

**APPLICATION OF CAPABILITY APPROACH TO ASSESS THE ROLE OF ECOSYSTEM SERVICES IN WELL-BEING OF INDIGENOUS AUSTRALIANS FOR WELFARE POLICIES**

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Well-being of Indigenous people in Australia is linked to use and value of natural resources that play a significant part in the socio-economic and cultural lives of people. This research analyses the current well-being approach as used in Australia from an Indigenous perspective, the value of natural resources in Indigenous well-being, and applies the capability approach to suggest transformation of the present concept of Indigenous well-being for the future policy decision making. The study presents data from three case studies from Queensland and proposes to include **intangible values [e.g. cultural and identity values] that are linked to people's capabilities and functionings** into the well-being measures. The results suggest changing focus from socio-economic measure of well-being to an integrated socio-economic-ecological measure that incorporates **people's capabilities. It examines the current passive welfare policies and recommends to develop pro-capability policies that promote and help people to build knowledge and skills in relation to natural resources; in line with people's past experiences, skills and knowledge. The paper also briefly** analyses the tradeoffs of the current Government expenditure on welfare programs for enhancing Indigenous capabilities that can benefit the wider Australian public and could save the cost of welfare programs and of weed/natural resource management programs to a greater extent, if Indigenous people will be provided with appropriate opportunities to access land/other natural resources. The study suggests transforming the concept of well-being and its measures by **incorporating people's capabilities and their values in relation to the natural systems. It is demonstrated in here that by including traditional and cultural knowledge as 'functionings' of** Indigenous people that enhances well-being, it could enable people to lead creative and healthy lives. This research proposes a win-win situation for the Government, Indigenous people as well for the wider Australian public.

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Dr Kamaljit Sangha is an ecological economist who has been working in the field on assessing value of ES for the last 10-12 years. She has worked in north Qld to link well-being of Indigenous people to the use and value of natural resources. For the ESA paper presentation, she attempts to apply a mixed of Capability and Millennium Assessment approaches to assess the value of ES in terms of well-being of Indigenous people.

**KEY LOCALITIES FOR MANAGEMENT OF BIODIVERSITY VALUES IN A PERI-URBAN LANDSCAPE IN NORTHERN AUSTRALIA**

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The Howard Sand Plains Site of Conservation Significance lies on the outskirts of Darwin in the Northern Territory of Australia and has been subject to increasing pressure from development as the city expands. Biodiversity values include a suite of listed threatened species, an outstanding **diversity of carnivorous herbs and sensitive 'sand sheet heath' vegetation. Threats to the biological** integrity of the landscape arise from intensification of land use, weed invasion, changed fire regimes and extraction of sand and gravel to satisfy an increasing demand for building material.

To better understand the values and spatial arrangement of prime habitat, vegetation communities of the seasonally waterlogged floodplains were mapped from aerial photographs at a scale of 1:10,000. The community boundaries were intersected with point records to identify key habitats for a suite of threatened species and prime habitat for carnivorous bladderworts (genus *Utricularia*). The vegetation mapping in combination with field data were used to provide a detailed description of sand sheet vegetation. Four localities were identified as the highest priority areas for the maintenance of biodiversity values associated with the seasonally waterlogged floodplains. In total these occupy 33.8 km<sup>2</sup>; 12.8% of the area of the Site of Conservation Significance.

Identification of key biodiversity values and sites provides an improved capacity to integrate these values into both broad-scale planning and site-specific decisions on land-use. We hope public access to these data will foster community understanding of the outstanding biodiversity values of the Site of Conservation Significance and facilitate community input into planning decisions.

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Dr David Liddle has spent over 30 years in northern Australia and brings a wealth of experience to the challenge of integrating science into the practice of resource management, including the opportunities and challenges of collaboration between people with diverse interests and backgrounds.