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## **Wellbeing of Traditional Owners: conceptual and methodological approach**

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### **Abstract**

This paper presents the conceptual and methodological aspects of an in-progress research project. The project objective is to explore wellbeing of Traditional Owners of country, both in a generic sense and with specific emphasis on the benefits, which Traditional Owners derive from country and participation in natural resource management (NRM) activities. Wellbeing is an inclusive concept, integrating domains such as economic opportunity (employment/income), health (mental/physical), social interactions (family, community), country and culture, among others. A literature review is provided on frameworks and models of wellbeing. From those applications, a framework suitable for the scope of this research is developed and implemented through a combination of qualitative (based on focus group discussions) and quantitative (questionnaire) methods. The paper describes some preliminary data and offers some equally preliminary conclusions.

The research is being funded by the Burdekin Dry Tropics Board and CSIRO Sustainable Ecosystems, and conducted in collaboration with Nywaigi Traditional Owners in North-east Queensland.

**Keywords:** Traditional Owners, wellbeing, country, natural resource management

## 1 Introduction

The primary focus of this in-progress research is the investigation of wellbeing of people – with specific focus on Traditional Owners (TOs) of country – and how the relationship of TOs with their traditional country influences their wellbeing.

“Wellbeing” is an inclusive concept, integrating aspects of human life such as economic opportunity (employment/income), health (mental/physical), country and culture, among others. It offers an alternative perspective to the economic concept of utility, which is typically applied in a welfare economic context. It is broader than a health-based perspective of wellbeing.

Specific emphasis is placed on the relationship between wellbeing and country, through physical and cultural connections and involvement of TOs in natural resource management (NRM).

The project objectives are to:

1. Develop and implement frameworks and methods for researching wellbeing in indigenous communities;
2. Provide systematically compiled data on perception of NRM contribution to indigenous wellbeing; and
3. Learn about conducting research with and for indigenous communities and TOs.

The paper is structured into seven sections. Section 2 provides relevant context to the research. Section 3 explores the concept of wellbeing and its relationship to the natural environment. It provides a literature review of existing approaches to and models of wellbeing and develops an approach suitable for the question at hand. Section 4 outlines the methods employed for this project. Section 5 describes preliminary results and Section 6 offers some preliminary interpretation and conclusions.

## 2 Research context

### 2.1 Regional-scale planning for natural resource management

Recent regional planning processes across Australia, specifically in relation to water and NRM, have seen active involvement by indigenous stakeholders, specifically TOs. This reflects an increasing acceptance of the notions that:

- (1) TOs have a legitimate interest in these matters;
- (2) Country is intrinsically linked to culture and therefore of essential importance to TOs; and
- (3) Outcomes from (NRM) planning processes can and need to deliver tangible benefits to TOs.

The Burdekin Dry Tropics Board (BDTB) is currently undertaking a NRM planning process for the Burdekin Dry Tropics regions. The Board seeks to integrate Traditional Owner interests in planning processes related to the National Action Plan for Salinity and Water Quality and NRM.

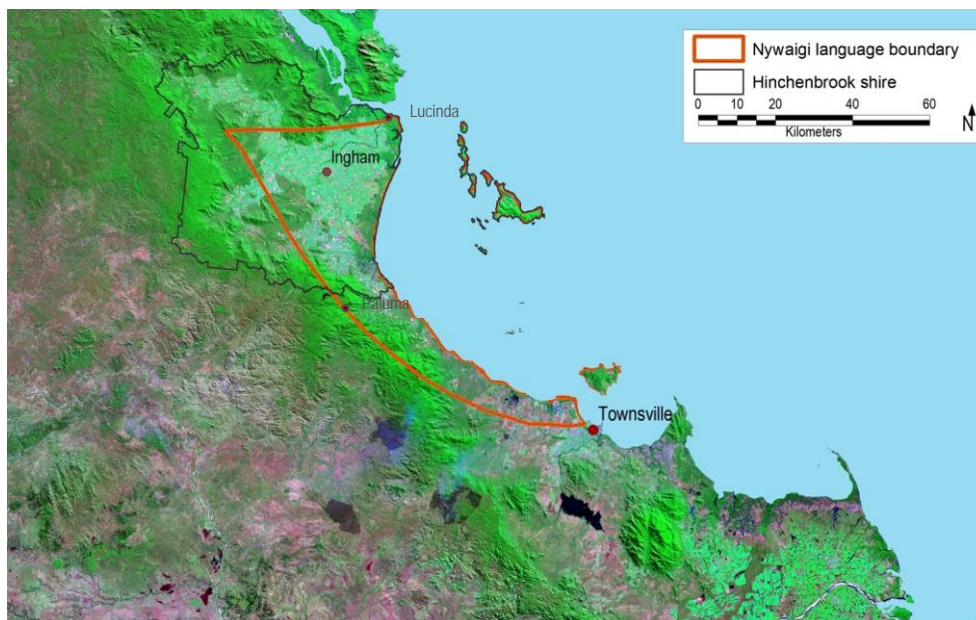
A socio-economic study commissioned by the BDTB in 2002 (Greiner et al., 2003) provided a detailed socio-economic overview of the region but found insufficient statistical data in the public domain for providing decision support to the BDTB in relation to indigenous matters and TO engagement. The BDTB subsequently developed a Priority Action Proposal entitled “Engaging TO participation in the NAPSWQ in the Burdekin Dry Tropics” with the intention to establish a framework for TO engagement. The research presented in this paper delivers on part of the proposal.

In consultation with its Traditional Owners Reference Group, the BDTB decided that a research project focussing on the relationship between TO wellbeing and involvement with country and NRM would be undertaken with the Nywaigi people.

The traditional Nywaigi country broadly contains lowland coastal country between Townsville and Lucinda in North-East Queensland, stretching inland as far as about Paluma (Figure 1).

**Figure 1: Map outlining approximate Nywaigi language boundaries**

(after SKM 2002)



Having been approached by the BDTB, the research team and a Board representative subsequently negotiated the project with the Board of the Nywaigi Land Corporation and the chairman of the Giringun Aboriginal Corporation, which represents nine TO groups in

the Eastern tropical region of Australia. Matters of negotiation included the project in principle, its detailed scope, methods for undertaking the research, TO involvement in the research, ongoing engagement and reporting protocols. In addition to the contract with the BDTB, which specifies deliverables, CSIRO and the TOs developed and signed a code of conduct which governs the process and behaviour of the members of the research team.

## 2.2 Socio-economic disadvantage of indigenous peoples

Socio-economic information detailing the situation of Nywaigi TOs is not available from official sources. The Australian Bureau of Statistics (ABS) releases data on the indigenous population for local government areas (LGAs). These data on the indigenous population do not differentiate between Aborigines and Torres Strait Islanders nor between Traditional Owners or others.

A majority of Nywaigi TOs are believed to be living within the Hinchinbrook LGA, which also contains a large proportion of the Nywaigi traditional country. Hinchinbrook LGA also includes Palm Island. Negotiations are underway to obtain broad Nywaigi population statistics from the geneology research conducted as part of the recently lodged Nywaigi native title claim.

Table 1 summarises key statistical parameters relating to employment and income of the population in Hinchinbrook LGA. The data paint a picture of socio-economic disadvantage of indigenous persons in the LGA. It is, however, difficult to directly relate these data to the condition of the Nywaigi TOs because of the caveats outlined above and additional issues with census data relating to enumerated population (eg. Greiner et al, 2004) and the appropriateness of methodology for the cultural and life circumstances of indigenous peoples (eg. Altman, 2002).

The vast majority of indigenous persons are not part of the labour force (71% - compared to 42% for non-Indigenous). Unemployment (22%) is four times higher than for the non-indigenous population. The major employer of indigenous persons is government services and defence. This industry includes workers on the Commonwealth Employment Scheme (CDEP)<sup>1</sup>.

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<sup>1</sup> The CDEP was developed in 1976 as a response to remote Aboriginal communities' requests for local employment to be created, with particular focus on community development. It was expanded to include Aboriginal and Torres Strait Islander communities living in rural and urban areas in 1985. The CDEP enables members of the Aboriginal and Torres Strait Islander communities to exchange employment benefits for opportunities to undertake work and training in activities which are managed by local Aboriginal and Torres Strait Islander community organisations. Hunter (2002) concludes that the CDEP enhances indigenous labour force participation while hiding a high level of underemployment within Aboriginal communities.

**Table 1: Selected ABS statistics for indigenous and non-indigenous persons in the Hinchinbrook local government area.**

Data Source: ABS census 2001

Category	Selected statistics	Indigenous	Non-indigenous
Age	Mean age	20 years	41 years
Labourforce	Unemployed (out of labourforce)	22%	5%
	Not in labourforce (out of total enumerated)	71%	42%
Sector of employment	Agriculture, Forestry and Fishery	3%	24%
	Manufacturing	4%	15%
	Retail Trade	6%	14%
	Government Administration and Defence	48%	3%
	Education	11%	8%
	Health and Community Services	14%	8%
Occupation	Managers and Administrators	3%	17%
	Tradespersons and Related Workers	7%	13%
	Intermediate Production and Transport Workers	8%	14%
	Labourers and Related Workers	35%	11%
Income statistics	Household income <\$300	10%	17%
	Household income \$300-\$599	42%	36%
	Household income \$600 and above	39%	35%
	Household income not stated	10%	13%
	Median weekly household income	\$600 - \$699	\$500 - \$599
	Median weekly individual income	\$160 - \$199	\$200 - \$299
Household/ Family structure	Mean household size	5 persons	2.5 persons
	One parent families	36%	10%
	Multi-family households	7%	0%
	Lone person households	1%	25%
Housing	Separate house owned	5%	69%
	Separate house rented	81%	16%
Education	Bachelor	4%	19%
	Diploma or advanced diploma	23%	11%

Indigenous persons tend to work in labourer positions. Relatively few hold managerial and administrative positions. Few indigenous persons have completed a university degree but many hold diplomas.

Individual income for indigenous people is lower than for non-indigenous. Household income for indigenous households tends to be higher than for non-indigenous households – but there are twice as many persons living in a household.

One-parent families are quite common in the indigenous population (36% of families) and 7% of indigenous persons live in multi-family households. Single person households are virtually non-existent in the indigenous population.

### 3 Conceptual approach: Wellbeing

There have been various definitions and conceptualisations of wellbeing (as reviewed by Alkire, 2002). A principal agreement is that it includes the satisfaction of (basic) material needs, the experience of freedom, health, personal security and good social relations. In combination, these elements provide physical, social, psychological and spiritual fulfilment.

The Australian Bureau of Statistics defines wellbeing as a set of factors, such as natural environment, the human made environment, social arrangements, and human consciousness, that interact within the given culture and can be seen as a state of health or sufficiency in all aspects of life (ABS, 2001). At the individual level, this can include the physical, emotional, psychological and spiritual aspects of life. At a broader level, the social, material and natural environments surrounding each individual, through interdependency, become part of the wellbeing equation.

#### 3.1 Philosophical approaches to wellbeing

Diener and Suh (1997) differentiate three principal philosophical approaches to the concept of wellbeing.

- (1) The choice utility (economic) approach
- (2) Normative ideal (social science) approach
- (3) Subjective experience (behaviour science) approach

##### Choice utility approach

The key assumption of this economic perspective is that people will select things and activities that most enhance their utility or well-being, within the constraints of the resources they possess. Utility relates primarily to the extent to which citizens can obtain the things that they desire. Utility is additive and utility of all citizens combined equals social welfare. This approach is widely adopted in western societies where decision makers place prominence on economic factors and monetary values and require ordinal measures of welfare to support policy decisions (Diener and Suh; 1997). Gross domestic product is the measure of choice of social welfare.

The concept of utility forms the basis of welfare economics. It is an abstract concept, mathematically founded, and enables the comparison and ranking of alternative policies. A comprehensive critique of this approach is contained in Sen and Williams (1982) who conclude that the problem with utilitarianism is that it may have been taken too far in trying to provide answers to problems of personal or public choice. Mirrlees (1982) specifically criticises the definition of utility as a person's conception of his/her own wellbeing as unacceptable in the light that people might have mistaken conceptions of their wellbeing. Hahn, in the same volume (1982) describes utility as used by welfare economists as purely commodity space and unable to deal with other important sources of utility such as rights. Hahn (1982, p.188) illustrates how "...utility may not only depend on the consequences of policy but on the policy itself..." by comparing the wellbeing of a hard working slave with that of an equally hard working free man.

In reviewing the conceptual foundations of the utility as a behavioristic concept and its empirical adequacy, Holländer (2001) points out (1) the importance of cultural determination of needs or aspirations, (2) that “..individuals sacrifice positive amounts of nonrelational goods for extra consumption..” (p.230) and the contextual importance of utility of that anything one does or has relates to what others do or have.

#### Normative ideal approach

This social sciences approach to wellbeing is governed by cultural, religious, philosophical or other systems of norms, ideals and values. “Optimal” levels of health, income, etc. are determined and wellbeing is measured relative to those reference points. Wellbeing of communities and/or individuals is assumed to improve as they come closer to – or exceed – the benchmark. This approach to wellbeing does not consider the subjective experience of people evaluated, nor their wishes (Diener and Suh; 1997).

This approach has been implemented as a cross-national measure by the United Nations in their ‘Demographic Yearbook’ and by the World Bank in their ‘Annual World Development Report’ series. Social indicators are relatively easily attainable from statistical data collected through activities such as the Census. Their main strength is that they objectively assess shared societal qualities and values.

#### Subjective experience approach

The key assumption is that individual standards of comparison determine personal satisfaction levels. This approach identifies wellbeing as experiential and adopts an individualistic perception of wellbeing. Different people value different things differently. Personal characteristics determine what attributes are important to people and how they rate their attribute specific satisfaction. For example, individuals from lower income families might have lower personal expectations in respect to their own income and may be more satisfied with a certain level of income than a person from a high-income family. Data on subjective wellbeing is best collected through questionnaires and interviews (Diener and Suh; 1997). A distinction is necessary between the determinants of (or means to) wellbeing and its constituents or elements (Dasgupta, 2001).

Quality of life is based on subjective well-being (Sumner, 1996). It combines life satisfaction (cognitive judgemental component), which means an assessment of how well one’s life is going on balance, and a sense of well-being (affective experiential component), ie. the extent to which one feels life as enrichening or rewarding. Different methods have been developed to measure subjective well-being, such as the satisfaction with life scale of Diener et al. (1985). These scales are cardinal scales.

### **3.2 Human wellbeing and the environment**

In 1992, the United Nations Commission on Sustainable Development published Agenda 21 (United Nations, 1992), which outlined an integrated way of assessing wellbeing. It proposed to give equal weight to human societies and ecosystems. One of the latest major



developments in this field, the Millennium Ecosystems Assessment project, is discussed here.

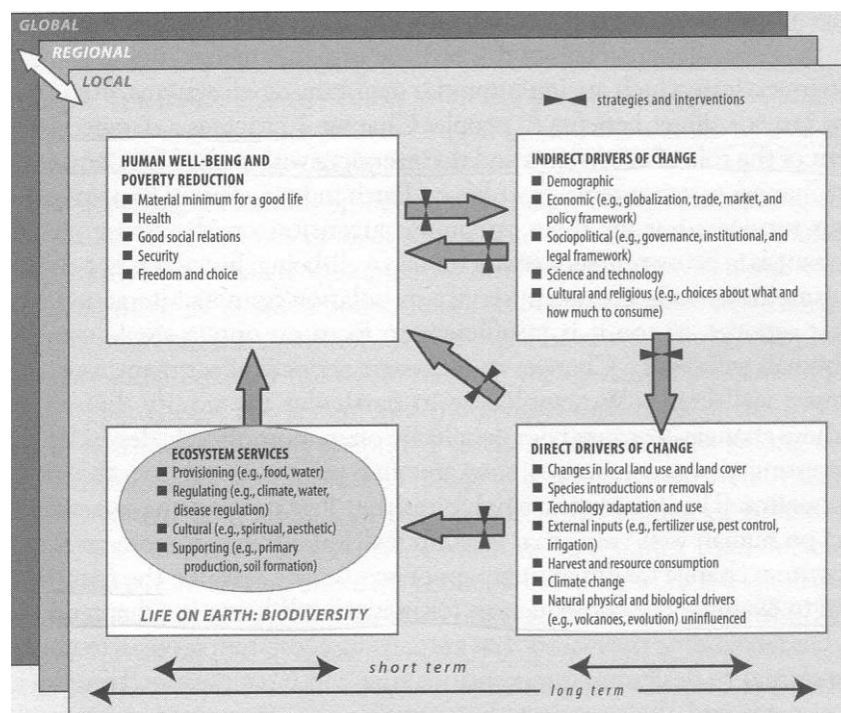
The conceptual framework adopted by the Millennium Ecosystem Assessment (MA) has at its core human wellbeing and poverty reduction (Millennium Ecosystem Assessment, 2003 and Figure 2):

The framework defines five core dimensions of wellbeing:

- (1) Material minimum for a good life – including secure and adequate livelihoods, income and assets, enough food at all times, shelter, furniture, clothing and access to goods
- (2) Health – including being strong, feeling well, and having a healthy physical environment
- (3) Good social relations- including social cohesion, mutual respect, good gender and family relations, and the ability to help others and provide for children
- (4) Security – including secure access to natural and other resources, safety of person and possessions, and living in a predictable and controllable environment with security from natural and human-made disasters
- (5) Freedom and choice – including having control over what happens and being able to achieve what a person values doing or being

**Figure 2: Conceptual framework of wellbeing and poverty reduction adopted by the MA**

Source: Millennium Ecosystem Assessment, 2003:37



The MA specifically explores the connection between human wellbeing and ecosystem services and identifies four major categories of ecosystem services that bear directly on human wellbeing (Millennium Ecosystem Assessment, 2003):

- (1) Provisioning services – ecosystems provide goods (food, fiber) and other services that sustain wellbeing. Biodiversity is fundamental since it provides sustainability and resilience vital for the livelihoods and coping strategies of many people, especially the rural poor.
- (2) Regulating services – includes functions such as purification of air, fresh water, reduced flooding or drought, stabilisation of local and regional climate, checks and balances that control the range and transmission of diseases.
- (3) Cultural services – totemic species, sacred groves, trees, scenic landscapes, geological formations, or rivers and lakes. These attributes and functions influence aesthetic, recreational, educational, cultural and spiritual aspects of the human experience.
- (4) Supporting services – indirect functions that are essential for sustaining each of the other three ecosystem services.

### 3.3 An integrated model for exploring wellbeing of Traditional Owners

Given the scope of the research project, it is paramount to be investigating the linkage between the natural environment and wellbeing of Traditional Owners. To that effect, a comparison of existing models that provide the principle connection between humans and the natural environment is useful (Table 2).

**Table 2: Comparison of domains contained in various human – ecosystem wellbeing models**

Human ecological model (Shafer et al 2000)	Person-environment relationship (Mitchell, 2000)	Concept of liveability (van Kamp et al, 2003)	Millennium Assessment Framework (MEA, 2004)	ABS concept (based on OECD, 1976)
Social equity	Community	Community	Material minimum	Family and community
Conviviality	Health	Health	Health	Health
Opportunity	Personal development	Personal development	Good social relations	Health
Accessibility	Goods and services	Economy	Security	Education and training
Liveability	Physical environment	Natural resources	Freedom of choice	Work
Sustainability	Security	Built environment		Economic resources
		Services accessibility		Housing
		Lifestyle		Crime and justice
		Safety		Culture and leisure
		Culture		
		Natural environment		

The person-environment model (Mitchell, 2000) examines a combination of measurable spatial, physical and social aspects of the environment and the person's perception of these. The perception is not only related to the objective characteristics of the environment but

also integrates personal and contextual aspects. The model is a “thinking model” and presents layers of concepts that are related to each other.

The concept of “liveability” refers to the conditions of the environment in which people live, (air and water pollution, or poor housing, for example) and the attribute of people themselves (such as health or educational achievement) (Pacione, 2003). Examples of various definitions of “liveability” are given in van Kamp et al (2003). Pacione (1990, in van Kamp, 2003) defines liveability as a behaviour-related function of the interaction between environmental characteristics and personal characteristics. Veenhoven (1996, in van Kamp, 2003) views liveability as quality of life of a nation and the degree to which its provisions and requirements fit with the needs and capacities of its citizens. Newman (1999, in van Kamp, 2003) notions that liveability is about the human requirement for social amenity, health and wellbeing and includes both individual and community wellbeing.

The main differences between the various models relate to object, perspective and time-frame (van Kamp et al., 2003) Some concepts are primarily related to the environment, (physical, built, social, economic and cultural), while others are primarily related to the person. Some are normative while others are person-based/experiential. The time frame of the concepts of wellbeing, liveability and quality of life tend to focus on the ‘here and now’ and are less concerned about long-term considerations associated with the notion of sustainability.

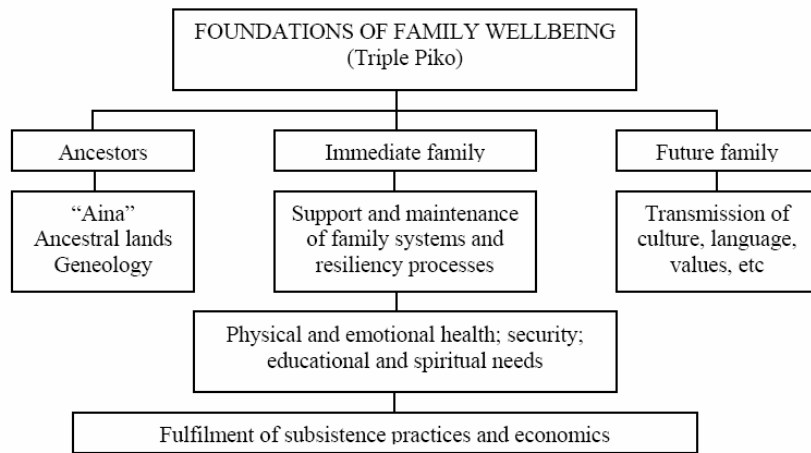
McGregor et al. (2003) implemented an experiential approach with a multi-layered model to illustrate the wellbeing for people in Hawaii. The model differentiates wellbeing at five levels: individual, family, community, Nation and “Aina”. Aina is a holistic concept of the natural system and resources that governs the life of the Nation.

Figure 3 encapsulates what Hawaiians regard as key elements of family wellbeing. Family wellbeing is based on “Triple Piko”, that is a relationship with past, current, and future family. Family wellbeing is enhanced when:

- (1) “Aina” reaffirms the sense of place and relationship to ancestral land and genealogy;
- (2) Activities, processes and resources that support and enhance the present, including extended family, are maintained;
- (3) Transmission of culture, language and values are being sustained and carried forward to future generations.

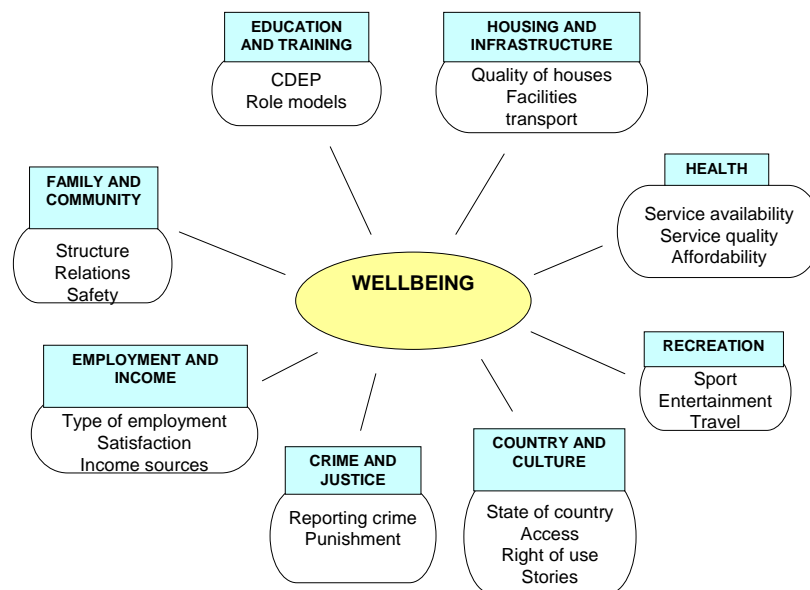
**Figure 3: Model of the foundations of Hawaiian family wellbeing**

(after McGregor et al. 2003)



For the purpose of the research task at hand, a preliminary framework has been developed , which integrates elements of other models and integrates them into an experiential model of Traditional Owner wellbeing, as presented in Figure 4. The model specifically includes a domain entitled “Country and Culture” in recognition of the connections of Traditional Owners to their country.

**Figure 4: Preliminary framework for Traditional Owner wellbeing research**



## 4 Methodology

### 4.1 Focus-group discussions

The methodology employed for the research was negotiated with the Nywaigi Land Corporation. In addition, a code of conduct governing the conduct of the research team and Nywaigi involvement was developed.

A focus-group based approach was adopted as principal method of data collection. Focus group discussions (FGDs) are a type of group interview. Powell et al. (in Gibbs, 1997) define a focus group as a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research.

The key characteristic of FGDs is that insights and data are produced through the interaction between participants. Therefore, FGDs are particularly useful when the objective of the exercise is to explore the degree of consensus on a given topic (Morgan and Kreuger 1993). By its very nature, the outcome of focus groups cannot be determined. The key elements of the FGD approach are summarised in Table 3.

**Table 3: Key elements of the focus groups discussions**

Source: Adapted from Larson et al., 2004

Element	Expression
Format	Group session
Recommended application	Identification of issues, problems, concepts
Purpose	Encourage divergent thinking; discourse; disclosure of perceptions and behaviours; encourages participants to agree on key outcomes
Size of groups	3-15; optimum 6-12
Participants	Selected by invitation; similar in characteristics
Moderator	Implement and follow agenda; Flexible yet focused in guiding discussions
Length	1.5 to 2.5 hours
Number of sessions	Varies; usually more than one
Forms of data	Written materials (whiteboard; paper); conversation notes; observer comments
Data collection	Documents; audiotape and/or transcription
Formats for reporting	Largely descriptive

Focus group discussions have been conducted so far in three of five agreed localities: Ingham; Tully and Cairns. Over the coming weeks, further discussions will be organised for Townsville and Palm Island. In each location, several focus groups are convened and participants are separated on the basis of age – and possibly also of gender if participation is high enough to support this. The age groups are 12-22 years (adolescents); 23-49 years (working age); and people 50 years and older. The Nywaigi liaison officer on the team

invites all Nywaigi people within a certain locality and surrounding area to the FGDs. He does that by telephone and in person.

Participation in this research project creates potential benefits to the participants, through the opportunity to be involved in consultation process, to be valued as experts, and to be given the chance to work collaboratively with researchers. The group-nature of FGDs serves to develop trust between group members and develops group issue-identifying skills. Feeling of empowerment is achieved through participant perception of actively participating in a process that might make a difference to the Nywaigi community in the future.

A key output of each FGD is an agreed mental model of wellbeing, which reflects the domains that the participants see as influencing TO wellbeing from the perspective of the population segment they represent. It also contains a prioritisation of elements, agreed in group discussion during which the moderator removes him/herself from the group.

These priority domains are subsequently discussed in order of ranking based on a pre-prepared set of semi-structured questions. The domain entitled “Country and culture” is also discussed in detail, irrespective of whether it is part of those domains identified as important.

## **4.2 Questionnaire**

Participants also complete a short questionnaire at the end of FGDs. The objective is to generate a quantitative dataset that enables (1) a triangulation of the qualitative information, (2) an integration of data across all locations and population segments, and (3) comparison of Nywaigi people with the quality-of-life statistics compiled elsewhere. To that end, the questionnaire is partially based on the Australian Unity Wellbeing Index (Cummins et al, 2001, Cummins et al, 2003 and Cummins et al, 2004), which in turn is informed by the satisfaction with life scale (Diener et al, 1985).

Most questions are rating questions, whereby respondents rate their satisfaction with a series of items relating to their quality of life and community situation. The scale is a five-point ordinal scale. Some open-ended questions provide opportunity for comment.

## **5 Preliminary results**

This research is in progress, with focus groups in three of five locations completed. Of the locations completed, one has been transcribed. Hence, the paper can offer but a glimpse of the type of results which the research is generating – and only with respect to the qualitative aspect of the research.

Table 4 provides an overview of the domains and prioritisation of domains derived during the focus groups in the first location, Ingham. Across all four focus groups, family –

meaning the relationships and support systems that family encapsulates – are rated as priority domains, rating highest for two segments (adolescents and adult women). Health is of particular importance to working age men and older Nywaigi. Older Nywaigi also identify country and culture as a priority domain.

In the discussion of the domains, it emerged that a Nywaigi-owned cattle station near Ingham provides the focus point for interactions of TOs with their country – in addition to recreational fishing which most participants undertake as a past time activity and for supplementary food. The property is a fairly recent purchase by the Indigenous Land Council and currently runs agistment cattle. It is used as a focus point of TO meetings, ‘time away’ for young people or just for recreation. There are many aspirations that the property will generate skill and employment outcomes as well as direct and indirect health benefits.

**Table 4: The domains of wellbeing identified by focus group participants in Ingham**

Domains identified	Younger people (12 – 21 yrs)	Adult women (22 – 49 yrs)	Adult men (22 – 49 yrs)	Older people (over 50 yrs)
Most important	Family and community relationships	Family and community relationships	Health (with specific focus on addiction issues)	Health (with specific focus on health services)
2nd important	Recreation	Education	Family relations and support	Country and culture
3rd important	Education	Housing	Community relations	Family and community relationship
Other domains identified	Cultural diversity Crime and justice Employment/income Entertainment Health and nutrition	Employment/income Country and culture Health Recreation Crime and justice	Recreation/Sport Education & training Transport Culture/Painting Employment Administration/ dealing with Government agencies Housing	Transport Education

## 6 Conclusions

This is a descriptive paper, which outlines the conceptual and methodological foundations of an in-progress research project investigating indigenous wellbeing – with specific focus on TOs of country – and how the relationship of TOs with their traditional country influences their wellbeing.

Wellbeing provides a holistic framework for researching the things that matter to Indigenous people in general and, more specifically, the relationship between country and outcomes for TOs. The paper provides an overview of the wellbeing literature on concepts incorporating environment and allowing for subjective perceptions. The model proposed for

this study suggests that natural resources are not only important for individual wellbeing, but are a base for the perpetuation of the cultural traditions and communal identity.

The paper touches on some of the procedural requirements for conducting research with Indigenous Peoples. The research is governed by an agreed code of conduct, which describes the negotiated scope of the project, method employed and implementation, involvement of community representative(s), and ongoing reporting and consultation processes.

While the key driver of the research is to explore the diverse direct and indirect relationships of country with TO wellbeing, it also provides a platform for starting to assess the applicability of the method in a wider context of TO situations.

## 7 Acknowledgements

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## 8 References

- Alkire, S. 2002, Dimensions of human development. *World Development* 30(2), 191-205.
- Altman, J. C., 2002. Generating finance for Indigenous development: Economic realities and innovative options, CAEPR Working Paper No. 15, Australian National University: Canberra.
- Australian Bureau of Statistics, 2001. Measuring Wellbeing, Frameworks for Australian Social Statistics, ABS Catalogue no. 4160.0.
- Campbell A., Converse P. and Rodgers W., 1976. *The quality of American life: perceptions, evaluations and satisfaction*. Russell Sage Foundation New York.
- Cummins R. A., Eckersley R., Lo S. K., Okerstrom E., Woerner J. and Melanie D., 2004. Australian Unity Wellbeing Index Survey 10. Australian Centre for Quality of Life, Deakin University, Melbourne, Report 10, April 2004
- Cummins R. A., Eckersley R., Pallant J., van Vugt J. and Misajon R., 2003. Developing a national index of subjective wellbeing: The Australian Unity Wellbeing Index. *Social Indicators Research* 64: 159-190
- Cummins R.,A., Eckersley R., Pallant J., van Vugt J., Shelley J., Pusey M. and Misajon R., 2001. Australian Unity Wellbeing Index Survey 1: Report 1. Australian Centre on Quality of Life, Deakin University, Melbourne, June 2001
- Dasgupta, P., 2001. *Human Well-Being and the Natural Environment*. Oxford University Press: Oxford.
- Diener, E., Emmons, R.A., Larsen, R.J. and Griffin, S., 1985. The satisfaction with life scale. *Journal of Personality Assessment* 49:71-75.
- Diener E. and Suh E., 1997. Measuring quality of life: economic, social, and subjective indicators. *Social Indicators Research*, 40: 189-216



- Gibbs A., 1997. Focus Groups. Social Research Update No 19; Department of Sociology, University of Surrey, Guildford UK.
- Greiner R. Stoeckl, N., Stokes C., Herr A., and Bachmaier J., 2003. Natural resource management in the Burdekin Dry Tropics: social and economic issues. Report to the Burdekin Dry Tropics NRM Board. CSIRO Sustainable Ecosystems: Townsville. 202 pp.
- Greiner R., Mayocchi C., Stoeckl N., Larson S., and Schweigert R., 2004. Assessing community benefits from tourism for Carpentaria Shire in North West Queensland. CSIRO Sustainable Ecosystems: Townsville and Tropical Savannas CRC: Darwin.
- Hahn F., 1982. On some difficulties of the utilitarian economist. In, Sen, A, and Williams, B. (eds), 1982, *Utilitarianism and beyond*. Cambridge University Press: Paris. 187-198.
- Holländer, H., 2001. On the validity of utility statements: standard theory versus Duesenberry's. *Journal of Economic Behaviour & Organization*. 45:227-249.
- Hunter, B (2002). The rise of the CDEP Scheme and changing factors underlying indigenous employment, CAEPR Working Paper No. 13, Australian National University, Canberra.
- Larson K., Grudens-Schuck N. and Allen B. L. (2004): Focus Group Fundamentals. Methodology Brief, Departments of Sociology and Agricultural Education and Studies, Iowa USA.
- McGregor DP, Morelli TP, Matuoka JK and Minerbi L (2003): An ecological model of wellbeing. In Becker HA and Vanclay F (Eds): *The International Handbook of Social Impact Assessment: Conceptual and Methodological Advances*. Edward Elgar UK
- Millennium Ecosystem Assessment (authors: Alcamo, J. et al.), 2003, *Ecosystems and human well-being: a framework for assessment*. Island Press: Washington DC.
- Mirrlees, J.A., (1982): The economic uses of utilitarianism. In, Sen, A, and Williams, B. (eds), 1982, *Utilitarianism and beyond*. Cambridge University Press: Paris. 39-62.
- Mitchell G. (2000): Indicators as tools to guide progress on the sustainable development pathway. In: Lawrence, RJ (Ed): *Sustaining Human Settlement: A Challenge for the New Millennium*. Urban International Press, pp. 55–104.
- Morgan D. L. and Kreuger R. A. (1993): When to use focus groups and why. in Morgan D.L. (Ed.) *Successful Focus Groups*. London: Sage.
- OECD (1976): *Measuring Social Wellbeing: A progress report on the development of social indicators*. OECD, Paris
- Pacione M (2003): Urban environmental quality and human wellbeing—a social geographical perspective. *Landscape and Urban Planning* 65: 19–30
- Sen A, and Williams B. (eds), (1982): *Utilitarianism and beyond*. Cambridge University Press: Paris.
- Shafer C. S., Koo Leea B. K. and Turner S. (2000): A tale of three greenway trails: user perceptions related to quality of life. *Landscape and Urban Planning* 49: 163-178
- Sinclair Knight Merz (SKM) (2002): *Aboriginal Language Groups in Australia*. Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) and Sinclair Knight Merz Pty Ltd (SKM), Canberra.
- Sumner, L.W., 1996. *Welfare, Happiness and Ethics*. Clarendon Press: Oxford.
- United Nations (1992): *Agenda 21: Programme of action for sustainable development*. United Nations, New York
- van Kamp I., Leidelmeijer K., Marsman G. and de Hollander A. (2003): Urban environmental quality and human wellbeing. Towards a conceptual framework and demarcation of concepts; a literature study. *Landscape and Urban Planning* 65: 5–18