Date Received	Submission No. 27			
	Date	PM Received		



Our Ref: 08/303

Committee Secretary House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs PO Box 6021 Parliament House CANBERRA ACT 2600 AUSTRALIA 18 July 2008

The Review Secretariat.

### Re: CSIRO's Submission to the Inquiry into Developing Indigenous Enterprises

We thank you for the opportunity to provide a submission to the Inquiry into Developing Indigenous Enterprises.

BY: ATSIA

CSIRO, through its various research and social outreach initiatives, is striving to deliver sustainable economic, social and environmental solutions to further address some of the major challenges facing Indigenous communities in Australia. We recognise the social and economic disadvantage experienced by Indigenous Australians, and are committed to overcoming the gap between Indigenous and non-Indigenous Australians. CSIRO has initiated an Indigenous Engagement Strategy to achieve greater Indigenous participation in CSIRO's research and development agenda.

CSIRO would strongly advocate further developing enterprises that build on traditional Indigenous strengths, namely ownership of land and sea resources and ownership of Indigenous knowledge. In doing so, it is our view that current business support programs do not adequately address or cater for essential research and development in industries that are associated with these types of activities.

Our attached comments specifically address issues surrounding the adequacy of current business support programs and explore the current and future opportunities for Indigenous enterprises.

Please do not hesitate to contact me or the main submission contact should you require any further information.

Yours sincerely

Repley Nostan

Dr Steve Morton Group Executive, CSIRO Manufacturing, Materials & Minerals



# CSIRO Submission 08/303 Developing Indigenous Enterprises. July 2008

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# **Key Points**

- Science and technology are strong drivers of economic advancement and contribution to quality of life.
- Business support programs do not adequately address or cater for scientific research and development in emerging industries.
- o Business support funding timeframes are too short to allow for appropriate investigations.
- Indigenous strengths lie in their ownership of land and sea resources and in their Indigenous knowledge for which there is a growing commercial value.
- A minority business/development council model would need to contemplate how it would be able to assist Indigenous businesses address matters requiring scientific research and development.
- CSIRO as a national research organisation contributes to addressing national challenges that face Indigenous Australians within a whole-of government framework.
- CSIRO's existing research specifically targeted at Indigenous communities includes an 'Indigenous livelihoods' research stream as part of the Sustainable Regional Development Theme.
- CSIRO's research and development addresses issues of direct relevance to Indigenous people in resource-based enterprise opportunities and natural resource management.
- CSIRO has established an Office of Indigenous Engagement within the Office of the Chief Executive.
- The Office of Indigenous Engagement is responsible for the implementation of the Indigenous Engagement Strategy which has four focus areas – Scientific opportunities; Employment; Education Outreach; and Cultural Learning and Development.

# Background

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's premier research organisation. CSIRO believes that Indigenous Australians have extraordinary contributions to make to Australia across cultural, economic and scientific domains. Furthermore, CSIRO recognises the social and economic disadvantage experienced by Indigenous Australians and is committed to overcoming the gap between Indigenous and non-Indigenous Australians.

CSIRO initiated its Indigenous Engagement Strategy (IES) in July 2007. The Strategy aims to achieve greater Indigenous participation in CSIRO's research and development agenda and activities. This participation will ensure that CSIRO benefits from the insights that Indigenous people can bring to the national challenges. The Strategy also provides a means of ensuring that CSIRO's activities are as effective as possible in contributing to addressing the challenges and aspirations of Indigenous communities.

The IES focuses on four areas - Science contributions, Employment, Education Outreach and Cultural Learning and Development. In July 2007 CSIRO opened its Office of Indigenous Engagement to oversight and facilitate implementation of the Strategy. The Office is attached to the Office of the Chief Executive.

CSIRO has explicitly sought to increase its engagement with SMEs in a range of sectors of the economy (e.g. through the CSIRO Small to Medium Enterprise Engagement Centre, http://www.csiro.au/solutions/SMEEngagement.html). CSIRO will seek to extend this engagement to Indigenous enterprises through the IES.

## Comments addressing the Terms of Reference

1. "Whether current government, industry and community programs offering specific enterprise support programs and services to Indigenous enterprises are effective, particularly in building sustainable relationships with the broader business sector."

### **Emerging Industries**

CSIRO provides assistance to Indigenous communities at the science front where there is the interface of research and activity that has the potential for economic and social development. CSIRO research has been instrumental in exploring future commercial demand in emerging industries that feature cultural, environmental and biosecurity services. A report co-authored by CSIRO scientists titled, "Healthy Country, Healthy People Investment Strategy" in 2007 identified a number of existing and potential commercial opportunities particularly in northern Australia that included:

- Fire management for carbon abatement and offset schemes;
- Land management on pastoral properties, defence properties, and NT and Australian Parks;
- o Environmental monitoring and rehabilitation around mine sites and forestry plantations;
- o Landscaping and dust reduction around major towns and communities;
- o Control and eradication of weeds and feral animals, particularly in high biodiversity areas;
- o Biodiversity offsets and the maintenance of intact landscapes;
- o Indigenous ecological knowledge; and
- o Cultural and environmental tourism.

The experience of CSIRO staff engaged in Indigenous business development activities suggests that current business support programs do not adequately address or cater for essential research and development in industries that are associated with these types of activities. It follows then that the support programs and services do not provide the necessary opportunities for Indigenous businesses to make fully informed judgements.

This comment is particularly relevant within those industries that may be affected by environmental factors such as climate change (e.g. fishing, ecotourism, aquaculture, forestry, bush foods, environmental services). Current business support programs (e.g. those administered by DEWR and IBA) allow for the engagement of financial consultants but do not sufficiently allow the Indigenous applicant to engage scientific research that may be integral to the success of the business and to its sustainability. The examples provided within the attached table (Table 1) demonstrate a variety of projects that have economic potential but which require scientific research and investigation prior to the development of any business framework.

### Timeframes attached to funding are too short for research and investigation

Existing business development programs do not cater for the longer timeframes to permit evidence to be gathered through research. For example, determination of the viability and sustainability of an industry or sector within an industry often requires longer investment (2-3 years) which is often outside the existing business support funding program periods (12-18mths).

### CSIRO

CSIRO has the expertise and experience to develop protocols and tool-kits for partnerships to achieve better social and economic outcomes for Indigenous Australians. Previous activities have focussed on, for example, protocols and tools for engaging traditional owners in natural resource management and resource use planning and in economic development based on novel resource-based products (e.g. bush tucker) and ecosystems services. The importance of this activity is not generally recognised by other agencies nor are these activities catered for within existing business support programs of Australian and State Government agencies. These tools assist Indigenous communities and through them, businesses, to participate in regional economies.

### **Case Study 1: Development of Framework Agreements**

In the development of protocols and tools, CSIRO has assisted the Miriuwung Gajerrong in the formulation of a cultural framework agreement with support of the Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation and Western Australia's Department of Environment and Conservation (DEC) staff. The Miriuwung Gajerrong Cultural Planning Framework is the first step in planning the management of several new conservation parks created under the Ord Final Agreement

The Ord Final Agreement represents a broad package of benefits that provide a platform for future partnerships between the Miriuwung Gajerrong as traditional owners, WA State Government, industry and developers for the benefit of the Miriuwung Gajerrong community and the East Kimberley Region.

Miriuwung Gajerrong people are from the northern East Kimberley and were actively involved in developing the Cultural Planning Framework, with a considerable amount of time spent out on country talking about customary law, cultural practices and responsibilities that will underpin the management of the new parks. The guidelines in the framework particularly show the importance of nature conservation to Indigenous development.

2. "Identifying areas of Indigenous commercial advantage and strength."

CSIRO's involvement in assisting Indigenous people and communities in Australia focuses particularly on the development of emerging industries in environmental management and other

'green industries". Indigenous Australians are particularly well placed to participate in these industries given their:

- o Property rights over substantial areas of Australia;
- The traditional knowledge systems and expertise that Indigenous people bring to environmental management issues; and
- o The alignment of many green industries with Indigenous cultural and lifestyle aspirations.

#### **Ownership of resources**

One of the strengths for Indigenous people is their "unique" access to land and sea resources that provide an economic base on which to establish business ventures.

Within Australia, 18% of land area in Australia is under Aboriginal and/or Torres Strait Islander ownership. Given that Indigenous Australians represent 3% of the population this land ownership represents a significant opportunity in principle (albeit that specifics of these property rights do potentially restrict the economic benefits that may accrue).

In many remoter parts of the country this proportion is even higher. In the Northern Territory 44% of the land mass and 84% of the coastline is under Aboriginal ownership, partly as a consequence of the Aboriginal Lands Rights Act.

Indigenous property rights are relevant in their interface with a number of significant industry sectors. For example, Indigenous ownership includes 13% of Australia's forest areas

#### Case Study 2: CSIRO Developing Economic Opportunities in Carbon-offset Products.

With the growing demand for carbon-offset products in Australia and internationally, the tropical savannas of northern Australia are likely to play a key role in an emerging carbon economy. Frequent burning of savanna landscapes is a considerable source of greenhouse gases, accounting for about 50 per cent of the Northern Territory's emissions, which is three per cent of Australia's total human-driven emissions.

However, the tropical savannas of northern Australia also represent about one third of Australia's terrestrial carbon stocks, and are therefore potential sinks (stores) for carbon.

Present indications are that tropical savannas of northern Australia are net carbon sinks, even if burnt frequently. To maximise their sink potential, CSIRO and partners are seeking more knowledge of the long-term potential sink strength, and how sensitive this is to land use, particularly tree-clearing, grazing and fire. Research is aiming to determine how the carbon sink capacity can be optimised, for example by reducing the area burnt, especially by hot late dry season fires.

CSIRO are investigating the complex issue of how institutional factors, such as property rights, may govern trade in carbon off-sets in the savannas on Aboriginal land. The work is being undertaken with partnerships that include the Northern Land Council and Aboriginal Traditional Owners in Arnhem Land. The type of work within this project is an example wherein the outcomes have contributed to an innovative commercial agreement that became possible because of access by Indigenous people and communities to scientific research. The resultant West Arnhem Fire Management Agreement is a partnership between Darwin Liquefied Natural Gas, the Northern Territory Government, the Northern Land Council and Indigenous Traditional Owners.

Nevertheless, business ventures that are land or sea based (e.g. pastoralism, forestry, ecotourism, fishing and aquaculture) are often fraught with risks such as fire, drought, floods, climate change, depletion of stocks (fishing) and, for Indigenous businesses in remote regions, disadvantages such as distance from markets and lack of regular transport.

# Case Study 3: Business Opportunities Research for Indigenous Land and Sea Management Groups

The growth of formalised Indigenous land and sea management groups and increasing business opportunities in cultural and natural resource management are driving the development of an emerging Indigenous land and sea management sector in the Northern Territory (NT).

In 2007, CSIRO worked with partners to develop a strategic framework for investment in Indigenous cultural and natural resource management in the NT. The partners were the:

- o NT Department of Natural Resources, Environment and the Arts;
- o Australian Government Department of the Environment, Water, Heritage and the Arts;
- Australian Government Department of Families, Community Services and Indigenous Affairs;
- NT Department of the Chief Minister;
- o Indigenous Land Corporation; and
- o Savvy Community Development Consultants.

The research profiled Indigenous land and sea management groups, current support arrangements and critical success factors to then determine priority investment needs across the NT.

The research provides a framework for governments to make decisions about future investment in this growing sector, which is attracting increasing interest from government and business alike.

#### Indigenous knowledge

#### Current Research

Indigenous or traditional knowledge and expertise are a significant source of competitive advantage, particularly where combined with Western research-based knowledge and practice. Some examples of current CSIRO research projects that are value adding to Indigenous knowledge include:

- o Sustainable bush produce systems for the arid zone;
- Property rights and greenhouse gas abatement on Aboriginal land;
- o Native Food Crops: Harvest guality of cultivated produce; and
- o Bush products from the arid zone.

Attachment 1 (Table 1) provides a further list of potential projects in this space that are currently under development.

In addition to developing projects that relate to particular dimensions of Indigenous knowledge, research is needed that explores or informs the development of policy settings for such opportunities. Current examples of such activity include:

- o Livelihoods through managing natural and cultural resources: benefiting Australia;
- Research capacity building in central Australia for effective institutions for sustainable Indigenous economic development;
- o Models of sustainable community benefit in remote Aboriginal Australia;

- o Economic and Cultural Value of Water to Indigenous People in the River Murray Region;
- Developing institutional arrangements for Indigenous participation in the National Water Initiative;
- Aboriginal perceptions of environmental health: implications for sustainable land management in north Australia;
- o Sharing knowledge: Indigenous Australians' observations on climate change; and
- o Government institutional arrangements for supporting Indigenous Natural Resource Management.

### CSIRO

#### Development of Future Research Program

CSIRO is developing a series of national roundtables of Indigenous leaders and research providers to identify research priorities for Indigenous people on specific issues of climate change, water, the resource sector, health and well being and science and Indigenous knowledge. The first national roundtable will be held in Broome at the end of July 2008 and will involve a cross section of nationally significant Indigenous leaders as well as members of CSIRO's Executive Team (including the CEO). This meeting will provide the foundation for a broader action plan around CSIRO's research contribution to Indigenous Australia.

# 3. "The feasibility of adapting the US minority business/development council model to the Australian context."

As in the US, the firms operated by minorities have to be able to compete in the marketplace for the business of the larger companies. A minority business/development council may help Indigenous businesses participate in those emerging industries (identified elsewhere in this submission) where Indigenous knowledge is a distinct advantage (e.g. biosecurity) or where access to labour is expensive (mining industry, site rehabilitation). However, any development council model will need to consider addressing the needs of Indigenous communities in accessing scientific research and development. Without the opportunity to incorporate science and technology, Indigenous business will remain "behind the eight ball".

#### **CSIRO**

Through its Indigenous Engagement Strategy, CSIRO seeks to build capacity within Indigenous communities to enable them to compete with and partner with the larger companies. CSIRO is encouraging Indigenous people to participate in science and technology by offering Indigenous tertiary study awards and is creating pathways in science and technology education so that Indigenous people and communities are better able to participate in the new industries of the future. Within the Strategy, CSIRO is also encouraging the development of frameworks that seek to promote and protect Indigenous development e.g. through the growing use of contractual arrangements that protect intellectual property rights.

4. "Whether incentives should be provided to encourage successful businesses to sub contract, do business with or mentor new Indigenous enterprises."

CSIRO considers a partnership approach to economic development essential and therefore supports the provision of incentives for business to engage with Indigenous operators. The use of incentives is especially important in those emerging environment / resource and cultural based industries outlined above that feature inherently high risk. However it is essential that Indigenous people are also given incentives to engage with other mainstream or larger businesses.

However, in encouraging business engagement with Indigenous enterprise, it is critical that parallel effort is invested in raising the ability and awareness of Indigenous Australians to be able protect their intellectual property rights so as to avoid unintended exploitation. A number of international conventions and protocols specifically address Indigenous knowledge and property rights. CSIRO is in the process of exploring these issues and the protocols needed in the conduct of our research to ensure protection.

### Attachment 1

Table 1: Extract from "Sustainable Indigenous Livelihoods Focal Project B – Potential		
Case Studies"		

Potential case study	Enterprise/issue
1. Mullumbarra Yidinji invasive fisheries management, Wet Tropics	Invasive fish management
2. Weed Busters, Ma:Mu, Innisfail Wet Tropics	Weed management
3. Kuku Nykul Wujal Wujal ecotourism	a) eco-tourism
·	b) land and sea management.
4. Native honey bees, Aurukun	Native honey production
5. Sea urchin harvest, Yarrabah	Wild harvest of sea urchin
6. Palm Island sponge farming	a) Sponge farm b) Community-based visioning related to sustainable cultural enterprises
7. Boigu Island, Torres Strait, community-based wetland management	Community-based resource management
8. Torres Strait fisheries co-management	Co-management of beche-de-mer and trochus
9. Torres Strait sponge farming, Yorke Island	Sponge farm
10. Northern Gulf Ghost Nets Ranger Program, Gulf of Carpentaria	Stewardship of coastal habitats
11. Muttonhole Wetlands, Normanton, Gulf of Carpentaria	a) Ecotourism b) Stewardship of wetlands
12. Central Desert: improving Aboriginal skills to analyse and use data on people/country in a high priority conservation area	Community-based monitoring and management of desert people/country as a whole.
13. Medicinal plant species, NE Alice Springs	Testing of five models for potential development of a high value medicinal spp
14. Repatriation of Aboriginal knowledge associated with high value commercial species	To return to Aboriginal ownership, TK associated with desert species with commercial value (current or high prospect)
15. Diverse economic species within bush-managed populations	Exploration of customary & commercial species
16. Tiwi Islands aquaculture and timber economy	a) Barramundi farming b) plantation timber
17. Indigenous knowledge for monitoring climate change, South-west Australia	a) Identification of Indigenous indicators of climate change