.

Again the strongest benefits appear to have been obtained through the school. A couple of people indicated they were not sure of the situation in the rest of the community, but with the school kids the standard of hygiene and the condition of the kids skin was now much better. The following comments paint the picture:-

“There is a really good understanding of the need for healthy skin at the school and the problems caused by scabies” and,

“The kids are coming to school much cleaner and with their hair washed”

One service provider noted that the hygiene of the kids and zero to five year olds and the pre-schoolers is much better than for other communities she works at. As a consequence she felt there were much reduced rates of skin sores and scabies and that was a result of good management at the school.

To be sure a number of respondents noted that the rates of scabies in the kids can still go up and down on a seasonal basis:

“The health of kids skin has improved overall, but it can go up and down depending on whether people have been staying in other communities at footy carnivals and things”

But a number of people felt that these bouts were addressed quickly through more ready reporting of scabies and rapid response from the clinic staff. The following comment captures this changed behaviour:

“I think this is because of community awareness which overcame the shame and negative stigma associated with scabies and helped earlier reporting and much better management of these skin health conditions”

An interesting observation from two respondents was that the biggest improvements in skin health in the community occurred a couple of years ago and this better standard has been well maintained since then.

Health Clinic data

As noted, relevant health data has yet to be forthcoming to support observations that scabies incidence has reduced and skin infections have become less of a danger to health.

Assessment

Clearly considerable project effort has been put into combating scabies and promoting skin health in this remote community over a number of years now. Much of this effort has been focused on kids, parents and teachers in the school environs with the use of outside health promotion resources and the development of new resources, some engaging the school students and other community members in their creation.

There is little doubt that the project has produced good effects with the school community more aware of the importance of skin health, kids coming to school in more hygienic condition, more ready reporting of scabies infection and effective treatment from the health clinic. The result has been a marked reduction in the rate of skin sores observable across the community, particularly amongst children. However, the data on clinical presentations will be required to bear this out.

There is some uncertainty about program impact in reducing scabies in some other sections of the community beyond those associated with the school and its activities. In particular there is concern for the health of aged members of the community and the level of knowledge of their carers regarding skin health.

Objective 2: Building capacity for hygiene

This project objective was assessed via review of the regular project and trip reports and stakeholder interviews.

Project and trip reports

For the period 2012-14 the following activities associated with building capacity for hygiene at Alpururulam were noted:

- Letter of agreement signed with Barkly Shire to take delivery and arrange installation of Laundry washing machines
- Construction of laundry underway in late 2013
- Contract signed with Isa Skills to deliver home-maker training at Alpururulam. Training delivered in mid-2013
- Dietitian and FAFT conducted skin health and 'strong blood' education sessions at Alpururulam school
- Held Best Kept Yard Competition leading to tidier community and cleaner yards - winners announced at Cooking Competitions (Dec 2013)
- Facilitated health promotion activities at school with FAFT officer: including hair washing, combing, face washing, skin hygiene, nose blowing

Stakeholder interviews

The stakeholder interviews tested people's perspectives on the following themes:-

- Improvement in hygiene practices as a consequence of project activities
- People's capacity to maintain good hygiene
- Improvement in food hygiene

Improvement in hygiene practices as a consequence of project activities

Some people suggested that Alpururulam has always been one of the better communities in Central Australia for being tidy and clean, so it is a bit hard to tell if things have got better more recently. Several others interviewed, however, had a strong sense that hygiene generally has improved across the community in recent times, as indicated by this comment:-

“Hygiene is now a hot topic in the community, people can talk about it more readily. There's much more awareness of the importance of good hygiene and people get angry when they don't have access to appropriate resources like hot water”

A couple of people considered improvements to the home repairs program in the community was also having a positive effect on hygiene since problems with hot water services, taps and other household appliances are now being reported more readily and fixed more quickly, supporting people's ability to keep clean.

Once more there were strong comments in relation to the school and positive effects of the project:-

“The pre-school kids and zero to five year olds are certainly presenting much better over the past two years since I've been going out to Alpururulam. The parents are taking much more pride in their kids and this must be having a broader effect on the community”

One respondent highlighted the degree of change that has taken place by noting that, if a hot water system has broken down in a house and the kids cannot be washed in the mornings, sometimes the parents will not send the kids to school because they're not in the appropriate hygienic state. It appears concern about hygiene is influencing some people's behaviour.

There is uncertainty about the degree of hygiene information and awareness getting out into the broader community beyond those associated with the school, and some respondents advised that the project needs to be continued, but also expanded to achieve a greater reach:-

“I would say generally that families need more of this health information, but we're going to have to take it out to them in the community. We should have more community events to promote health messages, not just at the school but in community places too”

People's capacity to maintain good hygiene

In general those who were visitors to the community expressed uncertainty about whether or not community members now had an improved capacity to maintain a good level of personal and household hygiene. However respondents who were permanent residents tended to claim an improved situation in recent times:-

“I would say community education around hygiene has improved community understanding of the need for hygiene and people’s capacity to respond to hygiene issues”

Several reasons were offered for this improved capacity, beyond the community education efforts. It was noted that the Warte store has used some of its profits in recent years to provide community members with washing machines, and this has had an impact on personal hygiene. Others pointed to recent improvements in the home maintenance and repairs program provided by Rainbow Gateway (RJCP). Repairs are much quicker and people are more confident to report their breakdowns in the knowledge there would be a response within a reasonable timeframe. This has meant that taps and plumbing are retained in working order. More particularly it has resulted in less down time for broken hot water systems, susceptible to damage caused by the high calcium content of the community water supply.

Despite improvement there were still considered to be a number of barriers for families in their efforts to maintain good hygiene. Chief amongst these is the community water supply:-

“The quality of water in the community is a big issue too. It’s got way too much calcium in it and it’s not good for the plumbing, or for people. It’s not good enough and it needs to be fixed”

Even though there are now improved repair times for hot water systems damaged by the calcium, it is still common for households to go without hot water for periods:-

“Access to hot water can still be a problem – when the hot water is off for people then the hygiene in that family deteriorates”

Overcrowding is another concern mentioned by a number of respondents:-

“Sometimes there’s a lot of pressure on houses when relatives come and stay, and then it’s hard to keep everything working well and for people to keep clean”

Several people mentioned that it has been 10 or 15 years since the community last had any new houses built, and crowding for some families is getting out of hand again with all sorts of negative ramifications.

For some however it is the failure to complete the community laundry facility that remains the biggest stumbling block to hygiene and skin health:-

“The number one issue is the Community Laundry. This really needs to get sorted out and get started. People need to be able to wash their bedding and blankets and they cannot do this in their domestic machines – if they have washing machines”

The laundry project has been a community priority for a number of years, especially since receiving Commonwealth funding support in 2011-12, but the facility is still yet to come into operation in 2014. The building has been constructed, the washing machines are purchased, but there are still some modifications required to the flooring before the machines can be installed.

Many of these issues outlined above are beyond the control of individual community members, but have been the subject of the Healthy Lifestyle Committee discussions to see if joint approaches can bring about necessary changes and improvements.

Improvement in food hygiene

Respondents were uncertain about how people are managing food storage and safety in their homes. Whereas the school has a healthy food program with well-managed and hygienic facilities for providing the kids with a breakfast and lunch each day, there is no real way of assessing what is happening in people's homes.

It would appear that most residents have fridges at home that would enable effective storage of fresh food, but there are factors that mitigate against fridges being used for this purpose, as the following comments reveal:-

"People tend to shop every day, or even twice a day, so that they use any fresh food they buy quite quickly. I don't think they're storing big amounts of food in their homes"

By way of further explanation:-

"When extended family come and stay they also use whatever's in the fridge. So people tend not to buy much food or keep it in the house"

Another compromise to food hygiene was reported to be pest and rodent infestations:-

"There are problems with pests and cockroaches which make it harder to keep your food safe and clean"

Clinic Data

The Alpururulam Clinic has provided data on the rates of trachoma amongst children in the community. A key means of controlling or avoiding trachoma is through improved hygiene, and particularly face washing. The data reveal that in August 2011 seven children at Alpururulam were noted to have trachoma infections. A year later in 2012 the number of children infected was down to two, and in August 2013 there were no trachoma infections observed. Using trachoma as a marker of hygiene, this data supports the broader observations of improved physical and domestic hygiene in the community.

Assessment

There is a strong perception that both hygiene and the capacity for maintaining a good level of hygiene have improved in this community in recent years. Some of this improvement is considered to be the consequence of project-related activities such as the Best Kept Yard and Tidy Towns competitions. The project work at the school is strongly argued to have improved both the awareness of hygiene issues amongst the children and their parents, but also the actual state of personal hygiene as observed in the kids attending at the school. This improvement is further supported by the reduced rates of trachoma infections observed at Alpururulam over the past few years.

Beyond project effects, however, it is apparent that the improved home repairs and maintenance program under the Rainbow Gateway (RJCP) has greatly assisted

householders to keep home and personal hygiene at a better level through the maintenance of plumbing and showers in functional order and more reliable access to hot water in homes.

However there are still felt to be important barriers to hygiene maintenance, including on-going hot water system breakdowns, a worsening situation of overcrowding in many homes in the community, and the failure to complete the Community Laundry facility. All of these barriers are amenable to influence from the project to a greater or lesser degree. For example, the issue of overcrowding in housing is an important health-related issue beyond the resources of this project to address, yet may be amenable to improvement over time through project advocacy for better health.

Objective 3: Create Healthier Living through inter-sectoral collaboration

This project objective was assessed via review of the regular project trip reports, analysis of Healthy Lifestyle Committee meetings and activities, interviews with a range of project stakeholders, and analysis of some sales data at the Warte Store.

Project trip reports

For the 2012-14 period the following activities associated with creating healthier lifestyles at Alpururulam through inter-sectoral collaboration were noted:

- The NTML Project Manager negotiated the project visiting schedule in consultation with the Barkly Remote Health Services Coordinator to ensure well-coordinated visits of allied health staff.
- Regular attendance at Healthy Lifestyle Committee meeting and encouragement provided to community members to attend and raise concerns about community health issues.
- Provided support to the SWSBSC workers program to create opportunities for these women to engage with their own community effectively. The SWSBSC workers are a huge asset in the community and their involvement in the program increases community engagement and nutrition education in the community.
- Embarked on the Rethink Sugary Drink Campaign in close collaboration with the school and the Store. Activities included: presentation of sugar story to each school grade using creative story telling.
- Facilitated horticulture training resulting in dust suppression tree planting at community entrance.
- Worked on community education re healthy food and nutrition. Activities included: establishing a healthy snacking section of the store; developed 'shelf talkers' for strong blood foods; cooking activities with the early years at the school; developed 'feeding babies and little kids poster'; nutrition workshop with Young Guns Football Team; nutrition education with young mums at the Pre-school.
- Held men's and women's cooking competition at the basketball court. Prizes and plaques were presented.
- *Developed Stronger Futures Food Security Grant Submission* with Store Managers and Committee seeking funds for a kitchen garden linked to the Store Takeaway.

Analysis of Healthy Lifestyle committee activities

The Alpururulam Healthy Lifestyle Committee was initiated in October 2011 by the first project officer in consultation with community members. Its original focus was to:

“... provide local guidance, input and participation into promotion, education and activities that go to eradicate scabies and improve the home environment and hygiene and health of the residents of Alpururulam”

Its initial priorities for action included:-

- Supporting residents to plant fruit trees and grass to reduce dust
- Plan a “Healthy Home” competition with white goods or garden tools as prizes
- Plan a community clean-up day
- Provide residents with house cleaning products to encourage hygiene maintenance
- Advocate for the community laundry, pest control and fencing for homes

Since the initial meeting, there have been regular meetings of the Committee conducted at roughly 2-monthly intervals, supported by the NTML project officer and chaired by a local Aboriginal person. A review of the comprehensive minutes recorded for these meetings reveals several developments of relevance to the project’s inter-sectoral collaboration on hygiene and healthy living.

Firstly, and importantly, the membership of and participation in the Committee expanded from the original mix of local Aboriginal residents, the Clinic, Shire, GBM, school, Isa Skills, and GPNNT to include, over time, several other organisations including:

- The Warte Store
- Aged care
- NT Dept. of Health (Barkly Public Health)
- Indigenous Engagement Officer (FAHCSIA)
- NT Police
- Rainbow Gateway (RJCP)
- Night Patrol
- Strong Women Strong Babies workers
- an Alpururulam Community Board representative

This means that over the course of the project at Alpururulam, some 15 different agencies have had representation on the Committee engaging in discussions and planning for a healthier community. This is in addition to participation by a range of local community people. Such sustained participation in collaborative community action focused on improving health is quite possibly unprecedented for a remote community in the NT and represents an outstanding project achievement on the key objective of inter-sectoral collaboration.

Secondly, the development and expansion of the range of health-related issues discussed and prioritised at the Healthy Lifestyle Committee meetings over its lifetime also suggests a steady development of inter-agency engagement arising from this forum. As stated, priority issues in the beginning included the Laundromat, yard fencing, pest control, and dumped car bodies, and many of these issues have remained central to meeting agendas right up until

the current time. But several other issues have been introduced through the life of the project and have involved increased inter-sectoral activity. The local police joined the Committee and raised issues of community safety. The need for a new dump was introduced to the agenda as was discussions of the Shire greenhouse and horticulture training for tree planting and dust suppression. Importantly Project collaboration led to the advent of a Strong Women's Strong Babies Strong Culture program at Alpuurrulam and these workers commenced partnering in project activities in late-2013. Committee discussions have also stimulated activity to establish a community Housing Reference Group to focus on housing issues of local concern.

One aspect of concern in recent times regarding the sustainability of effective inter-sectoral collaboration has been complaint that the Healthy Lifestyle Committee is taking on too big a range of issues, that some issues brought up are essentially out of scope for the Committee or beyond its capacity to influence in any meaningful way. Some Committee members have protested that meetings have become less productive resulting in less regular attendance at Committee meetings by some agencies.

Stakeholder interviews

The stakeholder interviews tested people's perspectives on the following themes:-

- Number and range of community organisations involved in health projects
- General environmental conditions
- Standard of housing
- Community Laundry Project

Number and range of community organisations involved in health projects

A question asking respondents to list the organisations that have been involved to some extent in the Alpuurrulam Healthy Skin and Community Wellness Project produced the following list of organisations:-

- Alpuurrulam Health Centre
- Warte Store and staff
- Alpuurrulam school and teachers
- Rainbow Gateway employment and training agency
- Alpuurrulam office of Barkly Shire
- Alpuurrulam Strong Women's Strong Babies workers (NT Health)
- NT Health FAFT unit
- Alpuurrulam Police
- Alpuurrulam Indigenous Coordination Centre
- NT Medicare Local

Of these 10 entities, eight are local community based organisations. All have been participants in the Alpuurrulam Healthy Lifestyle Committee (HLC) meetings and most remain engaged through this Committee. The HLC has been the primary forum for the Project on broader community engagement and action on specific health issues and the broader social determinants of health.

But there have also been several community-wide events that have brought different people together on health issues; for example, the Tidy Towns days, Best Kept Yards, health promotion at football carnivals, Kidney Week and other similar activities.

General environmental conditions

Most respondents who are visitors to the community were not sure whether the general environmental conditions at Alpururulam have improved in recent times, although some suggested it has always been better than most other remote communities.

Others suggested there have been improvements recently, as the following comments describe:

“Many people are now watering their lawns – it looks nice and it keeps the dust down. There are garden projects and beautification around the community and more people have their own gardens”

Several people referred to the positive impact of the Tidy Yards competitions which appear to have sparked community interest and action to improve the environmental standard. One person noted there seems to be more community pride in how things look now.

Others however advised that significant problems still remain, talking about too much rubbish still lying around the community and highlighting the need for fences around people’s houses “....so they don’t get everyone else’s rubbish blown into their place, and also to keep dogs out and kids in”

Several people noted the issue of dumped car bodies dotted around the community as being a significant environmental and health concern.

Standard of housing

Several people said they weren’t in a position to comment on the housing standards at Alpururulam or whether they have improved in recent times – they weren’t familiar with people’s homes. Others pointed to some improvements:

“I’m not sure if there are more houses now, but there seems to be better management of houses through the repairs and maintenance program from Rainbow Gateway”

Most people however felt that things had gone backwards in relation to housing, complaining there have been no new houses built in the community since 1998.

“I haven’t seen obvious improvements in housing or quality of housing. People have become a bit despondent about their housing” and,

“We’re worried about overcrowding here and some houses have too many people in them”

One respondent said she currently lived in a house with 13 people.

The Community Laundry Project

All respondents felt the goal of establishing a community laundry at Alpururulam was a good idea with benefits for the community. The following comment makes the case:-

“The Community Laundry has long been a focus of many people on the community. They have really wanted this facility as a way of improving community and family hygiene. The big machines would make it possible to wash blankets and bedding which is a real problem area for scabies”

Despite this project being a community priority for the past three years, the facility has still not been completed and the washing machines are not yet in situ. There is enormous community disappointment and frustration on this account:-

“The unfinished laundry is in your face and something of a monument to failed collaboration – it is embarrassing for community people”

The community laundry is the subject of more detailed analysis later in this report, but clearly people feel that such a facility would support family efforts to maintain hygiene and avoid things like scabies, and profound disappointment that the project has taken so long.

Review of store sales data

Store data on sales of sugary drinks, water and fresh fruit and vegetables was sought to test any improvements in healthy purchasing decisions in the community as a consequence of the inter-agency engagement between the NTML project, the school and the community Store. The Warte Store made a number of positive changes to the store layout over the past five years which may have impacted on this purchasing behavior. These included a reduced chocolate range, healthy store takeaway, sugary drinks were moved to the back of the store and a healthy snacking fridge initiated at the front of the store which is stocked with water, sandwiches and healthy snacks. Any improvements observed in data may bear relationship to health promotion work undertaken at both the School and Store through the Project. There is no evidence of influence due to population trends.

Sugary drinks sales data

Table 1: Sales data for top 15 Sugary Drinks for 2011-12 and 2013-14 at Warte Store

2011-12			2013-14			Percentage increase or decrease
Brand	Unit sales	Litres	Brand	Unit sales	Litres	
Coke (1.25)	20,419	25,524	Coke (1.25)	20,938	23,172	+9.21%
Coke (375)	9,059	3,397	Coke (375)	8,339	3,127	-7.95%
Kirks fruta (1.25)	5,231	6,539	Kirks fruta (1.25)	7,218	9,022	+37.97%
Sprite (1.25)	1,548	1,850	Sprite (1.25)	7,413	9,266	+400.86%
Sprite (375)	2,505	939	Sprite (375)	3,255	1,221	+30.03%

2011-12			2013-14			Percentage increase or decrease
Brand	Unit sales	Litres	Brand	Unit sales	Litres	
Fanta (375)	1,960	735	Fanta (375)	2,924	1,096	+49.12%
Kirks Pasito (1.25)	2,345	2,931	Kirk's Pasito (1.25)	1,345	1,681	-42.65%
Lift (375)	2,061	773	Lift (375)	543	204	-73.61%
Fanta (1.25)	1,090	1,362	Fanta orange (1.25)	1,383	1,729	+26.95%
Schweppes Rasp (1.25)	1,470	1,837	Schweppes Rasp (1.25)	1,281	1,601	-12.85%
Schweppes Lemon (1.25)	1,829	2,286	Schweppes Lemon (1.25)	455	562	-75.42%
Schweppes Lime (1.25)	896	1,120	Schweppes Lime (1.25)	519	649	-42.05%
Schweppes Pash (1.25)	831	1,039	Schweppes Pash (375)	811	304	-70.74%
Schweppes Sunkist (1.25)	1,022	1,277	Coke (300)	1,756	527	-58.73%
Kirks Pasito (375)	778	292	Lift Lemon (1.25)	754	942	N/A
Total		51,901	Total		55,103	+6.17

Table 1 above gives the sales figures for the top 15 selling sugary drinks at the Warte Store, Alpururulam, for the periods 2011-12 and 2013-14. The figures reveal an increase by litres in the sales of these sugary drinks from 51,901 litres in 2011-12 to 55,103 litres in 2013-14, and increase of around 6.17% by litres. The total of all sugary drinks showed an increase of 9.92% from 57,798 litres in 2011-12 to 63,531 litres in 2013-14. On this basis it could not be claimed that the project campaign to reduce consumption of sugary drinks has had meaningful impact at this time as measured by drinks sales. However, it is important to note that the sugary drinks health promotion campaign has only been running for around the last 12 months, so it will be important to consider the 2014-15 figures as a more relevant measure of project impact.

For the same periods the sales of sugar free coke products (diet coke and coke zero) decreased marginally from 8,371 litres in 2011-12 to 7,896 litres in 2013-14, indicating there has not been any significant community shift to the purchase of sugar free products.

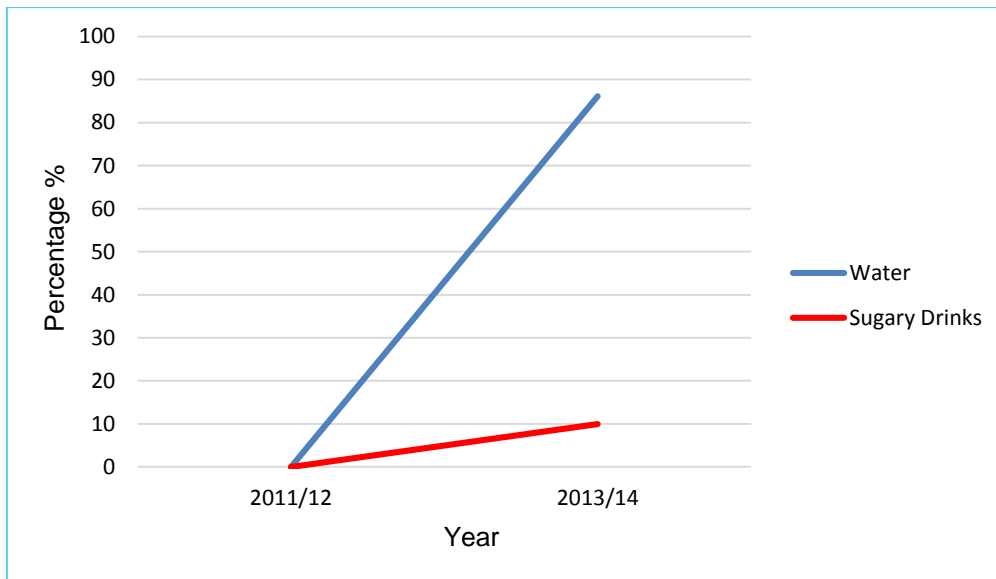
Water sales data

Sales data provided by the Warte Store Manager at Alpururulam reveals that in 2011-12 11,670 litres of water were sold from the Store compared to 21,718 litres sold in 2013-14.

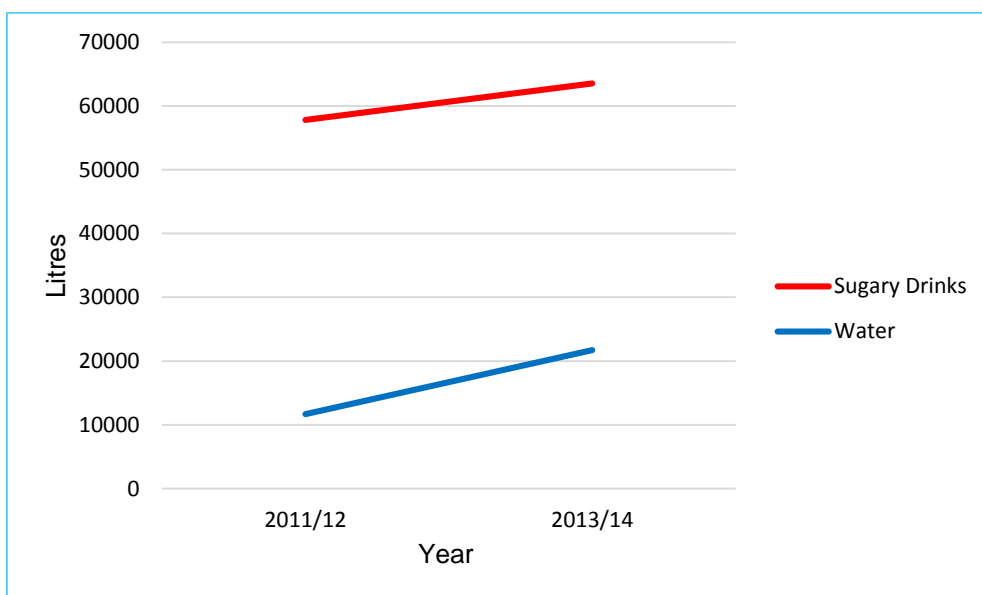
This represents an 86.1% increase in water sales by volume between these two periods and might suggest that some community members are taking heed of the health messages that water is the best way to quench thirst. However, as Table 1 for sugary drinks sales suggests, many people are still not acting on these messages.

In 2013, a water bubbler was installed outside the store. In the absence of usage data it is not possible to make any links to sales figures or behaviour change as a consequence of the water bubbler installation.

Graph 1: Percentage change in water and sugary drinks at Warte Store



Graph 2: Total sales for water and sugary drinks at Warte Store



Fruit and vegetables sales data

Table 2: Sales data for Fruit and Vegetables for 2011-12 and 2013-14 at Warte Store

2011-12			2013-14		
Type	Unit sales	Kilos	Type	Unit sales	Kilos
Fruit pack (700)	750	525	Fruit pack (700)	649	454
Salad pack (750)	732	549	Salad pack (750)	823	617
Vegie pack (1.0)	478	478	Vegie pack (1.0)	466	466
Tomatoes (500)	258	129	Tomatoes (1.0)	447	447
Onions ((1.0)	278	278	Onions (1.0)	727	725
Pumpkin	38		Pumpkin (1.0)	615	615
Potatoes (2.5)	723	1,807	Bananas (1.0)	1971	1,971
Lettuce	124		Apples (1.0)	385	385

It is difficult to undertake meaningful analysis of the Warte Store sales data on fruit and vegetables as the units of sale varied significantly between 2011-12 and 2013-14. In 2011-12 the units for different fruit and vegetables were recorded in individual pieces, perhaps reflecting a high volume of sales in smaller amounts of fruit and vegies, whereas for 2013-14 the sales units were mainly recorded in kilograms. However, some comparison has been made between more standardized items, as follows:-

- The Store sells a mixture of items as fruit packs, vegie packs and salad packs. When these packs are taken together by weight of sales, the figure for 2011-12 is 1,552 kilograms, and the figure for 2013-14 is 1,537 kilograms. There has been no growth in these sales over the two year period.
- It would appear there are increased sales of bananas, onion, tomatoes and pumpkin in recent times.

From these figures no definitive statement can be made about broad community changes in purchasing behaviour of Alpururulam residents in relation to fresh fruit and vegetables.

Assessment

The NTML project officer and Dietitian trip reports paint a picture of considerable and expanding inter-agency engagement in health promotion activities over the life of the project. An analysis of the activities of the HLC indicate again an expanding range of agencies becoming involved in discussions and planning regarding the broader determinants of health in the community and a range of shared activities and joint advocacy for health in response. This is a direct consequence of an explicit goal of the project to seek such broad engagement in efforts to improve conditions and health outcomes at Alpururulam.

This said, it must be noted that several health issues prioritised by the Committee for action have for various reasons not led to successful action to bring about change. In particular it would appear that little progress has been made in the following areas over the past three years:

- Fencing of community housing
- Provision of pest treatments for householders
- Removal of car bodies
- Completion of the community laundry

Of these, it is the latter that has proved the most frustrating for community members and has probably sapped people's confidence in the ability of the HLC to mediate change for the better – there is too much talk and not enough action. Importantly some cracks have appeared in the broader commitment of stakeholders to actively engage in the Health Lifestyle forum. This suggests that the Committee agenda has over-stepped its scope in a context of having several issues still unsuccessfully resolved. It implies the need for some restructuring of project strategy as mediated through the Committee and its processes.

In broad environmental terms it would appear inter-sectoral planning and engagement has helped to improve general community tidiness and the state of householders' yards with more lawns and gardens now in evidence, but much work remains for improvement in this area. The issue of overcrowding in housing remains a key health challenge for the community with an impact on outcomes for this project.

Disappointingly, the benefits of inter-agency work with the School and Store regarding sugary drinks and the need for fresh fruit and vegetables in the diet has not yet been reflected in the broad purchasing behaviour of community residents.

Objective 4: Reducing disease from skin infection and poor hygiene

This project objective was assessed via stakeholder interviews, the Project Focus Group, and review of health data collected at the Alpururulam Clinic.

Stakeholder interviews

The stakeholder interviews tested people's perspectives on the following themes:

- Awareness of scabies, skin sores and associated health risks
- Level of collaboration on health promotion
- Community health improvement

Awareness of scabies, skin sores and associated health risks

Improved awareness is a first step on the road to improved health outcomes. All respondents felt there was now a greater understanding in the community of health conditions associated with skin sores and their implications than prior to the project. As one respondent put it:-

“There is much more awareness of the dangers of skin infections in the community. This is demonstrated through people being much more prepared to report their scabies or skin infections and to get something done about it” and

Once again the strongest claims were made for community members associated with the school:-

“The kids can now identify scabies and they will report it. Parents are also much more aware and likely to do something about scabies if they find it”

But for some this increased awareness has qualifications. Uncertainty was expressed in interviews and in the focus group regarding just how much information some sections of the community were getting and how much they were taking on board. The complexity was explained by one respondent:

“I think everyone is hearing the story at least. But some won’t be fully aware of the dangers of heart and renal disease. Some may be understanding it, but they have too many more urgent pressures in their lives and they cannot really respond to skin problems or prioritise it ahead of other stuff”

In a similar vein another person explained:-

“There have been good impacts at the School with Mums and kids. The kids are much cleaner and are getting good tucka. But I doubt that the messages are going more broadly, or that people are really changing”

Yet another suggested more focus for health promotion messages now needed to go to old people and their caregivers, to teenagers generally and to women across the community.

Level of collaboration

The level of agency or inter-sectoral collaboration is also known to be an important ingredient for achieving behaviour change in communities and ultimately realizing health benefits. Respondents noted a strong level of such collaboration on health issues at Alpururulam. This has largely been achieved through the advent of the HLC as a key plank of the Healthy Skin and Community Wellness project. The following comment points to the critical role the HLC has played:

“I think there has been a good level of engagement between organisations at Alpururulam, much better than in other places. The HLC meetings have been very helpful in this regard”

Heath improvement

Without the aid of health data on presentations of skin infections and rates of scabies any views on overall improvements to skin health in the community fall into the realms of subjectivity. On this basis many interviewees were unwilling to offer an opinion as to whether improvements have actually been achieved. Several others have a sense that things have got much better in recent times. The following comment is representative:-

“We think health has improved. Younger people seem much healthier and the older people are okay. Overall the skin has improved in the community - mothers are reporting any scabies in their kids really quickly and it gets fixed”

However, as noted earlier we do have data indicating reductions in the incidence of trachoma infections in children over the life of the project, from seven children in 2011 down to zero in 2013. Health improvements in relation to trachoma incidence are strongly suggestive of improved conditions of hygiene amongst children at Alpururulam.

Clinic data

As stated, only limited strategic health data has been made available to the evaluation for analysis.

Assessment

Despite almost universal agreement amongst the project stakeholders that there is less scabies and skin infection apparent in the community since the advent of the project, the clinic data will be required to substantiate these observations.

D. Broad assessment criteria

The broader assessment criteria — focusing on the sustainability of the project, its accessibility within the community, and its transferability to other remote community sites in the region — were examined via the stakeholder interviews.

Rating for project effectiveness

Stakeholder interviews

Of the 22 stakeholders interviewed, only nine were asked to give a rating for the effectiveness of the Alpururulam Healthy Skin and Community Wellness Program on a scale of one to 10. None of the nine Aboriginal interviewees were asked to make this rating as it was felt such a scaled question may have caused confusion.

For the nine people who were asked to rate the project the scores ranged from six to nine, with an average score of seven point one. With no rating less than six this group of respondents clearly thought the project has been worthwhile with some positive achievements.

Project sustainability

Stakeholder interviews

All but one respondent hoped this health promotion program would continue at Alpururulam. Typical comments included:

“The program should be continued, and I think it should be further developed. The people at Alpururulam need more health information and support to become healthier”
and,

“This program needs to keep going. It’s working well at the school, now it needs to go beyond. We need to have community events, BBQs, film nights, or whatever it takes to get these messages to more people out in the community”

The lone voice against continuation argued it may be unfair to carry this project forward at Alpururulam, when other communities have much greater needs at the moment – funding should go to support the most needy communities.

In terms of what might prevent on-going sustainability of this work at Alpururulam, there were a number of concerns put forward. Clearly sustainability may be problematic in a circumstance where the NTML is due to have its funding ceased in mid-2015 and there is no clarity around what kind of organisation will replace it. A couple of people argued that the project would need tighter performance measures and clearer health data reporting if was to gain support for further funding, one stating *“..... it needs to be sharper in terms of its goals and measures”*

There was concern that the allied health staff need to be retained and it would be hard to sustain the work if these people were to leave – it can be very difficult to recruit allied health professionals to this kind of part-time remote role. In a similar vein, another person noted:

“With these projects you need a bit of luck with the individuals that get involved in the work on the ground. With Bev, Emma and Ingrid we have been very lucky. They have been totally committed to turning things around in health terms out at Alpururulam”

A notable comment was made about the central importance of getting the community laundry completed an open for business, stating that *“.... the current impasse is probably having a negative effect on people’s readiness to contribute”*

Significant amongst other comments were some fundamental principles:-

- You need the support of local organisations
- You need senior management on your side
- Mutual respect between program staff and service providers is essential
- Engagement with local Aboriginal people and working off their health priorities is pivotal for success
- High turnover of non-Aboriginal staff is a destabilizing influence
- Do not place too much work and too much responsibility on too few people – it will all fall over when they leave

Finally a couple of respondents felt that a continued focus on skin health and scabies might become a bit monotonous at Alpururulam – maybe a different theme and a fresh approach is now required.

Accessibility

Stakeholder interviews

Nearly all respondents noted the project’s special focus on children and mums, how effective this has been, and most felt this targeting to be fully justified. The following comment is illustrative:-

“The program has really reached families, mums and kids. This has been the focus, particularly from the program staff and the SWSB workers”

However, a number of people felt it would now be important to move on to working with other sections of the community:-

“Also we need a focus on the teenagers, they might be missing out on some of the hygiene and nutrition messages” and,

“Probably a lot of women are also missing out. We need to think about health messages for women in this community. We need a proper Women’s Centre” and,

“Maybe there needs to be more targeting of other vulnerable groups like the older people in the community”

There were also some suggestions on how to get to these other groups, including more health and lifestyle festivals, but also more talking with individual families and smaller groups who are having health issues. One person highlighted that *“.....we need more local people, local champions, to be talking with people and leading these health promotion efforts”*

Transferability

Stakeholder interviews

When asked if this model of health promotion work should be tried elsewhere, most felt this would be beneficial and appropriate, noting that other communities greatly need access to such programs. But there were some provisos offered, including:

- Any community targeted would need to be ready and willing
- The Project strategic plan and measures would need to be tightened up
- Need a stronger model to recruit and support the allied health professionals
- Strong community engagement would be a pre-requisite for success
- The project would need to be flexible enough to be adapted to the unique circumstances and needs of any particular community.

One person noted:

“It will be vital to have key local people at the centre of these health promotion efforts; i.e. local champions that people respect and will be prepared to listen to”

E. Assessment against Ottawa Charter Principles

The World Health Organisation (WHO) defines health promotion as the process of enabling people to increase control over and to improve their health. At its 1986 world Summit on health promotion in Ottawa, Canada, the WHO proposed five key action principals to guide health promotion efforts. These principles have stood the test of time and serve as a relevant framework against which to assist assessment of the merits of the Alpururulam Healthy Skin and Community Wellness Project. The principals are:-

- Build Healthy Public Policy:
- Create Supportive environments
- Strengthen community actions
- Develop personal skills
- Re-orient health services

Build healthy public policy

This Alpururulam health promotion project is the manifestation of Commonwealth initiated exploration of the concept of health promotion via community engagement, local capacity building, and inter-agency collaboration. Given its significant achievement in each of these areas and against its project objectives around skin health and hygiene to a lesser extent, it has the potential to make a significant contribution to health policy in the Aboriginal domain. It may be premature at this point in time, but further successful developments in project processes and achievements would justifiably support expansion of this health promotion framework into other remote contexts in the Northern Territory and beyond. In particular it may inform processes for bringing key service agencies together in collective local action to address the broader determinants of health in remote communities.

Create Supportive environments

At the Centre of the Alpururulam project is the goal of improving the local environment through educating and advising community people on necessary hygiene standards to maintain good health. Additionally it supports improving services to help facilitate people's ability to maintain these raised hygiene standards. To the extent that it has been successful in these endeavours it has made a significant impact on living conditions conducive to better health.

Strengthen community actions

The Alpururulam project has explicitly sought to recruit the enthusiasm, knowledge and expertise of local community agencies and individuals, both via the HLC forum and through collaborative health promotion initiatives with a number of these agencies, such as the Clinic, the School and Store. The community is undoubtedly in a stronger position now to plan and implement local projects to tackle health concerns than it was prior to the Project's activities.

Develop personal skills

All of this project's health promotion engagements with other community organisations have also involved increasing community members' knowledge and skills around hygiene, nutrition and health maintenance. It can reasonably be asserted that the project activities at the school have resulted in significant improvement in health and hygiene knowledge of school kids, their parents and many of the teachers. This is likely to have positive spin-offs for other sections of the community as school kids grow to become more knowledgeable teenagers and into adulthood.

Re-orient health services

The Skin Health and Community Wellness project has not so much re-oriented health services at Alpururulam away from clinic care, as it has added the dimension of community based preventative and health promotion capacity that was previously all but absent from the community's repertoire of health resources. The health clinic remains as busy and as relevant as ever, but the community now has greater knowledge and skills to reduce the flow of community residents into preventable illnesses requiring the resources of its clinical services.

F. Discussion of key project issues

To summarise the important evaluation findings from the interviews, project reports, the focus group and data collections, the Alpururulam Healthy Skin and Community Wellness Project has been a positive process, but with mixed results so far.

The strong features of the Project have been:

- Recruitment and retention of committed and diligent NTML personnel and sub-contracted allied health providers to promote and implement the project
- Increased community awareness of the importance of hygiene and the maintenance of healthy skin, particularly amongst the school community of students, parents and teachers
- Apparent reduced rates of scabies in the community (the data as still required to bear this out) and more rapid response to infections
- Apparent general improvements to community tidiness and hygiene
- Some increased community awareness of good nutrition and its importance, again associated most closely with the school community
- Strong level of community engagement as evidenced through the numbers of Aboriginal and non-Aboriginal people involved in project initiatives and a high level of community participation
- Successful inter-sectoral engagement for health promotion as manifested through the development and conduct of the HLC, but also seen in close project collaborations with the school, the Store, the RJCP, the Shire and other community organisations
- Improved community capacity to address broader health issues through familiarity with effective meeting processes and the building of personal skills of community people to engage in health promotion work
- Some re-orientation of health focus beyond the clinical domain and out into the community for preventative and health promotion work
- Effective collaboration and partnerships for the creation of SWSBSC program at Alpururulam

The weak points:

- Lack of regular or effective data retrieval on priority health measures, and therefore lack of strategic data reporting related to project objectives
- Inability to achieve outcomes in some areas of advocacy
- Inability to get the Community Laundry project across the line in the face of inter-agency complexity

- Limited health promotion reach into some sections of the community
- Limited achievement of behaviour change with regard to community nutrition priorities; that is, sugary drinks and fruit and vegetable purchases and consumption.

In response to these outcomes for the project, both positive and limited, there remain a number of challenges for consideration if the project is to go on to achieve its potential for the community at Alpururulam, but also as a prospective model for implementing effective health promotion work more generally. These challenges are discussed below.

Project future

It is widely accepted that health promotion work has long lead times for measurable impacts, firstly in terms of knowledge acquisition of the target population, later achievement of behaviour change arising from new knowledge, and ultimately to improved health outcomes as the desired result. On this basis it would be premature to close off this project after only three effective years of project activity and given the numerous positive impacts obtained so far. It would be more appropriate at this stage to review and re-calibrate project goals, take advantage of lessons learned to date and re-commit to on-going health promotion work at Alpururulam over the foreseeable future. The health picture of the community with high rates of preventable disease would support such a decision.

It has been suggested that the additional resources directed to this project at Alpururulam now need to be re-allocated to other communities with similar pressing needs for preventative work. The argument is that Alpururulam has had its opportunity and with the new knowledge attained through the project local people would be able to sustain necessary health promotion work into the future. However such sustainability would be difficult to achieve before more successes have been achieved and more local people and organisations are able to enjoy the fruits of their successes.

Changing emphasis of project goals

There is a degree of confusion over the key objectives of the project as a consequence of some shift of emphasis during the life of the project. The original project objectives under the PHI application were as follows:

- Reduce the problem of scabies and skin disease at Alpururulam
- Build community capacity to sustain good food hygiene and individual hygiene practices
- Create a healthier living and working environment for the Community by working across all sectors to address the identified needs
- Reduce the burden of disease and co-morbid conditions that arises from scabies and poor hygiene practices

These are essentially the objectives that have been assessed in this evaluation and are similar to the key project outcomes described in the evaluation request for tender. However the request for tender for this evaluation also has additional requirements for testing, being:

- The community can make healthier lifestyle choices and demonstrate increased awareness of healthy eating and engaging in physical activity
- The community has access to a community laundry to help maintain clean linen to assist in the reduction of skin disease.

These again are similar to the goals described in the Project Work Plan for 2013-14, which were:-

- Reduce incidence of skin disease in Alpururulam
- Reduce co-morbidities (diabetes, obesity, renal failure, cardiac failure, anaemia) through improved nutrition and exercise
- Increase community wellness

Despite having broadly similar project goals at various times over the project life, it can be seen that some differences of emphasis and broadening of range has come into play in the direction of increased focus on nutrition and even physical activity. Discussions with various stakeholders reveals that this change commenced in 2011-12 when it was felt that a singular emphasis on scabies was too negative, and indeed that skin health was improving sufficiently to allow a focus on other lifestyle issues requiring attention. An expansion of scope was also enabled by surplus funds available in 2011-12 as a consequence of a significant underspend in the previous year.

Whatever the reasons for the shift in objectives, it will be important going forward to clarify and re-negotiate project objectives to avoid confusion and unite all players behind common core aspirations for change.

Management support for the project

It is clear that the same level of project support in the form of a dedicated project officer will not be possible under future funding arrangements should project extension be decided. This provides the NTML with an opportunity to re-cast its management strategy for health promotion projects in the remote Aboriginal primary health domain. There will of necessity be far less physical presence in the community for project coordination, but this may allow for more strategic management and support of allied health staff contracted within the program and higher level strategic engagement with key stakeholder organisations, both internal and external to the community, to facilitate stronger project outcomes.

In particular, high level strategic partnerships for health promotion now need establishment or re-negotiation. An example of this need relates to the responsibilities for the provision of allied health services at Alpururulam via this NTML project versus the NT Government's visiting remote health services, and what services will remain available to the community in the event of the NTML project being wound up. Clear consultations between partners must be mandated to provide the necessary assurances.

Strategic Health data

The best health promotion efforts require comprehensive evaluation of process, impact and outcome for their validation. For both impact and outcome elements of evaluation, strategic data is a fundamental requirement, especially strategic health data. Projects that fail to collect, analyse and report annually on such data run the risk of losing project focus and may compromise their own efforts by not being able to back up their claims of success with hard figures. This project at Alpururulam must correct this deficiency as a matter of urgency.

Project planning

With restructured management support for the project, and improved access to strategic health data, will come greater capacity for clarification and re-negotiation of the core project goals for the coming period. Since there are many other organisations participating in project activities beyond the NTML staff, and given the importance of involving key local Aboriginal people in all initiatives, the need for project planning to be undertaken locally in the community now becomes paramount. Annual project planning on-site at Alpururulam will give the right messages to community stakeholders that they are the central players in addressing the broader determinants of health in the community, that they have both ownership and responsibility for bringing about the necessary changes.

The Community Laundry

The concept of establishing a central laundry facility at Alpururulam has been abroad in the community for a number of years now. Hopes were boosted when significant Commonwealth funding was forthcoming in 2011-12 to bring the project to fruition. Yet nearly three years later the Community Laundry remains incomplete and no industrial washing machines are turning over to the assist the community in efforts to improve the level of hygiene. While full responsibility for this initiative has never rested with the Alpururulam health promotion project, it has nevertheless been central to its advocacy efforts and its

vision for a cleaner community, healthier skin and less preventable chronic disease. It is essential that continued support from the project is maintained until the Laundry is up and running. While it remains unused it stands as a beacon to the challenges of getting building works undertaken in very remote communities. However, open and accessible to community members it may provide confidence in the community that collective action can bring about real change.

Support for allied health staff and breadth of services

The visiting allied health professionals (AHP's) are the key resources for this health promotion work. They are additional to the excellent health team that already exists at Alpururulam in the form of the Northern Territory Government (NTG) health clinic. The expertise of the AHPs in their various disciplines, and their charter to engage broadly across the community and beyond the clinical domain represents the special features of difference in this project model. As described above it has so far brought about strong community benefits.

It is therefore imperative that these professional staff are well-supported in order to maximise their tenure as contracted staff undertaking regular intensive community visits. Importantly their professional development needs for the context must be adequately addressed and that any recruitment required filling gaps is undertaken expeditiously so that the concept of a visiting team is maintained. It is also important that the team is further elaborated as the project goals vary in order to ensure the appropriate range of expertise is available to the community. Current deficiencies in this regard are in the areas of environmental health, where access to an environmental health officer would greatly benefit project endeavours, and physiotherapy would significantly enhance progress in the area of building physical activity in the community.

Local Aboriginal workforce in health promotion

As committed as the visiting allied health personnel have been, and the many other community stakeholders associated with the project, most of the non-Aboriginal staff will eventually finish their engagements at Alpururulam as other life priorities take them elsewhere. For this reason it is essential that local Aboriginal people are progressively integrated into activity under the project and into planning and management roles wherever and whenever possible. The Aboriginal residents of the community are the long-term stayers and ultimately the key resources for continuity - they can sure-up long-term sustainability and truly engage the local families and leaders. On-going Project support for the Strong Women's Strong Babies Strong Culture workers at Alpururulam, and also the Aboriginal Liaison Officers from the health clinic, will therefore remain a vital component of future health promotion planning. It may even be appropriate for this activity be elevated to the level of a principal project goal.

Inter-sectoral engagement

While the inter-sectoral engagement achieved by the Healthy Lifestyle Committee has been a hallmark of the Alpururulam project and a key barometer of successful partnership, it is now coming under challenge as a process with a number of long-term HLC goals still

unachieved and a sense from some participants that the agenda of issues is unrealistically large in scope. It is now time to review the prioritisation process for issues to re-invigorate the collaborative work of the Committee and to ensure any projects taken on have a greater chance of successful intervention. Further successes for the Committee will build confidence in community members that they can bring about necessary changes for health at Alpururulam and that the future, at least to an important extent, is in their hands.

Future proofing

The NTML is the auspicing entity for the Alpururulam Healthy Skin and Community Wellness Project. With the NTML due to cease operations in mid-2015, and with uncertain arrangements for transitioning to a new Primary Health Network under the Australian Government Coalition's reforms at the time of writing this report, the highest priority must now be directed to strengthening the project's functional processes, planning and reporting. This will provide the best opportunity for health promotion work to proceed at Alpururulam no matter what new arrangements are determined for an auspicing body for the project. Steps must be taken now and progressively reviewed to make sure the project can be handed over in sound shape.

G. Recommendations for future project activity

1. Project future

On the basis of evaluation against project goals and the Ottawa principles for health promotion, the Alpururulam Healthy Skin and Community Wellness Project should be prioritised for on-going funding and expansion into additional areas of health promotion work, notably nutrition and physical activity. To cease the Program now would compromise the sustainability of effort and run the risk of important gains to this point falling away.

2. Project management

The management and coordination of the project should now be re-structured to a more strategic footing, with fewer requirements for project officer support on the ground and a greater focus on building supportive partnerships to facilitate attainment of project goals at Alpururulam. In re-structured arrangements for management, priority should be given to the tasks of:

- Clear supervision processes for allied health staff
- Planned support and professional development for allied health staff
- Expeditious recruitment to vacant positions
- Close budget management and review
- Re-invigoration of stakeholder engagement in support of the Project and consideration for the development of MOUs with key partner agencies
- Sourcing additional funding for project-related activities
- Trouble shooting project challenges

3. Inter-sectoral Engagement

As a critical ingredient for successful action in community health promotion re-negotiate the membership and scope of the HLC to ensure the following:

- A smaller range of issues for action at any given time
- Effective follow through of all issues prioritised for action
- Further enhancing safety and security for the expression of Aboriginal residents' points of view re health issues in the community
- Continuation of good record-keeping for all meetings and dissemination of key decisions
- Efficient integration of the work of the Committee with other key committees in the community, including the Service Provider Committee, the Alpururulam Community Council, and the proposed Housing Reference Group

4. Project Planning

For the purposes of goal clarification and greater community ownership of project priorities, undertake annual project planning on-site at Alpururulam with all relevant service providers and stakeholders invited to participate. The following actions should be undertaken as part of the planning process:

- Thorough-going review of the previous year's activity and achievements
- Negotiation of an action plan for the coming 12 months of activity
- Development of clear performance measures for each action proposed
- Introduction of a process for participatory evaluation of project impact and monitoring on a regular basis throughout the year.

5. Project Data

As the prime means of validating health promotion work in the community strategic data must be collected and analysed, and then reported on an annual basis to the community and relevant stakeholders. As a minimum this data should include:

- Rheumatic Heat Disease Register data on incidence of rheumatic fever in the community
- Growth Assessment and Action (GAA) data on childhood anaemia and rates of failure to thrive in infants
- PCIS data on rates and control of diabetes, renal infections in children, and presentation rates for skin sores
- Store data on sales of fruit and vegetables and sugary drinks.

6. Building Community Capacity

The sustainability of health promotion programs in Aboriginal communities must be built around key local Aboriginal leadership if these communities are to be genuinely engaged in lifestyle change for improved health. To this end the Alpururulam project must prioritise the support, training and nurturing of local Aboriginal people as key resources in all project endeavours, and this should be reflected as a primary project goal.

7. Expanded Project Scope

Following on from productive health promotion work in the Alpururulam School and in engagement with the Warte Store, the project should now expand its focus to reach other sections of the community, including aged people and their carers, teenagers, and women in the community. This should be reflected more clearly in project planning and objectives going forward.

8. Range of AHPs in the Program

In line with an expanded project scope within the community to include more focus on health promotion in the areas of nutrition and physical activity, the project will need to maintain regular input from a diabetic educator and seek the services of a physiotherapist. To better address community environmental issues the project should seek or advocate for regular visits to the community of an Environmental Health Officer.

9. Community Laundry

As a priority, project management must continue to escalate the issue of the Community Laundry to high level discussions with the Barkly Shire to facilitate progress of the project towards completion at the earliest possible date. The project must support the maintenance of effective operation of the Laundry to meet the pressing needs of local community members.

10. Transition Planning

In view of the risks to continuation of the Alpururulam project associated with the uncertain future of the NTML, management must prepare a project transition plan to ensure the best possible preparation for the transition period, and this Plan must be regularly updated to match information as it comes to hand

4. Report on Utopia Gardens project

A. Description of project

Genesis of project

Utopia Homelands are serviced by the Urapuntja Health Service and approximately 350kms North East of Alice Springs with traveling time close to four hours, depending on road conditions. It has a number of unique elements. It is one of a minority of communities created by autonomous activism in the early phase of the land rights movement. It was neither a former mission, nor a government settlement, but was successfully claimed by Indigenous people who had never been fully dispossessed. Its people have expressly refused to countenance a municipal establishment, and instead live in approximately 16 [outstations](#) or clan sites, each with a traditional claim to the place. The largest outstation is Arlparra with up to 100 residents and the main store.

The original application for the Utopia Community Gardens project was drafted and submitted in November 2009 with funds allocated in the second half of the 2009 / 10 financial year. The application was crafted against the background of GPNNTs 'Urapuntja Enhanced Primary Health Care Services' (UEPHCS) program which was (and still is) providing a range of allied health services to the communities of Utopia Homelands in support of the Urapuntja Health Services. As part of this program, a dietitian was sub-contracted to provide visiting clinical services, and this dietitian who became the project facilitator identified and assessed the need for the gardens project.

The need was identified through consultations with 'community organisations' and 'community members' who expressed their concerns⁵:

"... regarding limited access to affordable fresh fruit and vegetables in [the] community. Although ... people's knowledge about good food choices and managing chronic conditions, is enhanced through better choices, it is very clear that without access to fresh foods, the knowledge gained can not be sustained or demonstrated."

In further support of the assessed need the grant application noted a recent study by the Baker Institute that showed diabetes prevalence had increased from 8% of the population to 25% in Utopia in "recent years".

In elaborating further on the consultations undertaken the grant application noted the project facilitator sub-contracted by GPNNT had:

"... discussed this option [community gardens] with community leaders and community members at three of the 16 outstations, and groups of people were very interested in developing this idea further. The project concept has also been discussed with the Urapuntja Health Centre staff, school, council, police and a variety of other groups who support the development of community gardens."

⁵ Rural Primary Health Services Program, Preventative Health Initiative, Application Form. November 2009.

On current levels of expressed interest (gauged through community interviews and discussed further below) there seems to be support for a ‘community garden’ solution at the micro level of families and some homeland communities, but uncertain support from the Utopia community Elders and traditional owners. In regards to the latter, it is instructive that a draft list of priority initiatives drawn up by the Urapuntja Aboriginal Corporation (UAC), the Committee of which is comprised mostly of Elders, does not mention the gardens project at all in a list of approximately 20 proposed initiatives — the closest any of the initiatives go to support is the following⁶:

“Development and implementation of a fully operational Land management program. There currently is no real Ranger program and it would give the people a program to work on their land to understand the need to have sustainable hunting practices and land management.”

Project objectives

A review of documentation associated with the community gardens project shows that the project objectives have not remained stable for the duration of the project — on the contrary there has been a significant evolution in the construction of the objectives around some abiding themes. What has prompted the changes is unclear. The evolution of the objectives from the original application for funding from the RPHSP (PHI) in 2009, through successive Project and Service Delivery Plans from 2010 to 2013, and the last Project Plan for 2013 – 14, is shown in Table 3.

Table 3: History of project objectives change

Original Application – November 2009	Project Plan Final – September 2010 ⁷	Project Plan for 2013 - 14
Improve health and nutrition of Utopia communities through increased access to affordable fruit and vegetables		Decrease chronic disease prevalence by, providing easy access to a nutritious food supply, increasing the communities’ understanding of the importance of a balanced diet, food hygiene and safety, and increasing physical activity
Support the development of community gardens within the identified outstations of the Utopia region, using a community development model	Objective 1 Support the development of community gardens within the identified outstations of the Utopia	Increase local food production through a community garden using a community development approach, therefore increasing the food

⁶ UAC, Indigenous Advancement Strategy Ideas, 2014 (provided by the CEO of the UAC).

⁷ Also Project Plans in 2011/12, and 2012/13.

Original Application – November 2009	Project Plan Final – September 2010 ⁷	Project Plan for 2013 - 14
	region, using a community development model	security of the Utopia Homelands
Increase food security by supporting the cultivation of fresh fruit and vegetables within outstations of the Urapuntja region	Objective 2 Improve food security and nutrition by supporting the cultivation of fresh fruit and vegetables within outstations of the Urapuntja region	
Facilitate skills transfer between people of the region who are experienced and knowledgeable in the cultivation of food in the harsh desert environment, to those community members that wish to learn these skills	Objective 3 Facilitate skills transfer between people of the region who are experienced and knowledgeable in the cultivation of food in the harsh desert environment, to those community members that wish to learn these skills	Build community capacity by improving the social capital, self esteem, skills and capabilities of community members and decreasing social isolation
Develop community gardens that can be sustained by community members with minimal additional support after three years	Objective 4 Develop community gardens that can be sustained by community members with minimal additional support after three years	

The 'original' objectives and those included in the Project Plans from 2010 to 2013 were associated with a number of performance indicators ("how will you know if you have achieved your objectives?") although not all of these were easily measured and no performance criteria were established to assess success.

The nature of the objectives changed again subtly for the evaluation. Five objectives were framed in *the Information for Submission - Expression of Interest for Lake Nash and Utopia Community Garden Projects Evaluation* (issued 14 March, 2014) as follows:

- An increase in the access to affordable and healthy food items through development of community gardens;
- Increased consumption of healthier foods by community members;
- Increased capacity for the community to prepare healthy meals using a community based approach such as a community kitchen model;

- Increased social and emotional well-being as a positive consequence for community members, in addition to improved food security and nutrition, and increased physical activity; and
- Improve health outcomes for diabetic patients.

It is these objectives that were adopted for evaluation purposes and are used as a basis of discussion in subsequent sections of the report on the Utopia Community Gardens project.

Project activities

In the early stages of the project the focus was on the gardens. This included community consultation to determine preferred type of cultivation for each community, to finalise the location and placement of the garden(s) and establish plans for distribution of produce within the community. Key community members who would take a leadership role in the project were identified.

Establishing the gardens was undertaken through the use of a variety of external resources. As much as possible this was done with, rather than for, community members.

As gardens matured and produced harvests, the project undertook skill and knowledge development activities with community members around the preparation of garden produce into healthy meals. This involved some informal cooking of harvested food, and a few formal demonstration cooking classes. A DVD was prepared that provided information on balanced diet, gardening and how to cook products harvested from the gardens.

The project also provided skill development and training programs for interested community members over a two year period delivered by appropriately qualified professionals. The project in the early days engaged local community workers (one full time equivalent) to lead and support the gardens and oversight the work undertaken by the community members.

Through the course of the project the project facilitator also engaged with changing the store policy and practice, school education, and health promotion. An outline of the originally proposed project activities, and how they relate to the project objectives (as at that time defined), is provided in Figure 1 which reproduces the project logic from a document created in 2013 to contribute to a shared understanding of the project following NTML staff turnover.

B. History of implementation

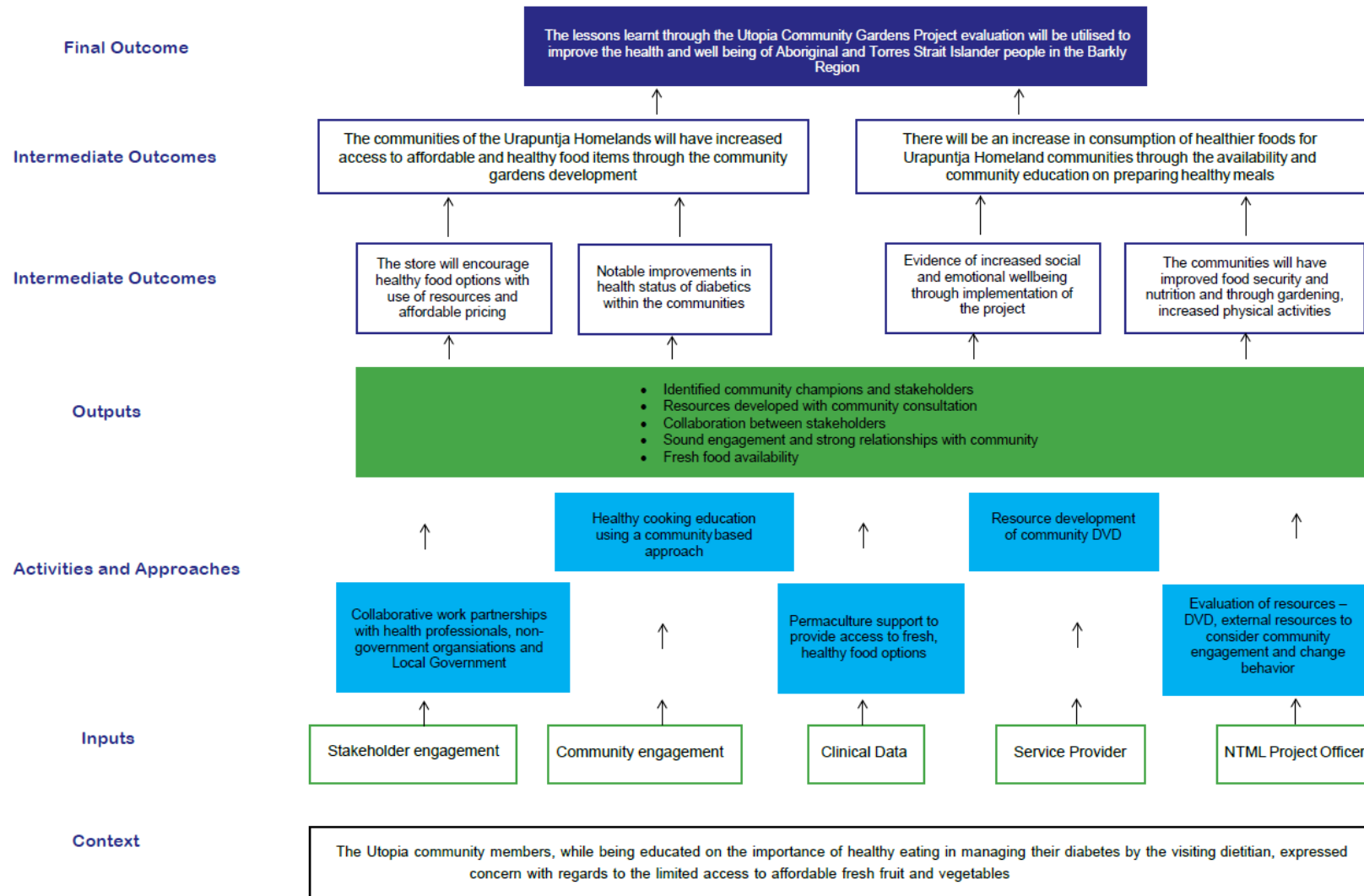
The project started in the second half of the 2009 / 10 financial year, although according to early reports the funds did not flow until April 2010 and the project therefore actually started sometime after. It has therefore been implemented for just over four years (up until June 2014) and is scheduled to continue at least until June 2015.

Numerous reports and an interview with the longest serving project facilitator testified to the project having adopted and followed a genuine community development approach. This translated into the project design (chosen solution) being the result of expressed need from the community, project implementation (such as communities chosen, garden site location decision making, types of plants propagated, etc.) being community led, the community

being responsible for outcomes, and community engagement being gauged as high. It is important to note that some gardens had been in existence at different times in one of more of the homeland communities prior to the project commencing. Indeed, one of the now Elders, under prompting from another, recounted that in the 1980's using a grant from Aboriginal and Torres Strait Islander Commission (ATSIC), a commercial garden of nearly four hectares had been established near the three Bore community lands and for four years supplied fresh vegetables to Alice Springs (with some also going to the local stores).

The initial project efforts were to establish three gardens of either vegetables or fruit trees. In the end most gardens were established with both, although clearly the trees were easier to maintain and less susceptible to periods of water deprivation (when communities left their homelands for extended durations). During the middle years of the project (2011 to 2012), many more gardens were established, indeed a much greater number than original expectations. The increased number was apparently the result of higher demand (more families being encouraged by the early gardens) and the availability of a coalition of willing resources coordinated by the project facilitator.

Figure 1: Project Logic for the Utopia Gardens project



These resources especially included two volunteers with permaculture skills as part of the Jack Thompson project⁸, resources from the Barkly Shire Council, resources of the Centre for Appropriate Technology, and an individual associated with both the Urapuntja Aboriginal Corporation and the Urapuntja Health Service at different times but with an abiding interest in community gardens. This last resource was able to bring into the project additional cash resources (\$25,000) from a private philanthropic source to build an additional garden for the Camel Camp community.

The first three gardens were planned for Camel Camp, Atheyle and Rocket Range communities⁹, but the last of these never got off the ground. The chronological order of the rest of the gardens commencing is difficult to pinpoint exactly, but an attempt to piece together the history from official half yearly and annual project reports and the project facilitator’s trip reports is provided in Table 4 below.

Table 4: Re-constituted history of gardens development based on available documentation

Homeland community	2010/11	2011/12	2012/13	2013/14
Camel Camp				
Rocket Range				
Atheyle				
Soapy Bore				
Kurrajong Bore				
Tomahawk				
3 Bore				
Mulga Bore				?(i)
Boundary Bore				
Apungalindum				
Arlparra (Cowboy Camp)				
Arlparra (Aged Care Service)				
Arlparra School				
Soakage Bore		?(ii)		
Mosquito Bore				
Urapuntja Clinic				

Notes:

(i) Mulga Bore was not visited during the evaluation and no notes exist on its current situation. Apparently it was one of the first gardens established using the wicking bed methodology

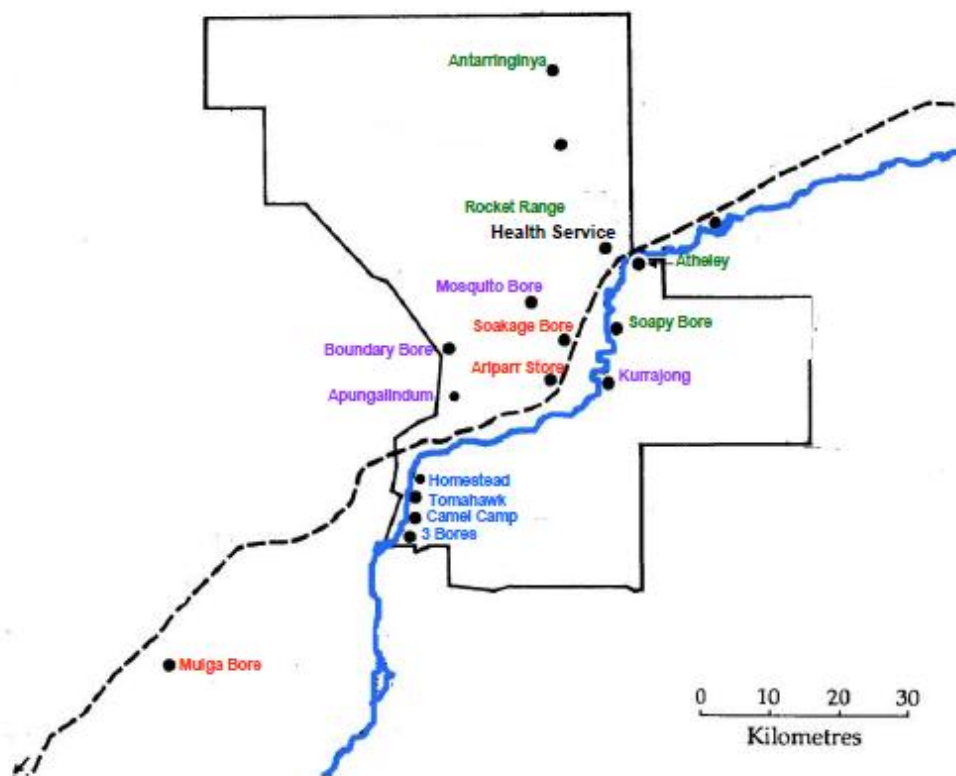
(ii) Soakage Bore was visited during the evaluation and evidence of a past garden established. It was located quite distant from any of the community’s houses. No mention of a garden at Soakage Bore was provided in any project reports.

⁸ These resources, two young men, were later contracted by the project facilitator to provide advice and support to the community gardens in reasonably regular but short visits of one to two weeks.

⁹ Original Application

Table 4 also attempts to track the survival of the gardens by indicating the years in which at least one crop was planted in the garden¹⁰ and at least partly harvested. It should be noted that in some gardens that have almost disappeared the fruit tree ‘orchards’ have tended to survive. The communities listed in Table 5 can be located geographically in the map of the Utopia Homelands provided in Figure 2.

Figure 2: Map of the Utopia Homelands showing separate communities



Wherever possible the community gardens were built using a ‘wicking bed’ technology¹¹. This technology was applied because it uses water much more efficiently and reduces the demand for constant watering associated with a conventional garden bed. The technical permaculture resources available to the project also noted that wicking beds seemed less vulnerable to weeds than conventional planting.

The beds were prepared under a range of different circumstances ranging from independent community effort (Boundary Bore) to external resource construction with paid community workers with in-between ‘shared effort’ (external resources and community members) working together. As noted above, construction activity was most intense in 2011 / 12. Gardens were (and remain) maintained by community members with encouragement from external resources in the form of seedlings, materials (hoses, tools, irrigation pipes) — where maintenance is sufficiently effective to enable continuous cropping of a community garden over a number of years one or more ‘green thumbs’ can normally be

¹⁰ The plant guide signs developed for the project as a means of educating community gardeners, one was placed in each of the gardens, promote at least three vegetable crops per year. It could be argued that the gardens should be allowed to lie fallow for the summer period given that water requirements are extreme and the land should in any case be allowed to recover. Two crops per year would seem like a reasonable return from most semi-arid region community gardens.

¹¹ A wicking bed is a garden bed with a waterproof lining that holds a reservoir of water at the bottom from which water is drawn upwards like a wick to the surface of the bed via natural soil osmosis or through the roots of plants in the bed.

identified with the garden. The 'green thumbs' tend to be women, but for some gardens the key person is a male.

In the earlier stages of the project up until 2012 good relations existed between the project facilitator and stakeholders at Clinic, the Shire and UAC and the school. Most of these stakeholders had been in place for many years and had developed close and strong collaborative working relationships, from which the project facilitator benefited (Handover Report, 2013):

“This group of staff were long term residents and had very strong links with community and were very supportive of the project. They offered mentoring and support to me as the visiting dietitian, practical advice about how to overcome hurdles (such as community members moving out of an outstation for sorry business therefore leaving the garden unattended), and also spoke to community members about utilising the gardens as part of health messages communicated at the clinic and outstations.”

This situation changed around 2012 to the extent that nearly all the stakeholders were replaced by 2013. The project facilitator then had to re-establish relationships with the new stakeholders and attempt to win their support for the project, a period during the project went into a bit of a holding pattern to some extent. Slowly a working relationship was established. When the long-term project facilitator also left in 2013 there was a hiatus in community visits as stop gap measures were taken, and community enthusiasm accordingly for the community gardens seems to have waned. Towards the end of 2013 and early 2014 the number of functioning gardens dwindled to only a few, a situation that has been reversed since the appointment and more regular visits of the current dietitian. During the most productive years of the project the project facilitator in addition to establishing the gardens undertook several other activities including:

- Developed and produced a video / DVD using local people and in local language (Alyawarr) seeking to educate community members on the technical elements of constructing and maintaining a community garden and what constitutes a balanced diet and how to prepare more nutritious meals. These resources are not polished but are highly subjective in content (using only local people) and when viewed certainly seemed to generate much interest.
- Conducted an occasional cooking demonstration to educate on how to prepare nutritious meals — these seem to have been very few in number and not so well patronized; and,
- Working with the Store management and the Store governance structure (the Committee) to influence Store policy in terms of product purchasing (more fresh foods), provision of takeaway food and to effect some minor merchandising changes (in terms of point of sale product display).

C. Effectiveness – Achievement of objectives

Objective 1 - Increase in access to good food

As Table 4 indicates there were a number of gardens established directly as a result of the project, a total of 17 in all in 13 different homelands. No target number of gardens was set in the beginning of the project, but it would be fair to suggest this number exceeded expectations. Some of the gardens in addition attracted outside resources — the construction of the garden at Camel Camp for instance was financed by a philanthropic donation, the garden at Cowboy's camp received considerable support by a church group from South Australia on one occasion, and volunteers from the Jack Thompson project donated some of their hours to the gardens project.

Of the 17 gardens established, only a handful has consistently delivered crops even from year to year and none are multi-cropping within a year. In a paper delivered to the 12th National Rural Health Conference by the former project facilitator, it was estimated that by that stage, 16% of the gardens were highly successful, 58% were moderately successful, and the rest had minimal impact on the community¹².

Loosely based on the above rating scale, a revised scale was developed for this evaluation to rank the gardens based on the following criteria:

- Community engagement in the garden construction;
- Evidence of continued cropping initiated by the community at least from year to year;
- Maintenance of garden infrastructure (fence, irrigation pipes / hose, tools);
- Evidence of seed / seedling production or at least independent purchase of seeds; and,
- Identified gardeners looking after the garden, without reliance on a single 'green thumb'.

Using these criteria a five point rating scale was constructed to rate each of the gardens shown earlier in Table 4, the results of which are shown in Table 5 below. A separate assessment of each garden's sustainability is also provided.

Table 5: Ratings of the success and sustainability of Utopia Community Gardens (as at August, 2014)

Homeland community garden	Success rating	Sustainability assessment*	Comment
Camel Camp	1	None	
Rocket Range	0		Garden never established
Atheyle	2	None	Reliant on a single gardener who has now passed away
Soapy Bore	5	High	
Kurrajong Bore	2	Possible	
Tomahawk	0	None	
3 Bore	5	High	There are two gardens at three Bore, both of which were built adjacent to a house, effectively in the 'back yard'. There is a high level of ownership
Mulga Bore	?		Reported by past project facilitator to have been a 'successful' garden
Boundary Bore	3	Moderate	This is a new garden with limited history but was created by the community
Apungalindum	4	Moderate	Gardeners are old and increasingly frail

¹² Summons, S. (2013) *Sowing the seeds of change: Urapuntja food gardens project*. 12th National Rural Health Conference, Adelaide., 7-10 April 2013

Homeland community garden	Success rating	Sustainability assessment*	Comment
Arlparra (Cowboy Camp)	3	Low	Relies on external stimulus and resources
Arlparra (Aged Care Service)	4	high	
Arlparra school	3	Moderate	Depends on teacher initiative
Soakage Bore	1	Limited	Original garden poorly placed
Mosquito Bore	1	Limited	
Urapuntja Clinic	4	High	Initial small garden established though the project. A larger garden has been built and supported by clinic staff, not really community 'owned'.

* Chance that a garden would be maintained or re-established without further external support in terms of motivation, seeds, fertilizer, infrastructure repairs, etc.)

Using this alternative rating three gardens (leaving out the clinic garden) or 20% of the communities scored highly and are most likely now self sustaining, another four (25%) have keen community gardeners but rely for various reasons on external support and be rated moderately likely to be sustained in the absence of support. The rest of the gardens (leaving out the clinic garden and that at the Mulga Bore community about which little is currently known) would only be likely to be planted with considerable external support and encouragement. A common problem cited by stakeholder observers with the gardens is the inability of garden 'owners' to commit their management for the duration of a crop (or be able to organise alternate maintenance arrangements), with a range of activities demanding their attention (family visits, sorry business, football carnivals, etc.). 'Automated systems', for instance grey water irrigation of gardens from washing machine outflows, are generally insufficiently robust to overcome garden management lapses.

On this record of success, and with relative agreement between the two rating efforts, different readers will interpret the data from their own perspective. Some will say there are now sustainable gardens in the Utopia homeland communities, and that these gardens have been forged in the harshest of conditions. Others will say the output from several years of investment is poor and that only a handful of gardeners now exist and who might have evolved even without the project.

The stakeholders interviewed in Utopia who knew enough of the history of the gardens, on average gave the project a score of four point six out of 10, rating it essentially not a success. The rating in the cold light of day is reasonable based on the objective to obtain a "... increase in the access to affordable and healthy food items through development of community gardens".

While one could argue the gardens had indeed increased the amount of healthy food in the communities, the absolute amount even after taking into account all of the gardens and all of the years of cropping, is quite small¹³, and if distributed over the community's population results in a very

¹³ Even the most avid 'back yard' gardener in favourable conditions would not hope to be self sufficient from their produce, and eliminate reliance on fresh food bought from a store. Gardens are a supplement not a substitute unless cultivated on a commercial scale.

small amount of food per person — certainly not enough to constitute a significant contribution to the diet. It is difficult to calculate but might be as low as one to two healthy meals per year.

Assessment

Establishing and maintaining a vegetable garden using exotic annual plant species is difficult in any environment, and especially so in the harsh conditions of Utopia. While the number of gardens has gone up and down, a solid core of sustainable gardens has emerged, offering an example that most people in the community know about. The interest to have gardens (although maybe not look after them appropriately) is very high, and remains latent in the communities even in the absence of a high number of active gardens.

The evaluation judgment is that in regard to Objective 1 the project has been a moderate success.

Objective 2 - Increase in consumption of good food

Given the limited impact on sustained good food availability from the gardens (however well intentioned), the main source of supply of healthy food, including fresh fruit and vegetables, will be the store at Arlparra or one of the other four stores within or near the Utopia Homelands. Store statistics on sales of fresh food have not been made available¹⁴ but stakeholders associated with the store indicated that sales of healthy food categories remained a small proportion of the store’s business and that growth in sales of health foods was negligible over the past three to four years.

Store stakeholders indicated that the focus for the last several years had been on consolidating store finances and accordingly the capacity to support healthy food options by discounting appropriate items or changing merchandising approach had been limited. Remote area stores, even in a good year, operate only off small profit margins. This is well illustrated in Table 6 which shows the financial operating conditions of the Arlparra Store for the last two financial years¹⁵.

Table 6: Snapshot financial conditions for Arlparra Store, 2013 and 2014 financial years

	2012/13		2013/14	
	Budget (\$'s)	Actual (\$'s)	Budget (\$'s)	Actual (\$'s)
Sales	3,250,000	2,874,315	3,250,000	2,775,088
Cost of sales	2,073,500	1,866,721	2,073,500	1,885,320
Gross profit (target of 30%)		35%		32%
Expenses	1,024,048	1,072,786	1,012,500	832,564
Net profit (target of 5%)	152,452	-65,192 (-2%)	164,000	57,204 (+2%)

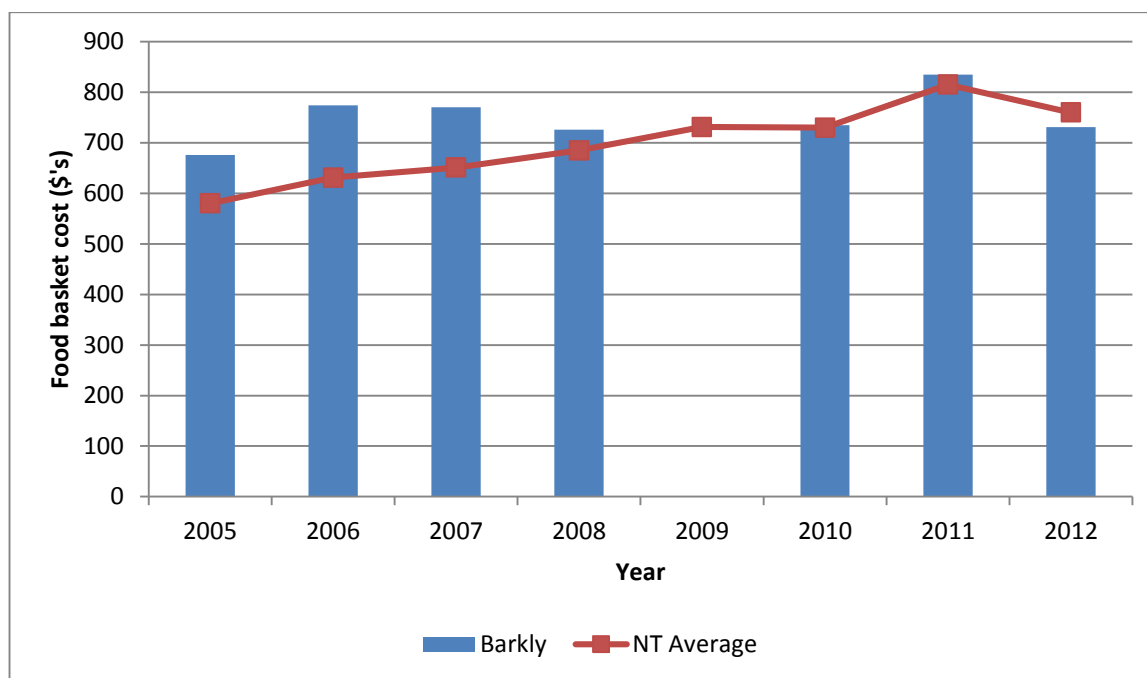
In the last financial year the Store made a net profit of only two percent and a loss in the previous year. According to stakeholders this level of net profit is normal, and across the remote community stores an annual profit of between five to six percent is deemed sound.

¹⁴ There was at the time of the evaluation a changeover of Store management. In future data may be more accessible.

¹⁵ Data provided by Burdon Torzillo and Associates with the approval of the Store Committee and permission to publish.

It is instructive to review the Arlparra Store data within the broader context of data from the annual NT Market Basket Survey of remote store data¹⁶. Figure 3 compares data on the cost of an average ‘food basket’ from a sample of stores in the Barkly region with all remote area stores in the NT¹⁷. In recent years the cost of a food basket in the Barkly has actually become slightly less than the total NT average after being much higher in earlier years. This figure though masks the difference between the Barkly region cost (\$731) and that of Darwin (\$511) and Alice Springs (\$485) supermarket cost, a difference of 30% and 34% respectively, a striking demonstration of the greater difficulties in remote communities of access to basic food.

Figure 3: Comparison of cost of a ‘food basket’ – Barkly region vs Total NT average



In regards to access to healthy food, some progress in remote area stores seems to have been achieved in recent years. Table 7 shows the proportional increase in prices of selected store items, and shows that ‘unhealthy’ food items like pies and coke have increased in price significantly faster than ‘healthy’ food items like apples and canned meat and vegetables.

Table 7: Cost increase (in per cent) of selected store items and the ‘food basket’ from remote stores: Total NT sample 2001 to 2012

Year	Pie	Coke	Apple	Canned meat and veg	Cigarettes and tobacco	Food basket
2001	20%	5%	10%	-1%	17%	5%
2002	21%	2%	8%	2%	22%	7%
2003	23%	9%	6%	9%	29%	12%
2004	29%	10%	18%	9%	48%	14%

¹⁶ Northern Territory Market Basket Survey, 2012

http://health.nt.gov.au/Nutrition_and_Physical_Activity/Publications/index.aspx

¹⁷ A ‘food basket’ that consists of foods that meet the average energy and recommended nutrient needs of a hypothetical family of 6 people for a fortnight.

2005	36%	14%	18%	8%	39%	14%
2006	41%	20%	22%	13%	44%	23%
2007	58%	27%	30%	14%	52%	27%
2008	67%	30%	30%	18%	58%	34%
2009	81%	36%	46%	21%	69%	43%
2010	84%	48%	28%	27%	104%	43%
2011	92%	55%	44%	28%	125%	59%
2012	99%	64%	42%	31%	141%	50%

Those stakeholders interviewed who could rate the achievement of Objective 2 on average provided a score of six, thus rating achievement against this objective as moderately successful. The basis for this more optimistic rating is not so much an actual increase in consumption (Store prices remain high and act as a significant barrier to purchase and consumption other than on specific occasions), but rather an increase in awareness. As one stakeholder offered:

“... there has been a definite increase in awareness regarding healthy foods, but it is hard to see this translating into gardens and then into actual meals.”

But, raising awareness is recognised as a start and an essential (if not sufficient) precursor to behaviour change including changing diet. Most of this rise in awareness is attributed to the gardens project, and the influence is strongest over those actually involved in the gardens or able to observe garden activities. One community member associated with a more successful garden noted:

“You get to taste fresh food, and then understand the difference. Makes you want to have more.”

One stakeholder noted the DVD developed on healthy food and hoped exposure of its content to the community would be beneficial to creating a broader understanding. Another observed that television had only recently come to homes in Utopia (2013), and this was likely to create a strong influence on awareness and ultimately behaviour. It is difficult to know whether this will be a positive or negative influence, but the access problems experienced in remote communities (in this case to fast food outlets and other means of obtaining ‘junk’ food) may on this occasion work to the benefit of the population. On the other hand, the strong promotion of healthy food in a range of television programs may begin to generate a community demand for healthy food options to be made available through the Store. One person interviewed for instance noted they were a fan of Jamie Oliver and he understood his approach to cooking healthy food.

Discussions with community members revealed that the gardens had helped shape awareness in another way by introducing the community to new flavours. Tomatoes, cabbage and some other salads amongst the vegetables, and rock melon, water melon, grapes, figs and citrus fruits had all been recognised as tasty to eat. The past project facilitator provided an interesting anecdote regarding one of the gardens that one year had a particularly good cabbage crop. Upon seeing the garden and noting it was almost past harvest, the project facilitator asked why it was not being eaten, the answer to which was that it looked so good in the garden. After providing ‘permission’ for the harvest to occur she noted the next day the entire garden was harvested and eaten in one night.

Assessment

The greatest success of the Utopia Gardens project seems to be a universal rise in the awareness across the community in recent years as to what constitutes healthy food. Of course this awareness could have come from elsewhere, but it only seems reasonable to ascribe some causality to the gardens project. Community members themselves certainly believe this to be the case.

This awareness has not translated into anything more measurable other than an occasional change in consumption of healthy food, but there are structural barriers to this translation occurring (price of healthy food, lack of home cooking equipment) which were beyond the scope of the project.

The community awareness could have been more widespread if the DVD resources developed had been more widely employed (something planned for the future) and activities planned for the store been able to be implemented.

Objective 3 - Capacity to prepare healthy meals

Objective 3 aimed to increase the capacity within the community to prepare healthy meals. Most stakeholders interviewed could not even rate achievement on this objective because so little progress had been made — a combination of very little activity having been undertaken directly related to this objective and the very real constraints on community members to change behaviour.

With regard to the first of the reasons for limited achievement, the activities originally proposed in relation to this objective were:

- Produce a video specific to the community using local individuals as ‘actors’ and filming in the local language of the [Alyawarra](#) people. There were several videos, but specific to this objective was one with content promoting healthy food and demonstrating how to cook the food in a stew;
- Demonstration of cooking processes in existing kitchen locations (e.g. the Aged Care service) and using a community based approach such as a community kitchen model ;

The video seems to have been first mooted in 2012, and with support from a film production resource a ‘draft’ video product was completed at least by the end of 2012. For different reasons the product was not approved till much later in 2013, and according to information from the NTML office, copies not made available till May 2014 which have not yet been widely released to the community. As of the last evaluation visit the video had still not been ‘launched’ (plans to do so were being discussed by the dietitian) and there was some question as to whether individuals who had played roles in the video production had seen the production. However, there were reports that the video was being used in the Arlparra Store as background viewing for customers and the dietitian had used it at least once with a class of children at the Arlparra School. Overall the video appears yet to have been properly promoted in a structured way to optimize viewing if not impact.

There is no data available on testing its effect through some form of viewer response and feedback, but given its highly subjective (local people and language) production values it is likely to stimulate interest. Certainly at one viewing with the school children much excitement was generated by viewing familiar faces.

In regards to cooking demonstrations little seems to have occurred. Some consultancy advice from visiting dietitians seems to have been provided to the Aged Care service, and at least one

demonstration is reported in 2012 at which 20 people were in attendance. A previous dietitian wanted to combine release of the video (film screening) with a larger scale cooking demonstration.

One stakeholder noted that there are now several hot meals being prepared in Arlparra (Aged Care, the Recreation Centre, and the school is considering providing meals as is the Arlparra Store) for a range of community members and this was at least one opportunity to influence the population diet and potential promote cooking of healthy food.

With regard to the second of the reasons for limited achievement, several stakeholders noted a range of practical impediments to cooking healthy meals. Families have other barriers besides awareness and knowledge, and even when the intent is strong there is a lack of tools (pots and pans, functioning stoves, available clean water, etc.). The 2013 'Handover' report describes some of these difficulties:

"... people have the knowledge that a healthy lifestyle was important, however they lacked a straightforward opportunity to follow a healthy lifestyle in that environment.

The development of the gardens allowed an additional source of free, fresh produce in the community. I had one young mother say to me that every day, she went to the garden to pick something fresh to feed her infant daughter, therefore following healthy eating recommendations where she would not have been able to before. The same mother told me she kept her food in a locked chest under a tree, so that other people would not eat it and she knew she would have something for her daughter at mealtimes. The chest was obviously not refrigerated, meaning that storage of fresh produce would not have been possible with her available equipment. Therefore, it wasn't so much about encouraging people to change their behaviour, as it was about working with them to overcome the barriers they experience to making healthier choices."

This sentiment is placed into a broader remote Indigenous community context by Hudson who suggests that government instrumentalities have largely failed to see the real reasons why people eat unhealthily¹⁸:

"Most healthy eating campaigns have not taken into account the lack of sufficient health 'hardware' (functioning kitchens, refrigerators, stoves) in Indigenous communities. Many residents rely on pre-cooked or takeaway food (hot chips and pies) and food that can be heated easily (two-minute noodles) because they do not have the facilities to store or cook food at home."

In some respects the need for cooking demonstration is enhanced because of the unfamiliarity of many of those responsible for preparing meals with cooking of healthy food, especially if the source of ingredients is an 'exotic' vegetable species. At one garden for instance one of the community gardeners proudly showing his crop, which included healthy looking silver beet, asked discretely what it (the silver beet) was good for and how to cook and eat it. The exotic vegetables and fruits that are well known and liked include tomato, cabbage, lettuce, melons, citrus fruits (especially oranges) and grapes. Others, such as broccoli, beet, carrot, etc. are less well known and therefore not yet universally liked.

¹⁸ Hudson, S. (2010) Healthy Stores, Healthy Communities: The Impact of Outback Stores on Remote Indigenous Australians. Centre for Independent Studies, Issue Analysis, No. 122 • 17 June

By way of contrast, bush foods still maintain an important place in the diet and culture of the Utopia Homelands people, and are considered to be good for one's health and well-being (Turner, 2005¹⁹). The value of bush foods was certainly mentioned by many community persons interviewed, and it was noted that the window of opportunity for gathering bush foods was approaching. Preparation of bush foods and cooking, normally with meat provided through hunting of kangaroo, echidna, possum or goanna, is well known. Gathering of bush foods itself is a highly regarded activity and involves some degree of 'specialist' knowledge that is highly respected.

Rickards et al. (2011²⁰) from focus group discussions with people from the Utopia Homelands identified community understanding of the relative nutritional value of different food sources:

“Store foods with a high sugar or fat content are contributors to kidney disease, heart disease and other chronic conditions. ... The benefits of bush food, including kangaroo, are clear. The physical activity involved in hunting / gathering bush food and preparing it for eating is considerable and has benefits in itself, and the nutritional value of the food is high. Kangaroo blood is considered a good source of strength.”

Assessment

The comparatively limited achievement of objectives one and two noted earlier to appreciably add to the availability of healthy food clearly limits the chances of achieving Objective 3 to increase the capacity within the community to prepare healthy meals. As well, there seems to have been only limited and somewhat inconsistent project effort directed specifically at this objective, making positive outcomes unlikely. In retrospect, there appears to have been an over-reliance on informal conversations, especially around the gardens' activity, to achieve the desired change in the preparation and consumption of healthy foods generated. In the 2013 'Handover' Report for instance it was noted:

“The relationships and the many discussions about healthy food that occurred while digging and watering mean that the community is well aware of healthy food and physical activity messages. There is no doubt the knowledge is there about better choices, the next steps are in making the healthy choices the easy choices.”

Using the community gardens and the produce created as a springboard for conversation about healthy food and healthy eating makes sense, however a more structured and concerted effort with wider community coverage is needed to achieve substantive change in healthy food cooking. Educative processes need to begin with current knowledge of nutrition (which focus on bush food and Indigenous food classifications), demonstrate the possibilities appropriate to current community constraints (including living conditions and equipment limitations), and use a range of education pathways and approaches.

Objective 4 - Increased social and emotional well-being and food security

The full hoped for outcomes of Objective 4 were to obtain increased social and emotional well-being, as well as improved food security and nutrition, and increased physical activity. All stakeholders

¹⁹Turner M.K. (2005). *Bush Foods: Arrernte Foods from Central Australia*. IAD Press. Alice Springs

²⁰ Rickards, P., Rowley, K., Bailey, A, Jones, L., Tilmouth, R. , Saraswati, K., Fitz, J.,Guillemin, M. and Brown, A. (2011) *Local Aboriginal Knowledge of the Determinants of Health at Utopia*. A Report to the Teasdale-Corti Comprehensive Primary Health Care Project 'Revitalising Health For All', Global Health Research Initiative

observed that this objective was overly optimistic, particularly in regards to the issue of food security (which would have required a commercial venture not the small scale community approach adopted).

In respect to the issue of increased social and emotional well-being, the project facilitator and others associated with project implementation over the first few years clearly believed that the gardens provided some direct benefit to those who participated in their establishment and / or management and indirect benefit to communities where the [better] gardens were located. The benefit to well-being was conferred through pride of achievement. The 2013 Report for instance states:

“This project has given people a source of pride and hope, which can be a determinant of healthy behaviour choices. “

The degree of pride was considered to be enhanced by the community development approach, where the community themselves had strong ownership of the garden design and development, and therefore could in all honesty ‘own’ the rewards and the accolades.

This belief in the project well-being outcomes would upon observation seem to apply most definitely to certain individuals associated with the gardens in Soapy Bore, Apungalindum, 3 Bore and more recently Boundary Bore, and in the case of the former to the broader community, this pride and concomitant well-being was not necessarily felt as much with the other gardens and the broader community.

More importantly though, if this was a hoped for project outcome, then more should have been done to engender and multiple the impact of the gardens. The thinking seems to have been that well-being would be felt through ‘intrinsic reward’ processes, that is a self-satisfaction with seeing the garden thrive and then harvesting and eating the ‘fruits of the labour’. These intrinsic rewards needed to be reinforced through extrinsic rewards — external recognition and validation of the garden outcomes. Thus an annual prize could have been provided to the best community garden (this might have stimulated broader within homeland contribution to the cause of community competitiveness) with some prize money attached to the award (from the NTML budget in the first place but ultimately through the Store since it already offers a \$10,000 prize for the football carnival). Gardens could have been graded and ‘accredited’ by a reputable authority such as the CSRIO Sustainable Ecosystems Division. Or, gardens could have been the focus of quarterly attention, with quality garden bed photographs being displayed in a prominent part of the Store and other parts of the community. Similar ways of making garden achievement visible and providing positive reinforcement would have cost little but had a potentially strong effect.

Another well-being outcome that might have been generated by the project was employment and / or development of skills that could lead to employment. Clearly the project in the early days intended to use the gardens as a means of employment of local community members to construct and then tend the gardens. But a range of administrative difficulties — the inability of the NTML to pay individuals without an ABN, problems with paying individuals too much and placing welfare payments in jeopardy, transparency questions with payment in Store vouchers — meant a decision was made by the community not to be paid. This inability to generate employment²¹ was turned subsequently into a virtue, and the prevailing thought became as discussed above that garden ownership and the feeling of “joy from being in the garden” was sufficient reward and motivation to work — an outcome project proponents argued would have been unsustainable if based on a paid employment model.

²¹ There is one exception to this at Camel Camp where apparently workers were paid through the UAC to build a series of wicking beds.

Without directly taking issue with the above argument, perhaps at least the employability skills of those 25 to 30 community individuals most closely associated with the gardens for at least one or two crops could have been enhanced through structured (but not necessarily formal) training and assessment. This would have led to recognition of the skills actually developed, and perhaps progressed individuals towards a qualification such as a Certificate in Conservation and Land Management (see Appendix B for a list of units of competence required to master for the Certificate II level qualification). Such a training program could have (and still might be) offered through the Batchelor Institute of Indigenous Tertiary Education resources located at Arlparra, especially if progressed using their 'both ways learning' philosophy as follows²²:

"Both ways is a philosophy of education that 'brings together Indigenous Australian traditions of knowledge and Western academic disciplinary positions and cultural contexts, and embraces values of respect, tolerance and diversity."

Finally, claims were made for the gardens that they improved physical activity. For instance the 2013 Report noted that:

"The gardens also offered an opportunity for meaningful physical activity."

The Report went on to say that:

"... activities such as walking, jogging, or exercising for exercise itself do not appeal so much to community members, however, activity with meaning such as hunting is widely taken up, and I have seen women walk for two hours in 41 degrees in search of goanna (for example). The gardens were similar in that the physical activity had a meaning and a purpose, and was more readily taken up by community members than other options would be."

In this regard the gardening activities are able to be likened to gathering bush food about which Douglas and Walsh (2011) state:

"Collecting bush foods is something that people enjoy doing and is part of a strong cultural tradition, not something new that has had to be learned or imposed on people by outsiders. Benefits to Aboriginal people from participation in the bush foods industry currently consist of non-monetary benefits people gain from collecting bush foods on their traditional lands and the monetary benefit of being paid cash in hand per kilo for collecting raw materials (for supply to traders and processors) ... Non-monetary benefits include maintenance of cultural traditions and intergenerational transfer of traditional knowledge, and the health and well-being benefits derived from being out on country and eating nutritionally rich bush foods."

These same authors estimate between 300 to 500 women, mainly middle-aged to senior women, are involved annually in commercial bush food harvest, many of whom live in the Utopia Homelands communities.

Assessment

The community gardens no doubt generated some pride on an individual gardener and in some cases a community level, and in so doing contributed to the well-being of some community members. It is difficult to gauge the level of this outcome, but the effect is likely to have been localized and experienced only by a comparative few.

²² See Batchelor website: <http://www.batchelor.edu.au/>

Similarly, the benefit of physical exercise derived from the gardens would have been felt by few, and only then for a period of time particularly through initial construction of the gardens and then in garden preparation and re-planting periods.

The actual outcomes of this objective could have been amplified to deliver more widespread benefit through stronger efforts to reward and recognise at both the community and individual (through competence recognition) levels.

Objective 5 - Improve health outcomes

This objective sought to accomplish improved health outcomes for diabetic patients. All stakeholders interviewed for this project thought it was a long bow to draw between actual project activities and any health outcomes. They reckoned that for any project activity to deliver 'end point' outcomes within such a comparatively short time frame was unrealistic, but given the limited scope of the project actions undertaken this made the expectations even more unrealistic.

Even the project proponents seemed to concede this point, arguing only the 'promise' of the project to deliver physical health outcomes. For instance from the 2013 Report it was noted:

"In one instance, one lady started work in the garden with a blood sugar level of 33mmol/L (recommended range four to eight), and after digging and planting, her blood sugar returned to 7mmol/L. This was a very tangible example for the community about how meaningful physical activity, undertaken regularly, can assist in managing disease and also enhancing well-being."

In an earlier report (2011 Progress Report), a broader health benefit was ascribed to the establishment of the gardens as follows:

"... there has been a great deal of discussion about healthy food and physical activity, as well as a lot of work on the part of the community members to build and tend their gardens on a daily basis. Anecdotally, it has been noted that this project has raised awareness of personal issues and there has been a follow on effect with people changing behaviours e.g. Better medication compliance. This is believed to [be] because of the intense discussions about what good health is, higher levels of physical activity and how there can be health improvements through small changes around choice and behaviour."

One way of checking on whether there had been any improvements in health status would be to look at trends in relevant data. Accordingly data was requested from the Urapuntja Health Clinic on two key and relevant Northern Territory performance indicators (KPI) as follows:

- Number and proportion of resident clients aged 15 years and over with type 2 diabetes who have had an Hb A1c test in the last six months;
- Number and proportion of diabetic clients with albinuria who are on an ACE inhibitor and/or ARB.

Clinic management from the initial and subsequent interviews argued against providing this data, on the basis that it would not reveal anything in the way of health outcomes that could be attributed to the gardens. Data has not been made available to the evaluation.

Assessment

The community gardens project, given its scope and requirement to progress at a 'community development approach' pace, should never have been expected to deliver changes in health

outcome. Indeed, the project logic, detailed in Figure 1, probably wrongly identifies two sets of 'Intermediate outcomes'. At least two of the first set of 'intermediate outcomes' (including an outcome that would deliver 'notable' improvements in diabetes outcomes) would have been more appropriately labeled longer term outcomes.

Failure to achieve this objective is a product of setting an unrealistic goal in the first place.

D. Broad assessment criteria

Sustainability

Continued need for external support to generate community momentum for the majority of the gardens suggests this project is not sustainable, despite at least three gardens (with a fourth at the Urapuntja Health Clinic that may or may not qualify as a community garden) looking sustainable into the immediate future.

According to many though, and particularly those with considerable community gardens experience, a longer timeframe of development effort is required first before judging sustainability outcomes. One stakeholder with experience interviewed asked what might be considered an appropriate timeframe to provide support, build capacity and inculcate cultural change to establish an agrarian as well as hunting and gathering set of norms.

Moreover, implementation of the project while earnest and well intentioned was not perfect, a charge that project implementers would almost certainly accept. Some of the gardens were constructed without first gaining full community buy in, others were sited in places away from any nearby house presumably to avoid favouring one family over another but in the end had therefore no 'owner' who would unambiguously take care of the garden (and therefore reap most of the rewards)²³. External support for the gardens in the form of a project facilitator and technical advisors was strong and consistent through 2011 and 2012, but a delay in the change-over of project facilitator reduced consistency and frequency of visits, a situation accentuated by significant turnover of non-community staff at the Clinic, school and council. The value of routine support was well demonstrated this year when the return of an enthusiastic and regularly appearing dietitian has reinvigorated community interest.

To make the community gardens more sustainable into the future greater use of appropriate technology is recommended. There are several elements to this:

- (1) Plant species — vegetable gardens are not unknown to the Utopian communities but are still somewhat new and alien to the culture. Indigenous people of the region, almost exclusively women, gather food products from locally available plants using Indigenous knowledge to find the plants at the right time. It is these vegetables and fruits which are known and well regarded. Exotic vegetable species used in the community gardens (cabbage, tomato, potato, silver beet, spinach, etc.) while well understood from the perspective of western cultivators, add to the test of the community gardens being a success by adding another layer of cultural challenge.

²³ The exception to this scenario is the garden at Soapy Bore, which is quite distant from any house, but seems to have generated genuine 'community' support and recognition.

It was beyond the scope of this project to explore other than cursorily²⁴ the possibilities, but local community women indicated that bush foods such as bush tomatoes, bush bananas, desert plum, desert yam are available only seasonally and seem to bear fruit only after sufficient rain.

Could these species be investigated or trialed to produce fruit out of season if given sufficient water? A major project exploring this possibility was conducted by the Rural Industries Research and Development Corporation in 2004 at Pantharrpilenhe (a community near the Altunga Historical Reserve) in which the wild harvesting and propagation of over 20 Central Australian Indigenous food plant species was tested, and detailed cultivation guidelines established²⁵. Of course there are in some communities, law relating to bush foods which preclude commercial production, and there are other issues of Indigenous intellectual property where knowledge is applied without benefit to traditional owners. The extent to which these issues might be problematic in Utopia has not been explored²⁶.

The primary value of planting Indigenous species, apart from being culturally known and understood as 'healthy' food, could also be that they will be less vulnerable once established to water supply irregularities. In at least one garden at the Aged Care service, planting of areas that could not be easily irrigated, but were still within the fence boundary, with native plant species (including bush medicine plants) was being actively considered. Other established community gardens that currently have unutilized fenced areas (e.g. Boundary Bore) and / or wish to expand their existing fenced areas (e.g. Soapy Bore) might be interested in exploring cultivation of native plants, assuming the Elders agreed.

- (2) Planting technology — the gold standard being promoted for the gardens in Utopian communities, indeed all through semi-arid Australia, is the wicking bed. No doubt this technology is 'appropriate' to this environment since it uses water, the most costly and scarce resource in the production process, so much more efficiently. The argument is that this efficiency, along with other benefits such as weed control, provides a sound return on the initial investment of much greater effort to establish the gardens. While this is acceptable, again the external technology adds a layer of additional cultural challenge; constructing the wicking beds is hard work and technically requires education to understand. At Boundary Bore a new garden was recently established by the community women by building garden beds more simply from corrugated iron and old car tyres but not using wicking technology. Not as efficient but much quicker and easier to understand and construct.
- (3) Planting time — a number of sheet metal signs with planting guide content were manufactured and erected at each of the community gardens by the technical advisory workers and paid for by the NTML. The signs provide advice on when to plant and harvest different (exotic vegetable and fruit) crop species. At least one planting time is virtually in the height of summer which seems to be testing fate — community gardeners would be better advised to leave the garden fallow during the summer and let the soil recover. More importantly though, the local names of the seasons (quite a number) in (use the language name) have been added to provide local gardeners with an alternative added reference point to the Western seasons of winter, spring, summer and autumn. Nobody associated with the signs seemed to know the

²⁴ See for instance Douglas, J and Walsh, F. (2011) Aboriginal People, bush foods knowledge and products from Central Australia. Merne Altyerre-ipenhe Reference Group

²⁵ Miers, G. (2004) *Cultivation and Sustainable Wild Harvest of Bushfoods by Aboriginal Communities in Central Australia*. A report for the Rural Industries Research and Development Corporation, July.

²⁶ See also research undertaken by Desert Knowledge CRC (Cooperative Research Centre and the CSIRO).

http://www.cse.csiro.au/research/nativefoods/nativefoods_website.pdf

http://www.terrain.org/articles/16/cribb_latham_ryder.htm

cultural and technical significance of the Indigenous seasons (normally seasons imply some form of activity). Knowing this could be very helpful from an education stance. The signage was not apparently supported by a resource plan and evaluation, this could be considered an oversight to the broader Project Plan in 2012-13.

- (4) Nutrition education — similar to the planting guide signs, nutrition advice and education seems to be couched in the Western concept of five food groups (Australian Guide to Healthy Eating). Local Indigenous people conceptualise food also into five food groups, but they are food from animals, food from plants, edible seeds, edible grubs, and sweet foods (nectar, wild honey, sweet fungi). Why not use local concepts and knowledge to deliver key messages?

Some or even none of these ‘appropriate’ pathways may indeed be appropriate, and may all have been investigated in the past and discarded. A conversation with one of the past technical advisors however suggests that at least in regard to plant species this was not explored, but may have been considered important as part of a next phase of development. Unfortunately this is undocumented.

Transferability

Community gardens projects are common through Central and Northern Australia, and similar to the Utopia Community Gardens they have met with mixed success. One somewhat pessimistic opinion about community gardens offered from a libertarian perspective notes²⁷:

“For more than 20 years now, governments have been aware that very few Indigenous communities have their own gardens, but attempts to address this situation have not been particularly successful. Most residents of Indigenous communities live in community or public housing and do not have their own plot of land. Communal gardens have not worked very well because of difficulties in determining who is responsible for maintaining them. Often no one is willing to take on the long-term responsibility because there is nothing in it for them—they do all the work but have to share the produce with everyone in the community. This lack of responsibility has caused the failure of many gardens... Gardens in remote communities tend to have a short life-span, ending once the initial enthusiasm wears off or the person who instigated the idea leaves the community The Commonwealth Department of Health and Ageing used to invest in market gardens but ceased doing so because ‘there was no evidence of long-term systematic change in terms of public health care.’ This claim seems doubtful—surely having a regular supply of fruit and vegetables would provide many health benefits. What seems more likely is that there was no long-term change in the attitudes of residents towards growing their own food.”

The longest standing project facilitator for the project claimed that by adopting a ‘community development’ approach to the gardens’ establishment, development and maintenance, the processes of the project are unique to Utopia, and therefore not easily transferable. The aspect that is transferable though, that the facilitator offers, is the community development approach itself. Perhaps more optimistically the project facilitator presented to the 12th National Rural Health Conference to following wisdom:

“Food gardens can be considered one worthwhile strategy amongst many potential strategies to address this issue. Many factors effect whether a garden will be successful in terms of ongoing fresh food production, and food gardens are unlikely to be a solution to the low availability of fresh food as a standalone strategy, but rather should be considered as one strategy in a multi-

²⁷ Hudson (2010)

strategy approach to address nutrition and physical activity as determinants of chronic disease.

“

E. Recommendations for the Garden Project's future

1. Project continuation

The conclusion of the evaluation team is that more time and effort is needed to realize the aspirations of the project designers and the community in regard to greater healthy food availability and consumption. While further investment may not deliver against all the original objectives, as there is always a risk, the long-term outcomes are worth pursuing.

The NTML resources under the current funding arrangement, effectively the dietitian and project management support, are stable until June 2015. After that point funding is uncertain, but an on-going more strategic role for the NTML could be fashioned and argued persuasively.

The subsequent recommendations have been crafted mainly for work until June 2015, but with a view to some activities, whether involving the NTML or not, continuing on past this date.

2. The role of the dietitian over the next 12 months

The dietitian's role needs to be more bounded and directed than it has been since June this year. This means developing some short term objectives and performance indicators for the life of a contract until June 2015. While tremendous interest has been generated by the dietitian through her enthusiastic approach and rapport with the communities, it is important now to focus on and 'cash in' on the interest created. In order to achieve these objectives the dietitian will need adequate time in Utopia.

The objectives need to be shaped around a meaningful number of feasibly achievable outputs. The evaluator's recommendation is for the dietitian to focus on four tasks only, all of them using local and organisational structures in 'culturally' appropriate ways:

- Working with the Arlparra school (and possibly selected outstation schools) and the teachers to develop learning experiences and associated resource materials (learning objectives, lesson plans, teaching materials, etc.) around the content of nutrition, healthy eating and food security. The processes need to work within the culture of the school, using their language (curriculum, learning outcomes) being cognizant of their practices (timetables, duty of care) and respectful of their need to plan to integrate the content with their student goals (e.g. language and literacy outcomes).
- Supporting identified gardeners with culturally appropriate and effective training to develop their capacity to be self-sufficient (or to know where to go for more information) and to become 'consultant' resources in the future for other emerging gardeners. Training perhaps through Batchelor Institute should be formal and structured, in conjunction with a partner that can recognise the outcomes (possibly with a qualification) and can appreciate the value of appropriate technology in the course design. The training should be undertaken at the gardens, and with the gardeners in both teaching and learning roles. The training needs to be practical not classroom based.
- Working with the Store management, the Store governance (Committee and advisor) and Store staff to change and improve the Store policy in very practical ways and to influence within the cultural and financial imperatives of the Store its merchandising practice. This could include introduction of healthy take away meals, more prominent point of sale marketing of healthier food products, and purchase and stocking of fresh food.

- Consultancy advice to producers and deliverers of cooked food to the community. This includes (1) food cooked for the elderly within the community by the Aged Care service and food hampers distributed to the elderly in outstation communities (2) food prepared for young people as part of the sport and recreation program (3) food probably to be introduced through the school program. Each of these food preparation programs can be used for broader community demonstration in conjunction with a broader community education campaign based on promotion of the healthy eating DVD.

In addition to the above four tasks, to enhance the progress of gardeners and their community towards self-sufficiency, it would be appropriate to more conspicuously and consistently support community actions and recognise achievement. This could mean an annual competition for the best garden, the prize for which might be \$2000 donated by the Store (this can be built into their community obligation policy — currently the Store budgets for \$100,000 in net profit being distributed for the good of the collective communities). In addition, individual gardens / gardeners could be recognised through an accreditation process. An outside ‘authority’ would be needed to judge and accredit gardens, for which there might be various levels to aspire that acknowledge different degrees of garden maturity.

3. The role of the NTML project officer over the next 12 months

At a more strategic level, the NTML project officer can supply negotiation, planning and coordination capacity (for instance manage or support Utopia master plan development, identify and source funding , support grant applications) to organisational stakeholders within the Utopia Homelands in support of achieving larger and more strategic objectives. These larger objectives should ideally be consistent with the direction in which the gardens project is trending based on community consultations (in particular with the UAC²⁸). For instance:

- Finding sources of funding (or in kind services) from the government, commercial and private philanthropy sectors that can support application of Indigenous knowledge to the gardens’ development²⁹;
- Coordinating efforts to consolidate and recognise the competence of community gardeners; and,
- Planning commercial gardening actions that build on the capacity already developed and to be further developed through the actions of the dietitian.

While the project officer will need to still support and supervise project operations, the capability of the officer and more strategic organisational context in which the officer is located, suggests strongly a more strategic role orientation. Working in tandem, the dietitian on the ground and the project officer working to connect and apply outside resources to the Utopia Homelands community’s [realistic] dreams, should prove effective in the short term.

4. Project objectives

²⁸ There are a number of stakeholders in Utopia with and through which NTML could act. Of the community based organisations the UAC appears to be the most critical and currently at least, most representative of a genuine community perspective at least as told by the Elders and Traditional Owners.

²⁹ Just one example of a funding source that the project officer might be best placed to approach would be the Coles Indigenous Food Fund (CIFF). The CIFF is supported by Coles Supermarkets, Robins Foods and Red Ochre. The fund supports Indigenous Communities and Indigenous-owned entities in the native foods industry supply chain. The CIFF aims to give Indigenous people a share in the market and a stake in the industry.

Earlier it was noted that the shifting objectives for this project might have facilitated at times some lack of focus both at the operational level and in project supervision.

Within the next eight to nine months clear and concise objectives need to be constructed for the dietitian until June 2015, based on a re-examination of feasibly achievable outcomes within the timeframe and consideration of the above suggested tasks and role. Measurable performance indicators need to be associated with each task and outcome. These objectives and KPIs can be constructed and agreed internally (to NTML).

Another set of objectives will need to be re-framed for the longer term taking an optimistic perspective that the project will find investors beyond 2015. A point of departure for this re-framing task could be the current project logic (see Figure 1).

These objectives, part of a broader master plan, will need to be developed external to the NTML and in collaboration with a broad coalition of community partners. This would include:

- UAC;
- Arlparra Community Store; and,
- Urapuntja Health Service.

Together these organisations share all of the community leadership and collective wisdom. As noted previously, it is the evaluator's opinion that the UAC is the potentially best coordinating body. In addition to these key partners, a range of other stakeholders need to be heard and engaged in any future planning because of their direct involvement or their capacity to influence outcomes through service provision. This includes:

- The 'green thumbs' from the more successful community gardens;
- Aged Care service;
- Barkly Shire;
- Batchelor Institute; and,
- My Pathway.

The NTML can and should justifiably play a role in facilitating a gathering (perhaps many) of these collaborators and seeking to engineer a master plan for the community gardens which can truly deliver some of the more ambitious original objectives.

5. Commercial dream

Within this future plan, there needs to be thinking about a genuine attempt to find food security and accessible fresh food. Creation of some form of entity within the Utopia communities, most often suggested to be at Arlparra, that produces fruit and vegetables on a sufficiently large scale to impact on available supply in the community, and provides 'local' support and needed infrastructure for the community gardens (seeds, seedlings, plants, tools, fertilizer, compost, irrigation equipment, etc.), has been an oft mentioned holy grail. Most often, this entity has been promoted as a commercial enterprise³⁰, particularly in the light of more recently introduced rules and guidelines around employment support funding.

The seed for a commercial enterprise was sown in early reports of the project facilitator and during the evaluator site visits was raised by several stakeholders. It appears that land has already been

³⁰ If not structured as a private enterprise, then at least its sustainability is considered to be reliant on a commercially viable business model.

designated by the Elders for such an activity and a fence constructed around the site at Arlparra. But many discussions have ended as the numerous logistical considerations have been confronted, despite the apparent existence of resources to deal with many if not most of these considerations. This includes not just the construction of the garden, but on-going financing, a raft of commercial relationships to be constructed with the local stores, development of a stable and capable workforce, and appropriate business planning.

In truth, if such a project is to be brought to fruition it needs one or more champions, ideally from within the community. As noted in an earlier section to this part of the report, a commercial garden has been created and apparently successfully run in the past demonstrating it can be done. The resources exist to make it happen again, and funding for a well worked prospectus would not presumably be difficult to source.

How to find the project champion or champions will not doubt be a challenge, one perhaps beyond the NTML's area of expertise. But if a champion is uncovered, then a role exists to build a team of support around that person with strong technical advice (for instance a contract with a project manager such as CAT or others from the Desert Knowledge Precinct), strong financial and organisational advice (such as that provided to the Arlparra Store) and strong emotional and managerial support to deal with a range of human relations and personnel management issues.

6. Handover of management control

The end point of the above suggested planning and development work is for the NTML to hand over responsibility for any on-going project activity to a local, on the ground entity. This does not mean that the NTML will not necessarily have a role into the future — it could still maintain an active role. But this would be in support of (a sort of sub-contractor to) another organisation.

Earlier discussion suggests new responsible entity would be the UAC, but the proposed planning processes may identify an alternative entity.

7. Project data

A failing of the current project has been not collecting appropriate data for management purposes. The fact that this data would have been important for evaluation purposes is secondary — better data needed to be collected on implementation and possible outcomes. This would have included:

- Data on garden establishment and planting history (types of plants, number of crops per season, harvest outcomes);
- Data on active participation in the gardens' establishment and maintenance;
- Regular data on health status including blood sugar readings;
- Data on population health status especially for conditions that would respond to healthier eating;
- Data on levels of nutrition knowledge; and,
- Data on knowledge of garden cultivation amongst active gardener participants.

Some of this data collection might remain pertinent into the future. This will be determined by the performance indicators agreed for the work of the dietitian, but whatever data requirements are agreed, the means of collecting that data should be established and if beyond the control of the NTML, made the subject of explicit MOUs.

5. Recommendations for future NTML preventative health activity

On page seven of the Expression of Interest document a set of evaluation questions were set which is less to do with the specific outcomes at Lake Nash or Utopia and more interested in the project management processes. The key broad questions were:

- What are the key strengths to the project management approach and effective practices?
- What are the key lessons for future project planning in preventative health within communities?

Project management approach

The project management approach has involved a key resource (project officer) in the NTML office arranging and supervising regular structured visits of relevant AHPS to the two project sites. The strengths of this approach include:

- The project has enabled a new model of allied health professional service to be applied to a remote area context. Through the RPHS AHPS can be sourced from anywhere in Australia to provide a regular visiting service to agreed communities, like Urapuntja and Alpururulam. This enables intensive periods of work to be focused on particular communities and their health issues, which may ultimately be a more productive model than full time employment of AHPs who then endeavour to service a large range and number of communities as full time workers. The short, sharp and focused approach may have benefits over the model that relies on an AHP constantly traveling and visiting and risking burn-out;
- The NTML project management approach has enabled a focus on health promotion to be retained throughout the project life and has actively promoted broad community and stakeholder engagement in social determinants of health that a more traditional remote area health service would be unable to achieve or maintain. The health promotion focus has been maintained and has not been sucked back into the clinical domain as often occurs;
- This approach, with regular community visits from the NTML project officer, has facilitated on-going multi-agency engagement and focus on key health challenges — the relative ‘outsider’ status of the visiting AHP facilitates a more even handed approach to all resident stakeholders. Such a strategic level of activity beyond the clinic and out in the community would not be possible from allied health service providers alone who lack the time to initiate and sustain such engagements and who may not have the requisite skills for this level of work.

The approach though is not without some weaknesses:

- While the AHP, in whatever guise including as a project facilitator, is the implementer of operations in the community, they should not be solely responsible for implementation. The project management approach can lead to some degree of independent field action since it is more difficult to supervise — and the temptation therefore becomes to ‘trust the field worker’. All employees need supervision, even the best. Supervision identifies when workers are straying from the agreed activities and / or direction of the project, and either accepts the new direction as appropriate or ‘controls’ the worker to re-establish direction. Supervision can be through collection and examination of appropriate activity data (for instance after community visits), regular teleconference, and co-visits to communities.

- Visiting service providers have less time and opportunity to form working relationships with community stakeholders. This puts stress on their emotional intelligence and interpersonal skills. Some of the pressure for skills in this area can be released by operational (AHP) and more strategic (the NTML office) resources working together at times to overcome stakeholder relationship issues. This might be most important at times of AHP staff turnover.

Lessons for future Project planning

1. Improving people's health through preventative work can take a lengthy period of time for health information and raised individual and community awareness to eventually flow on to behaviour change, and then ultimately to improved health outcomes. For this reason a long view needs to be taken of any health promotion work and the ultimate goals must be broken down into achievable and sequential steps. Outcomes are normally understood as immediate (one to two years), intermediate (three to four years) and long-term or end point outcomes (five to six years). Working in Indigenous communities means normally that the above timeframes should be further relaxed.
2. Annual project planning in community is essential with a solid assessment of the past year's activities against the agreed performance measures, and then a realistic and meaningful set of project goals and performance measures set for the coming 12 months.
3. The collection of project implementation and key health data associated with the project's target areas must be clearly negotiated, accessed and reported on to the community and relevant stakeholders on an annual basis. Failure to achieve this linkage to health data leaves such projects extremely compromised and vulnerable.
4. It takes significant work, persistence and flexibility to maintain production relationships with both internal and external stakeholders to projects of this nature if the benefits of collective work and opportunities for collaboration are to be realised. Moving beyond the health sector into other service areas can be daunting, but is essential.
5. It is absolutely essential to provide the utmost assistance to the AHPS in the program to enable them to cope effectively with their challenging work roles. At the same time close monitoring of these workers is required to ensure the project sticks to its agreed targets and principles. Close supervision, even when undertaken remotely, should not be considered as impinging on the operational worker's autonomy but rather as ensuring they are properly supported to perform their role.
6. It is vital to maintain close links between the health promotion staff (in this case the visiting AHPs) and the local health clinic and staff. If a gulf develops between these two groups the project will be compromised in various ways as it attempts to tackle the broader determinants of health that predispose to illness. The Clinic staff treat illness and knows the picture of health in the community as a consequence. The clinic staff on the other hand have limited capacity to engage the community on health issues out in the community. This is the work of the preventative or health promotion staff. They must work hand-in-hand so as to keep each other well-informed and for the system to make sense to community people, who will need to be assured that all health personnel are in unison.
7. Every effort must be made to support and train local Aboriginal people to work in this area of health promotion and community engagement. It is too much to expect visiting non-

Aboriginal health professionals to undertake this work effectively in isolation – they need the local co-worker to fill in all the blanks in their community and cultural knowledge. In the case of Alpururulam, the Strong Women’s Strong Babies Strong Culture workers become central to local ownership of issues and ultimately to the success of the project in raising people’s interest, awareness, and capacity for change. In the Utopia Homelands, where there are decided language challenges for an outside ‘consultant’, the need for local support is acute. Some of the gardeners could be trained into a change agent role.

Appendix A: Details of the evaluation methodology

Ethics approval

Ethics approval was required to conduct interviews with community members in Utopia and Lake Nash. Accordingly an application was drafted and submitted to the Central Australian Human Research Ethics Committee. Following response to further questions, an approval to conduct the evaluation research was gained.

Evaluation methodology

A common methodology to evaluate each project was designed to address the evaluation questions within the time and budget constraints for this project. The evaluation questions were satisfactorily answered through:

1. An evaluation of the projects’ **implementation** using a broad management audit approach that is commonly used in evaluation projects³¹;
2. An evaluation of the projects’ **impacts** through analysis of selected data and targeted consultations; and,
3. Goal free collection of qualitative data.

Implementation or process evaluation — the advantages of the management audit approach are that it:

- Attempts to assess the effort used in objective achievement;
- Assumes that correct program implementation is followed by desired outcomes (i.e. does not require demonstration of causal links); and,
- Compares "what happened" with predetermined criteria rather than more costly control data.

Data collection for the management audit included a review of relevant documents, purposive interviews with key informants (within the NTML and community health services) and observation.

Impact evaluation — the impact evaluation gathered evidence on achievement of project objectives.

Purposive interviews targeted persons who were instrumental in the implementation of the health promotion projects. These included:

- (a) The NTML project officers located in Alice Springs, other staff and relevant allied health personnel (e.g. dietitians). These interviews will not require ethics consideration;
- (b) Relevant Lake Nash and Utopia health centre workers. The interviews with health centre workers will not, we believe, require ethics consideration; and,
- (c) Community members associated with project governance or implementation, or who have utilised project products and benefits.

³¹ Chemlimsky, E. (1985) Comparing and contrasting auditing and evaluation, *Evaluation Review*, 9 (4):483-503

A local community member was engaged in each community to assist in arranging visits and community interviews (and later detailed goal free consultations) in each community.

Two visits to each community of three to four days duration were conducted with plans to present the results of the evaluation at a third community visit following completion of the evaluation report. The aims of each visit are described below.

- First visit – final contracting of community liaison officers, project orientation for the community liaison, observation of the project sites, and initial health service and community interviews;
- Second visit – group discussions and individual interviews with community members and supported by community liaison;
- Third visit – presentation and discussion of results with interested community members.

Observations were undertaken at project sites especially of the physical elements of project implementation such as the laundry facilities and community gardens.

The key project outcomes /expectations of each project and how evidence was gathered regarding those expectations is demonstrated in the below tables.

Lake Nash Skin Disease and Community Wellness project

Outcomes / expectations	Data collection processes
A reduction in scabies incidence across the community, particularly in children.	Audit - Seek scabies incidence and skin disease de-identified data from the health clinic. Analyse pre and post project data.
The community will have an increased awareness of skin disease and understand the importance to their overall health, attending the health clinic for treatment in timely manner.	Audit - Check project data on community awareness (this should be available). Impact evaluation - If not available, develop culturally sound process for sampling community knowledge on skin disease and increases to knowledge and conduct focus groups with support of community liaison.
The community making healthier lifestyle choices and demonstrating an increased awareness of healthy eating and engaging in physical activity.	Audit - Check project processes and data collected including data on food purchases. If inadequate, sample community members as above.
Through the facilitation of a HLC, there will be an increased community and stakeholder engagement and networking opportunities and the community will be committed to improving the health and wellness of all Lake Nash people.	Impact evaluation - Undertake focus group discussion with HLC to ascertain levels of community engagement.

Outcomes / expectations	Data collection processes
The community have access to a community laundry to help maintain clean linen to assist in the reduction of skin disease.	Audit - Conduct interviews with those managing the laundry and observe its operation. Collect and analyse any project data on laundry including finances and operation / maintenance. Include discussion of laundry impact in focus groups and interviews.
That the project will be embedded into the community ethos and enable sustainability for beyond the project timeframe.	Impact evaluation - Utilise focus groups and purpose interviews to ascertain how the project has affected the community and what status it has achieved as amongst other priorities.

The Utopia Community Gardens Project

Outcomes / expectations	Data collection processes
An increase in the access to affordable and healthy food items through development of community gardens.	<p><i>Audit - Obtain project data on:</i></p> <ul style="list-style-type: none"> • Number of gardens initiated during the course of the project • Current status of each of the gardens • History of planting if known of each garden • Sale of local produce (if any) through Arlparra or other store <p><i>Qualitative data – Obtain data on:</i></p> <ul style="list-style-type: none"> • Perceived value of gardens • Produce harvested and consumed from the gardens • Consumption preferences • Reasons for planting history
Increased consumption of healthier foods by community members.	<p><i>Audit – Obtain project or other data on:</i></p> <ul style="list-style-type: none"> • Project diary notes on changes to store merchandising approach • Store Committee decisions regarding healthy food (minutes) • History of change in store purchase orders • History (last three years) of sales of healthy food items from store/s <p><i>Qualitative data – Obtain data on:</i></p> <ul style="list-style-type: none"> • Perceived consumption of healthy food • Changes in consumption preferences • Changes in understanding of ‘healthy food’ ... what is healthy food and why is it healthy?
Increased capacity for the community to prepare healthy meals using a community based	<p><i>Audit – Obtain project or other data on:</i></p> <ul style="list-style-type: none"> • Project diary notes on healthy meal preparations / demonstrations

Outcomes / expectations	Data collection processes
<p>approach such as a community kitchen model.</p>	<ul style="list-style-type: none"> • List of other activities to promote healthy meal preparation (DVD, school lessons, posters, etc.) <p><i>Qualitative data – Obtain data on:</i></p> <ul style="list-style-type: none"> • Self report on changes in food preparation and ingredients • Barriers to changing food preparation behaviour
<p>Increased social and emotional well-being as a positive consequence for community members, in addition to improved food security and nutrition, and increased physical activity.</p>	<p><i>Audit – Obtain project or other data on:</i></p> <ul style="list-style-type: none"> • Clinic trend data (last three years) on relevant KPIs and prevalence of specified clinic presentations, including mental health presentations • Project diary notes on efforts to increase physical activity <p><i>Qualitative data – Obtain data on:</i></p> <ul style="list-style-type: none"> • Perceived changes in community emotional well-being as a consequence of gardening • Perceived changes in level of physical activity
<p>Improve health outcomes for diabetic patients.</p>	<p><i>Audit – Obtain project or other data on:</i></p> <ul style="list-style-type: none"> • Clinic trend data (last three years) on relevant KPIs and prevalence of specified clinic presentations, including: <ul style="list-style-type: none"> ○ General health check outcomes ○ Incidence of diabetes <p><i>Qualitative data – Obtain data on:</i></p> <ul style="list-style-type: none"> • Perceived changes in community emotional well-being as a consequence of gardening • Perceived changes in level of physical activity

Interviews

22 interviews were undertaken for the Lake Nash project which comprised 16 residents of Alpururulam, nine of whom were local Aboriginal people. Of the nine Aboriginal people interviewed, none were employed under the PHI program, seven were employed by various community organisations, and two had no employment affiliations. Of the 14 non-Aboriginal people interviewed, seven were visitors to Alpururulam, four were currently employed by the NTML, and seven were employed by non-health organisations.

In Urapuntja a total of 15 stakeholders, most of them residents who are employed as part of local service delivery operations. Twelve of the stakeholders interviewed were Aboriginal people. Another 14 local people from outstation communities were interviewed mostly at or near a community garden.

All of these interviews were informal and as much as possible conversational in nature (while still covering required data collection).

Focus Group at Alpururulam

A brief Project focus group was conducted at the conclusion of an Alpururulam HLC held at the Rainbow Gateway office on Wednesday 3 September. Those present comprised the following:-

- Ingrid Phyland
- Bev McCormack
- Karen Thomas
- Valerie Campbell
- Reggie Nelson
- Doreen Kelly
- John Percy
- Jenny Mahony
- Rohan Webb
- Kerrie Campbell

The Committee meeting started with a brief summary of health promotion activities conducted over the past three years of the project, including:-

- Many activities around healthy skin, hygiene and nutrition at the school
- Nutrition and cooking classes and competitions in the community
- Renal week
- Store competitions have been good
- Discussions re dust suppression, fencing for housing, house repairs
- Home-maker training.

With the formal period of the project now coming to a close the issue of 'where to from here' was raised, including what will be the role and activity of the HLC. It was suggested the Committee may need to be re-named and restructured afresh, with less agencies involved and the key issues from the meetings to be taken to other key meetings, like the Service Provider Group, for actioning. It was also suggested that meetings be more regularly, perhaps monthly, but shorter and more focused on actions and getting things done.

The rest of the agenda covered the following issues:-

- Fencing for houses:
- Cleaning up the old rubbish dump:
- Housing Repairs and the Housing Reference Group
- The need for pest control in homes:
- Improvement in sewerage system
- The need for a program for dog health and control
- Update on the community Laundry project
- The need for a work base for the SWSBSC workers
- More focus on zero to five year olds and the need for a special facility to cater for this age group and mums
- Plans for the development of community meeting places

Project Focus Group

Immediately following the HLC members were invited to participate in a brief focus group session with the evaluator for the Alpururulam Healthy Skin and Community Wellness Project. The following Committee members participated: Valerie, Kerry, Reggie, Doreen, John, Jenny.

Two questions were put to the Group:

1. Does the community have a good awareness of the serious health issues caused by scabies and skin infections?
2. Does the community have a good awareness of the importance of good nutrition and health foods for helping to keep people healthy?

Community Awareness of scabies and possible ramifications

The Group felt that certain sections of the community had a good knowledge about the scabies story and the importance of healthy skin, particularly the mums with kids at the school who have been getting information and advice on this. But there was concern that many others do not know and have not got the message about kidney and heart disease from skin infections.

Despite the observation that healthy skin awareness is slowly improving, it was felt more work is required in the broader community on this issue - "*we need more health promotion out in the community*".

Community awareness of nutrition and health

There was agreement that there is now better community awareness about problems with sugary drinks and the importance of fresh fruit and vegies. But again, this was mainly through work at the School with Mums and kids. Now the messages have to go broader out into the community. In this regard it was felt activities like the cooking competitions have helped, and talks with the footy players are good.

Everyone knows that bush tucker is the best food, but for most people this is very hard to get and only an occasional treat. That leaves reliance on the Store, and unfortunately the best food, fresh produce, is very expensive at the Store – people cannot always afford this fresh food.

Appendix B: Land Management Certificate II

AHCCHM201A	Apply chemicals under supervision
AHCILM202A	Observe and report plants and/or animals
AHCINF202A	Install, maintain and repair fencing
AHCMOM203A	Operate basic machinery and equipment
AHCNAR201A	Carry out natural area restoration works
AHCNSY203A	Undertake propagation activities
AHCOHS201A	Participate in OHS processes
AHCPCM201A	Recognise plants
AHCPGD201A	Plant trees and shrubs
AHCPMG202A	Treat plant pests, diseases and disorders
AHCWRK204A	Work effectively in the industry
AHCWRK209A	Participate in environmentally sustainable work practices
HLTFA301B	Apply First Aid
FPIFGM2211B	Detect wildfire
AHCARB250A	Operate and maintain chainsaws