Reinforcing alternative economies: self-motivated work by central Anmatyerr people to sell Katyerr (Desert raisin, Bush tomato) in central Australia

Sarah Holcombe^{A,D}, Peter Yates^B and Fiona Walsh^C

Abstract. This paper examines an alternative economy in the Anmatyerr region of central Australia, with reference to the 'hybrid economy' concept. We argue that this concept has application in recognising emerging Aboriginal economies surrounding the utilisation and management of natural resources. In particular, we examine the 'bush harvest' of one species — where Aboriginal people sell Desert raisin (Katyerr or Bush tomato) to traders who then on-sell to manufacturers and retailers. This seasonal economy intermittently injects relatively significant amounts of cash into households (but unaccounted for in census figures). Although some groups have been selling bush harvest produce for up to 30 years, it is increasingly gaining momentum with a larger market developing. Yet, there is a risk that this burgeoning market and the mainstream interest in horticulture will fail to recognise the value of local Aboriginal motivations that drive the customary harvest activity. Nevertheless, there is increased federal government recognition, via the Central Land Council, of the value of Aboriginal people as local land managers; as rangers. This in turn has provided resources to promote and encourage this harvest through the recognition of Aboriginal land management practices, such as seasonal burning to encourage the crop's growth.

Additional keywords: Aboriginal people, arid zone, bush foods, bush harvest, local knowledge.

Introduction

From January to May 2009 Outback Bush Foods (OBF), coowned by Peter Yates and Jock Morse paid almost \$24000 in cash into three central Anmayterr Aboriginal settlements, ~200 km north of Alice Springs. This was the company's twelfth year of trade with the harvesters in these settlements (the total population of the settlements is 100–200 residents). How does this hidden economy, as cash in hand, operate locally? And what is the potential to develop this local industry further? These are important questions to ask as there are extremely limited economic opportunities in this region, like elsewhere in remote central Australia. However, for a range of reasons, including the locational advantage of this region and the fact that Katyerr grows there in relative seasonal abundance, this has provided a set of opportunities for Aboriginal harvesters in this region. In Anmatyerr the fruit is known as Katyerr, Akatyerr in Alyawarr, Yakajirri in Warlpiri and Desert raisin in common English. Bush tomato is its commercial name and Solanum centrale J.M. Black its botanical name. It has a 1-1.5-cm diameter edible berry that is sold as a dry fruit (Fig. 1).

This paper examines this alternative economy with reference to the 'hybrid economy' concept. We argue that this concept has application in recognising emerging Aboriginal economies surrounding the utilisation and management of natural resources. This seasonal economy intermittently injects relatively significant amounts of cash into households (but unaccounted for in census figures). Although some groups have been selling bush harvest produce for up to 30 years, it is increasingly gaining momentum with a larger market developing. Yet, there is a risk that this burgeoning market and the mainstream interest in horticulture will fail to recognise the value of local Aboriginal motivations that drive this customary harvest activity. Nevertheless, there is increased federal government recognition, via the Central Land Council (CLC), of the value of Aboriginal people as local land managers or as rangers. This in turn has provided resources to promote and encourage this harvest via recognition of Aboriginal land management practices, such as seasonal burning to encourage the crop's growth.

Background to the Australian native or bush foods industry

As Cunningham *et al.* (2009) note, non-timber products sourced from the bush provide one of the few prospects for new or expanded natural resourced-based enterprises involving

^AAustralian National University, Research School of Humanities and the Arts, Sir Roland Wilson Building 120, McCoy Circuit, Canberra, ACT 0200, Australia.

^BCharles Darwin University, Grevillea Drive, Alice Springs, NT 0871, Australia.

^CCSIRO Ecosystem Sciences, Alice Springs, PO Box 2111, NT 0871, Australia.

^DCorresponding author. Email: sarah.holcombe@anu.edu.au



Fig. 1. Anmatyerr women with Katyerr just collected (photo by S. Holcombe).

Aboriginal people in remote Australia. Nevertheless, because of the social welfare system in Australia, Aboriginal harvesters are not solely reliant on the cash income derived from the sale. So the Australian bush harvest is not borne of the same necessity as in developing countries. Nevertheless, there is a strong drive by the government to reduce 'welfare dependence' and foster the range of social and wellbeing possibilities that come with work. This concept of 'work' has received considerable critical attention in the international development literature (e.g. Scoones 1998) and, as we will elaborate, increasingly within Australia to include consideration of alternative economies and livelihoods. There is also a growing appreciation that in remote areas where there are vast tracts of ecologically diverse land, land-based harvesting activity can provide environmental services, as well as promote the health and wellbeing of those who practise it (Davies et al. 2011).

Bush food harvest comprises only a small part of the overall business activity of the Australian bush foods industry. The industry from producers to consumers is estimated to be worth \$14 million annually, excluding the Macadamia nut. This estimation includes value adding (Robins 2007; cited in Bryceson 2008). Bush harvesting is still the dominant means of production for the most common bush foods, including Desert raisin. However, it is at risk with the future expansion of cultivation to provide supply that meets the growing demand for the product (see Robins and Ryder 2004; Bryceson 2008). As such, there is a growing tension within the industry between the mainstream drive for horticulture and maintaining the traditionally derived harvesting methods to ensure that Aboriginal people benefit from the industry. This paper specifically addresses this latter approach to the bush food production.

Brief context setting

In referring to 'Anmatyerr country' we are using a customary Aboriginal understanding of the socio-political landscape encompassing the land of the Anmatyerr language group. However, only a relatively small proportion of this customary land is owned formally under the *Aboriginal Land Rights* (Northern Territory) Act (1976) granted after a successful land claim in the 1980s. This area of Aboriginal freehold land lies in the middle of Anmatyerr country and comprises the area of what was once Ti Tree station, but subsequently became the Ahakeye Aboriginal Land Trust. The township of Ti Tree on the Stuart Highway (Fig. 2), lies in the centre of this Aboriginal land, but is itself within a 13-km² block of land designated as opentownship. The majority of Anmatyerr land is thus held under pastoral lease and this tenure significantly reduces the possibility of bush harvest and associated activities.

Although relatively close and accessible to Alice Springs, the Anmatyerr region could be defined as an 'Indigenous domain' where the 'dominant social life and culture is Aboriginal, where the major languages are Aboriginal, where the dominant religion and world views are Aboriginal; in short where the resident population constitutes the public' (Von Sturmer 1984). Here 80% of the regional population of ~2000 people are Aboriginal (this includes the Aboriginal settlements of Mt Allen in the west, to Engawala in the east and Aileron in the south). The majority of these people speak Anmatyerr or Warlpiri as a first language. With the exception of those Warlpiri and Anmatyerr people who live in Ti Tree town, the majority live in Aboriginal settlements on small excisions on pastoral leases. We do not apply the term 'community' to these places as this assumes a host of qualities that these places do not necessarily share.

Regional employment options, 'opportunities' and alternative economies

Well meant efforts to train Anmatyerr people for full-time employment have yielded limited success (e.g. Centrefarm Aboriginal Horticulture Ltd 2009). Not only are the 9 a.m. to

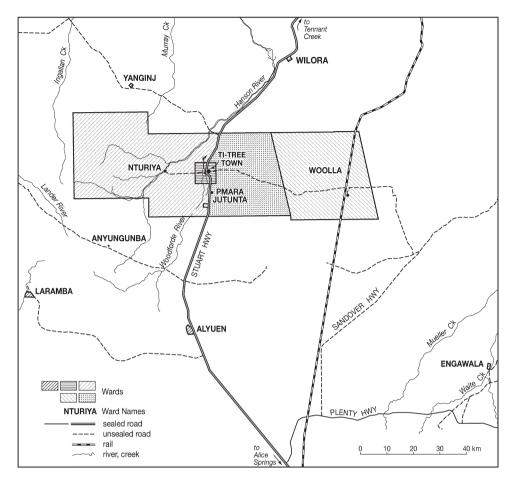


Fig. 2. Anmatyerr region map, including the wards that were part of the Anmatjere Community Government Council, before their amalgamation into the Central Desert Shire in 2008.

5 p.m. employment opportunities that are present for Anmatyerr people limited, but it has been found that the rigid nature of the work challenges an Aboriginal sense of connectedness, responsibility and practical value (Maru and Davies 2011). Research by Rea *et al.* (2008) on Aboriginal training pathways in the Ti Tree region illustrates that a key factor for successful training includes that it fits into the meaning and purpose of community life, as community-directed training relevant to current and future needs.

Maru and Davies (2011) analysed factors at Ti Tree on Anmatyerr lands that influenced employment of Aboriginal and non-Aboriginal people within a wider livelihood context. They found that about half of the 50 Aboriginal employees interviewed had full-time jobs and 20% had part-time jobs. In the Anmatyerr region income stratification between Aboriginal and non-Aboriginal people is extremely marked; the weekly individual income of non-Aboriginal residents is more than 3 times higher than Aboriginal incomes at \$768 and \$213, respectively, (Ingamells *et al.* 2010). This income disparity is clearly related to income status where, according to the 2006 ABS census data, only 6% of the Aboriginal population are in general employment (Ingamells *et al.* 2010). The bush harvest and on-selling of various native food species by Anmatyerr

people operates within this context of apparently high rates of unemployment.

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The harvest and sale of bush products is a good example of a hybrid economy. Altman (2001) developed the 'hybrid economy' concept to characterise the specific nature of remote Aboriginal economies which comprise elements of the welfare sector, the market or private sector and the customary economy. Most Anmatyerr harvesters are also in receipt of welfare transfers or funding from the Community Development Employment Program (CDEP) and a few have other income options, such as artwork sales. In contrast with northern Australia, there has been an established trade in bush harvest in central Australia for more than 30 years (Douglas and Walsh 2009; Walsh and Douglas 2011), and researchers have only recently realised the extent of this trade. Walsh and Douglas (2009a, 2011) have identified the importance of work and pay for Aboriginal harvesters, the social aspects of harvesting, the alternative to settlement life that activities 'out bush' can provide and a range of other motivations, as well as the multiple motivations behind the four trader companies and their interpretations of what has motivated harvesters.

The title of this paper refers to the concept of 'alternative economies'. This concept, borrowed from Gibson-Graham

(2002), positions our project as a consideration of the bush harvest as productive action enabling a form of economic identity that is alternative to mainstream Western economic systems. This identity liberates people from the circumscribed economic identities of participation in ongoing formalised training programs, community development employment programs and recipients of welfare transfers - all labels of economic marginality from the mainstream. By making visible the 'thin veneer of capitalist economic activity underlain by a thick mesh of traditional practises and relationships'... (Gibson-Graham 2002) and the harvest and sale of bush products as an economic activity potentially legitimised. We are unlikely to find a post-capitalist utopia (per Gibson-Graham) in Australia because the state plays such an influential role in the economic lives of Aboriginal Australians. Thus, we continue to draw on Altman's hybrid economy concept, as this locates the intersection of the market with the customary pursuits and the transfers of the welfare state, because all bush harvest activity takes place within this frame.

The linkage of a livelihood framework to the alternative hybrid economy concept enables us to draw out the distinctive features of the bush harvest. A sustainable livelihood is a means to physically sustain oneself and one's dependants; on the surface, it might seem that a salary from regular employment would serve this end as well. A livelihood however, is about far more than income, and encompasses all aspects of the social, cultural and physical world (see Scoones 1998; Davies et al. 2008). A livelihood that depletes critical environmental resources is unsustainable; so too, is a livelihood that erodes a person's sense of themselves. For Anmatyerr people, the disparity in the energy with which people engage in various productive activities strongly suggests that some activities – such as art or bush harvest – have an inherent and sustaining social meaning, while other activities - like much of the formal work that is available – are felt to be empty.

The freedom to engage in bush harvest, and in the land management activities required to support it (i.e. burning), are constrained by land tenure and other limitations. The Ahakye Aboriginal Land Trust is where many of the central Anmatyerr harvesters undertake their work. There is some evidence of tensions between the priorities of Anmatyerr men and support agencies who want to engage in cattle production, and require cattle fodder, and the (mainly) women who want to harvest bush foods and require periodic burning of fruit production areas. Furthermore, the Ahakeye Aboriginal Land Trust is small and surrounded by non-Aboriginal owned pastoral leases. Thus, traditional owners have constrained their burning for concern about fire spreading onto neighbouring leases. However, this attitude is changing with the employment in 2008 by the CLC, of four rangers at Ti Tree who engage in seasonal burning within the land trust, as will be further discussed. Following a cessation of new land claim processes as legislated in the Aboriginal Land Rights (Northern Territory) Act (1976), increasingly over the past 10 years the CLC has provided support to traditional owners to manage their lands through multiple programs including the employment of new staff as Aboriginal rangers. In 2010 the CLC had become the host-employer for 76 Indigenous rangers on a full-time, part-time or casual basis across seven ranger groups in central Australia, up from 37 a year earlier. A further 45

Indigenous rangers were engaged on a casual basis under 'pilot' program developments and other funding arrangements (Central Land Council 2011).

Harvest and trade of bush produce by Anmatyerr people

The harvest and trade of bush products by Anmatyerr people is interesting because it enables a certain autonomy from the circumscribed economy that Aboriginal people have been subjected to under the Northern Territory Emergency Intervention, instituted in 2007 (Altman and Hinkson 2007). One impact of this wide-ranging policy intervention is the quarantining of welfare transfers to Northern Territory Aboriginal people via, what has been termed, the Basics card (Fig. 3). This card, though in appearance like a cash card, operates to compulsorily income-manage Centrelink (as government transfer) payments by quarantining half of any payment and all of the advance payments (e.g. baby bonus, stimulus payments). For instance – a fortnightly pension payment for a single is \$672; fortnightly newstart single is \$456, and with dependant children it is \$490. The advance payments of the 'baby bonus' were introduced under the Howard government, and are an automatic payment to the primary carer of several thousand dollars per child. Aboriginal people with these cards are not allowed cash withdrawals or to purchase tobacco or alcohol with them. This has



Fig. 3. Information sign referring to what can and cannot be purchased on the Basics card under the Northern Territory Emergency Response, at the Ti Tree store counter.

created significant cash shortages for Northern Territory Aboriginal people to spend as they choose.

We found that one consequence of this income quarantining was that cash income from the harvest became even more valuable. This marginalisation seems to us compounded somewhat, by the rolling policy changes; such as the enforced amalgamation of the Anmatjere community government council into the vast Central Desert Shire, the uncertainty over the future of CDEP, the community housing stock being transferred to Northern Territory public housing and so on.

In 2009, Yates, after 12 years of buying bush produce from the Anmatyerr region through OBF, noticed a demographic shift in the profile of the harvesters: independently, but concurrently, there was increased demand from commercial processors for bush produce. We wanted to explore the motivations of the Anmatyerr harvesters. Outback Bush Foods is one of four bush harvest traders who have operated for 5 years or longer in central Australia. The traders are all small or micro-enterprises that, due to the highly seasonal nature of resource production and harvest, cannot be solely reliant on the trade for a principal income source (Walsh and Douglas 2009a, 2011). All enterprises have multiple income streams of which bush harvest trade is just one. The longest running is the sole operator, Rod Horner, who has been buying seed species and Desert raisin from Anmatyerr and Alyawarr people in the Utopia region of the Sandover for over 35 years (Horner 2001). Two companies have a base and local harvesters bring produce to them (the Warlpiri-owned Yuendumu mining company and Wirmbrandt Pty Ltd). Horner and OBF travel to and from Alice Springs to order and buy from harvesters in distant settlements with whom relationships have been established. Central Anmatyerr country, where OBF operates, is 2 h north of Alice Springs on the Stuart Highway. There are vast areas of central Australia where the traders do not go and where trade-based enterprises do not exist.

Walsh and Douglas (Walsh and Douglas 2009a, 2011) provided an overview across central Australia of bush produce harvest and trade. They then focussed in the Alyawarr region neighbouring Anmatyerr lands to the east. They analysed the activities involved in harvest and trade, the motivations and quantified various parameters of harvest. Prior reporting on various activities and enterprises was in a Bush food workshop report (NTG 2001) and in the review of bush produce enterprise potential by Morse (2005).

Prior to the 2000s, the only regional research was reported in Land Use and Resources in Desert Homelands (Cane and Owen 1985). They mentioned the 'pocket money' that some Aboriginal people earned from the harvest of native seeds but they did not indicate in which region this was occurring or how widespread. Cane and Owen (1985) documented the variety of bush foods that were consumed domestically and the success or otherwise of introduced land-use patterns. Of particular interest here are their findings of the limited success of horticulture in western central Australia, despite the unremitting encouragement it was given by government. Their research, of more than 20 years ago, offers some striking comparative insights with the horticulture that is also currently actively supported in Anmatyerr country through the Northern Territory government Department of Primary Industries and Centrefarm Aboriginal Horticulture Limited (see www.centrefarm.com, accessed 15 August 2011). This website

outlines the aspirations of the horticulture industry for Aboriginal employment on Aboriginal land.

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There is a lack of research on the economic value of desert bush resources – especially in the non-monetary domestic or customary economy of Aboriginal families. This contrasts with the significant body of research undertaken in the Top End of the Northern Territory by Altman (1987), Altman *et al.* (2007), and others affiliated with the Centre for Aboriginal Economic Policy Research (Fordham and Fogarty 2010), and also in other Australian coastal regions (Gray *et al.* 2005; Hunt *et al.* 2009). Devitt (1988) eastern Anmatyerr, Walsh (2008; and earlier) and Bird (Bird *et al.* 2005) Martu studies are the only comprehensive accounts of customary harvest patterns from desert Australia.

Methods

Holcombe obtained information about how the harvest activity operated in the Anmatyerr region near the end of a very productive Katyerr season in September 2009. She visited every house in Pmara Jutunta (aka Six Mile), which is the largest of the three main Amatyerr settlements from where OBF purchased Katyerr. A local Anmatyerr language speaker and lifetime resident of Pmara Jutunta, Maryanne Stirling provided paid assistance to Holcombe. There were 30 houses in Pmara Jutunta. She asked whether the residents had collected Katyerr this year to sell and if they had collected in the past. Of the three houses, where residents were not at home the research assistant knew the harvesting status of residents, with the exception of one 'unknown'. Holcombe also undertook three field visits to Katyerr harvest locations with harvesters to record harvest locations relative to residence and discuss harvester motivations in context.

Findings and discussion

Two features of the trade in bush fruits and seeds are particularly striking. The first is that it is largely self-motivated by Aboriginal people who respond to the requests of traders. The second feature is it that the relations with individual traders, appears to be critical to this trade. These features occur in a context where Aboriginal engagement with paid work is often rare and people are largely reliant on government income sources (Sanders and Holcombe 2010; Ingamells et al. 2010). It is also despite the reality that it is hard work to organise harvest and process bush foods in preparation for sale. There are challenging logistics associated with transport and equipment and there are many home and settlement distractions. Just why is such an activity - despite its challenges – so popular for so many people? We conclude that money is a part of the motivation, but given the apparent reluctance of Anmatyerr people to engage in formal employment, we infer that money is not the sole motivation and that other significant factors also motivate people.

A harvest had not been traded for 2 years before 2009, indicating the stochastic nature of rainfall and plant production patterns. We can assume that harvester skills and capacity were similar over the 5 years. Trader and downstream buyer demand was greater in 2009 than any previous year. The Anmatyerr region in 2009 saw a confluence of factors with high Katyerr production, a strong market for the product and the implementation of the Basics card leading to significant cash shortages for Anmatyerr people.

We found that the sale of bush produce provided significant amounts of cash for unemployed people who, excluding those on CDEP or with other paid income, make up ~80% of the regional Aboriginal population. We also found that the demographic profile of Katyerr harvesters had diversified from the elderly women and middle-aged women supported by their families, to include young men and women aged in their 20s and 30s.

A major element of the value of the bush harvest activity is its resonance with the past – but more importantly – its economic character is consistent with customary Aboriginal systems and values. The traditional lifestyle certainly had its hardships, but it was also varied: people gained their livelihoods as they travelled responding to seasonal opportunities and demands. The bush held a range of foods and other resources, and people collected them according to availability, need or preference. The results of one's labour were tangible: people brought home real material goods that were contributed to the family or group, and in the process built social capital. By contrast, mainstream employment requires delayed or intangible production to generate a product (money) abstract or unfamiliar to people and without the network of customary social relations (Figs 4, 5).

Socio-demographic profile of central Anmatyerr harvesters in 2009

Holcombe's interviews found that harvest and trade by central Anmatyerr people was far more common than anticipated. Of the 30 houses that we approached, only five houses were occupied by families who did not collect and there was one unknown. We conclude that in the study settlement there was a significant majority of residents who harvest for sale and had done so in the last year. People in two of the five houses without harvesters

had assisted family with Katyerr collection in other ways. In one house, a young man was the 'taxi driver'. He received payment for driving his elderly female neighbours to the harvest site. In another house, the daughter assisted her mother in the neighbouring house with the post-harvest processing. However, in one of the houses that technically counts as housing a collector – the young woman had collected only once this year. Notably, she had indicated that; it was such 'hard work' she would never do it again. The research assistant also lived in one of the few households that did not collect. She also said harvesting work was too hard. Yates observed that harvesters were particular about weather conditions and avoided working in the extreme heat. Mornings and evenings were preferred work times but, as fruit is retained on the plant, the harvest can also be delayed for several weeks while people waited for cooler weather.

In all of the houses where harvesters resided there were a few elderly women who had not collected this year – or recently, but again the majority who harvested had sold their Katyerr product this year. Many of the harvesters were young to middle-aged couples – in fact this team composition seemed just as prevalent as the more elderly women - who were accompanied by their daughters and/or granddaughters. Harvesting and processing is predominantly a family affair. However, Yates had also observed young single men selling Katyerr for the first time in 2009. They then financed their football trips to town with the \$100-\$200 in earnings. By contrast, one young man Holcombe interviewed was not a footballer, but rather drove his elderly relatives to the harvest sites and had simply decided to pick his 'own bucket for something to do'. He had a full-time job in Anmatyerr Council essential services and for him it was a weekend activity where the earnings paid for the fuel. In response to Holcombe's question of how did he know what to do, he answered that he 'just knew



Fig. 4. Roadsign Entry onto the Ahakeye Land Trust as part of the Northern Territory Emergency Response (photo by S. Holcombe).



Fig. 5. Roadsign Exit from the Ahakeye Land Trust as part of the Northern Territory Emergency Response (photo by S. Holcombe).

how to'. This learning by watching and doing is critical to the intergenerational knowledge transfer and succession planning for harvesters (Walsh and Douglas 2011).

No time allocation – return studies (per Gray et al. 2005) were undertaken during this preliminary research. Preliminary calculations of harvest rates by Walsh and Douglas for the neighbouring Alyawarr region give a mean rate of 0.8 kg/h (n = 11 records) to harvest and sort dry Katyerr, but this does not include drying or cleaning. The harvest and subsequent processing requires a complex range of skills; many of which derive from traditional local knowledge (Walsh and Douglas 2011) and the sale requires a further set of skills. Several people we interviewed commented on the physical demands of the work (also Walsh and Douglas 2009c). Typically the group would leave early in the morning - harvest until mid afternoon, return for a meal and rest then continue with the processing until ~10 pm. Katyerr plants have prickles that can cause blisters during the harvest. The fruit also has to have calyx and stems removed; different groups and individuals using different methods. There was a general perception among harvesters that this hard work is invisible to outsiders (see also Walsh and Douglas 2009a, 2011).

Motivations of harvesters

Anmatyerr and other central Australian harvesters displayed and spoke of a range of motivations for their work. The young men and women who harvested to sell for the first time in 2009 identified cash income as the main if not the sole driver. These people were a minority. For the other harvesters who Holcombe spoke with, it was noted that the cash was important but equally too were other rewards. These included the use of existing skills and knowledge that could be utilised with freedom and flexibility. People were their own bosses; their own entrepreneurs. Their experience had parallels with perspectives and attitudes of self-employed non-

Indigenous people who are reported to be happier than their counterparts employed by medium and large organisations (Australian Financial Review 2009). This article noted that 'greater emotional wellbeing', accrued to the self-employed because they were 'more in control and less stressed . . . really engaged, motivated and doing it for themselves'. As the trader Rod Horner observed of Aboriginal harvesters 'they are the producers, they control the means of production' (Walsh and Douglas 2009b). We surmise that, if harvesting was solely driven by income need then logically Anmatyerr people with relevant training would hold the available Council positions and horticulture jobs. This is not the case. Davies et al. (2011; Maru and Davies 2011) found that additional to income, jobs needed to provide social relationships and networks to be rewarding for people. They also recommended that employment that linked people to their lands were consistent with Aboriginal aspirations.

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It seems to us that for the majority of the harvesters the energy and enthusiasm with which harvesting work was embraced was because the activities were imbued with relevant meaning. It was socially rich, as family units operate together and intergenerational knowledge transmission occurred as a matter of course. Away from the settlement, harvesters were independent, thus able to set their own timetables, free of the trouble of drinkers and the general humbug of community life (Yates 2009). As Yates (2009) also found 'once collecting started settlements would be like ghost towns with people out working all day, often camping out in extended family groups for several days at a time. Cleaning the product for sale provides highly valued communal time, when several women would sit around a tarpaulin sieving, winnowing and talking'. A report by the NPY Women's Council also noted that 'participation immediately drops if the harvesting is viewed as straight out work rather than a whole day family activity' (Ngaanyatjatjara and NPYWC 2003).

Although not explicitly described by Anmatyerr people in this way, the joint consequences of health and environmental services was also an important outcome of harvest activity. Katyerr is very high in vitamin C and antioxidants (Zora Singh, pers. comm.). Being 'out bush' makes people feel good (Davies *et al.* 2011). On Aboriginal land, people have more freedom to burn vegetation and promote plant production and thus ensure the ongoing harvest.

The multiple factors interpreted to motivate harvesters were identified by traders in quantitative analysis of interviews done by Walsh and Douglas (2009a). In further research among Anmatyerr and Alyawarr harvesters Walsh and Douglas grouped and listed the motivations stated or interpreted from those they interviewed. Notably, many of these motivations are consistent with motivations for the customary harvest of resources for domestic or family use (Walsh and Douglas 2009a; see Appendix 1 for this list of motivations) (Fig. 6).

There was some preliminary evidence to suggest that cash derived from harvest sales sits outside the demand share economy. This cash may have held a different status and carried some inherently positive quality. Yates observed that to avoid the harvest income from being 'lost' to store debt or to family demands some harvesters would sell to him in Alice Springs and then spend the cash at Kmart and other Alice Springs outlets before returning home. He quoted an elderly woman to whom he had just paid several hundred dollars. She spoke authoritatively to her son; 'This is my money! I got this money from hard work. Hard work collecting seeds! This is not money for grog.' (Yates 2009). Furthermore, harvesters tended to be very particular in retaining their individual harvest. Generally each person had their own buckets and individuals filled them independently rather than collectively. This suggests that an approach – 'own bucket = own money' also attaches to the income generated. Large cash quantities were used for purchases of white goods e.g. refrigerators (J. Morse, pers. comm.). Holcombe also found that harvesters spent the income to purchase groceries, buy tobacco and cigarettes and for playing cards. The latter three were prohibited purchases under the Basics card requirements. Further field research is required to identify how these motivations might vary among generations and in different contexts. It seemed doubtful, however, that the income would regularly be spent on alcohol, because, as one respected elderly man noted in response to my question as to whether the young woman at his camp wanted to come on our Katyerr trip; 'some do not look about Akatyerr, they look about this one [signing drinking]'. See also Appendix 1, Harvester Motivations.

Horticultural production of bush foods

Unlike bush harvest activity which has had no government support, grants or subsidies for its development in central Australia, horticulture has received very significant funding around research and development and training for Aboriginal people. Morse (2005) outlined the opportunities for Aboriginal Enterprise for bush resources in central Australia and detailed the limited ways in which Aboriginal bush harvesters can benefit both through the piece rates they get paid per bucket of what they collect and for the intellectual property that has gone into the work they perform in recognition of their local knowledge. Yet, as Morse and business partner Yates were to find out – the focus of the Northern Territory Department of Primary Industry, Centrefarm, the Desert Knowledge Cooperative Research Centre, private companies and other agencies was and still is on horticulture. In the Anmatyerr region, with an extensive potable water aquifer, the horticultural industry has developed over many years, though its viability is questionable.

The expansion of bush harvest is said to be constrained by the seasonality of the harvest and the labour of the harvesters



Fig. 6. Ti Tree school children's art as part of a cultural program coordinated by April Campbell.

thus there is not continuity of supply. Consequently, trials into the commercial horticultural production of Katyerr are also under development. Horticultural production of bush foods actively excludes the dependence on Aboriginal knowledge, and also effectively channels, or attempts to, Aboriginal people into mainstream employment. There is also a significant likelihood that advances in the horticultural production of Katyerr will not lead to Aboriginal employment opportunities due to a largely mechanised horticulture industry dominated by commercial farmers (Yates 2009). The harvesting of bush resources is a hidden economy - but because it is little understood by non-Aboriginal people (other than the few traders and researchers such as Walsh and Douglas) it has been ignored. Conversely, horticulture is a language that non-Aboriginal people understand and are comfortable with, not the unruly, unpredictable bush harvest that operates independently of non-Aboriginal direction or supervision. The features of bush harvest impacts directly on the willingness of government to support and fund different Katyerr production systems. No support for any horticulture industry targeted to Aboriginal employment in central Australia has ever succeeded on its own terms (see Cane and Owen 1985; Walsh and Douglas 2009b). Nevertheless funding continues to be available.

An internal review of the Centrefarm horticulture's training and employment program from an industry perspective (Centrefarm Aboriginal Horticulture Ltd 2009) was recently undertaken in the Anmatyerr region. The finding was that after 26 weeks of on the job training for a Certificate Two in Rural Operations only one or two people from the 20 plus people trained would be capable of earning a living in the industry. They noted that one reason for this was that there was no Aboriginal understanding of the difference between piece work and hourly rates - attributing this result down to work attitudes learned under CDEP where low productivity is not penalised (Centrefarm Aboriginal Horticulture Ltd 2009). Their 'finding' raises a comparison with the bush harvest which is also paid on piece rate per kilo, yet the harvesters are highly productive and effective. Future research might look at any overlap between those individuals who undertook the horticulture training and those who are also bush harvesters. What are their values and motivators driving different responses to each production activity?

The new formalised land management activity involving Anmatyerr rangers (through the Commonwealth Caring for Our Country program) has potential to support the sustainability of Katyerr and other species that are harvested. Recognition of the value of eco-system services potentially provided by Aboriginal people is relatively new in desert Australia (Davies *et al.* 2011). With the Commonwealth funding for the proposed 10 Anmatyerr rangers to work on the Ahakeye Land Trust (as at 2009 there were four employed) there seems to be considerable scope for fire regime management to encourage the bush harvest of small-scale commercial species such as Katyerr.

Conclusion

This research has found that the need for cash has encouraged the harvest and trade of bush produce. In 2009 this is a perverse positive outcome from the Northern Territory Emergency Intervention; it reminds us that people find creative means to meet their needs. Conversely, there has also been an exceptional Katyerr crop in 2009 and although there is strong evidence to indicate that the harvesters are cash poor, the evidence that they are motivated by more than cash is compelling. There are powerful cultural factors motivating people to participate in the harvest. As an alternative economy, aside from art, the sale of bush harvest provides one of the few possibilities of an independent source of income from the marginalising mainstream. In its offering of a form of economic liberation from the mainstream the participants gain their livelihoods back, along with respect for their local knowledge and their manner of doing business is effectively legitimised.

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Bush harvest enterprises already have the human capacity and people are already participating in this regional economy (c.f. Centrefarm Aboriginal Horticulture Ltd 2009). It seems to us that harnessing the productivity of Aboriginal land simply requires a clearer appreciation for what already exists and what is already working. As one bush trader noted; 'In the NT, Aboriginal people have more than half the land area, yet they've got virtually no means of generating wealth or wellbeing from that land. [Selling bushfoods] allows them to use that land and the resources on it in a way which is culturally appropriate and not artificial. . . externally determined and funded' (quote from Morse in Walsh and Douglas 2009a). These small dynamic enterprises have operated for decades without significant external subsidies, thus suggesting that they have been highly resilient and sustainable.

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Appendix 1. Reasons why Aboriginal people collected and ate bush foods (Walsh and Douglas 2009a)

The below lists a comprehensive array of motivations but it does not put a relative importance on them

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Ontological/Metaphysical

follow the Dreaming, follow the Law of grandparents cultivate familiarity between harvesters and their sentient and spiritual landscape reproduce resources by their collection and consumption continuity with the recent and ancestral past teach children about bush foods

Economic

sell for additional cash sustenance, the physical need for food eat tasty, known foods contribute produce to sharing, gifts and socioeconomic exchanges to work and occupy foragers

Social

strengthen social groupings and cohesion through cooperation and shared activities provide stimulating topics of conversation respite from child care responsibilities escape from antagonists and arguments break from tensions, intensity and routine of settlement life expression of and context for detail of Aboriginal languages, e.g. spp. names

Political

pursue activities that are initiated by Aboriginal people rather than whitefellas

Ecological

monitor resource stocks and production manage production through burning and species distribution transmit traditional ecological knowledge

Personal

improve health through dietary change and exercise intellectual stimulation and interest reinforce or shape individual identity independence and autonomy status and prestige enjoyment and relaxation excitement and thrill enhance wellbeing and happiness enjoyment and relaxation excitement and thrill enhance wellbeing and happiness