Plants for people

A new project is helping Aboriginal people develop innovative small businesses around traditional knowledge of native plants and their uses. By helping to build self-esteem and self-sufficiency within remote communities, the initiative is also opening up avenues for better communication, and improving appreciation of the value of Aboriginal culture.

> The *Plants for People* program is breaking new ground. Co-ordinated by the Desert Knowledge Co-operative Research Centre (DK-CRC) and the Western Australian Centre of Excellence for Sustainable Mine Lakes (CSML) at Curtin University, researchers are working with Aboriginal communities in South Australia, Western Australia and the Northern Territory, to help them document, evaluate and apply their indigenous knowledge through 'action research' projects. Approved and driven by the communities involved, these projects will directly benefit their people and outlook.

'We're helping the Aboriginal people use their traditional knowledge as a capital asset, to increase the wealth of their communities through self-sufficiency rather than government aid,' says program co-leader Professor Louis Evans, of CSML.

'The work is primarily focused on native plants and developing the capacity of communities to build successful business enterprises around them.'

Such enterprises could include producing and marketing native food products and condiments; developing medicinal compounds and tonics (such as antiviral, antibacterial and antifungal agents), nutrition products and personal care products (cosmetics, hair care, skin care and aromatherapy products); producing

The Pencil Yam (Vigna lanceolata), known locally as 'katjatari' and 'irtennge', is a trailing herb with edible tubers, found near watercourses. It is important in ceremonies and Aboriginal mythology. David Callow





A Knowledge Exchange between Aboriginal elders and youth involved in the Plants for People project. ${\tt David Callow}$

educational books, posters, photographs and CDs; and building horticulture, farm-forestry, integrated aquaculture (plants and fish) and tourism ventures.

Importantly, protocols have been developed to ensure that the intellectual property rights over traditional knowledge used in these ventures actually belong to the Indigenous people and communities. Similarly, the research teams are ensuring that enterprises developed through *Plants for People* are owned and controlled by the Indigenous communities.

Through these projects, Evans says younger generations of Aboriginal people are learning more about their own culture and developing a respect for it, while older people have developed skills, confidence and self-esteem, through various training programs and the realisation that non-Indigenous people are interested in their knowledge and culture.

'These projects also more broadly inform the general Australian population about the wealth of knowledge and cultural integrity that is still present in Aboriginal communities,' Evans says.

Social enterprise

Before sustainable business enterprises can be developed, strong social foundations and community 'capacity' are essential.

At Titjikala in the Northern Territory, Evans's team has put in some three years of groundwork, establishing trust, learning about native plants from the community, and getting the right 'engagement process' happening.

To build the capacity of communities to undertake





Understanding the cultural mores of Aboriginal communities, and their own understanding of the concept of community, is essential to ensuring future business enterprises survive.

projects, Western and Indigenous experts conduct education and training activities in, for example, horticulture, native seed collection and propagation, photography, and business. Social enterprise activities also feature. At Leonora in Western Australia, for example, a young Aboriginal woman employed at the local school wanted to showcase successful Aboriginal people in the community. Evans's team helped her produce a series of posters, which will be displayed at the school and at NAIDOC (National Aboriginal Islander Day Observance Committee) Week next year.

'This project was a social enterprise to build the woman's self-confidence to participate in a *Plants for People* project,' Evans says.

'Her next project will be to produce a calendar, posters and brochures that outline the seasonal changes in food plants at Leonora, for sale in tourist shops.'

Associate Professor Brian Cheers, who co-leads *Plants for People* with Evans, and leads the South Australian component of the program, says understanding the cultural mores of Aboriginal communities, and their own understanding of the concept of community, is essential to ensuring future business enterprises survive.



'The kinds of enterprises the communities engage in, the ownership structures, and the ways of doing business, have to fit with their culture,' Cheers says.

'While we can teach them the best of Western business methods, Aboriginal people have been doing business, between themselves and with South-East Asia, for tens of thousands of years. We need to be respectful of their way of doing business, and see the value and importance in how they go about it.'

This understanding can only be gained by working collaboratively with the Aboriginal people, to engage in activities that are important to them. To do this, research is conducted in an active or 'participatory' way.

'The external researchers and the Aboriginal communities discuss everything that's done,' Evans says.

'Any project activity has to be endorsed by an Aboriginal entity – which can be a small group of Aboriginal people, a legal organisation, or preferably a Council of Elders – so that it conforms to the traditional cultural approach to enterprise.'

These approaches are now reaping rewards. At Titjikala for example, the local men, through their own initiative and using their horticulture training, collected and germinated native seeds, planted them around community buildings, and established an irrigation system.

'This self motivated project is illustrative of the confidence and capability that *Plants for People* has helped engender in the community,' Evans says.

'Of even more significance is the recent development of a joint venture tourism business at Titjikala with commercial tourist company, Gunya Tourism.'



Flint making, as demonstrated by this senior Tapatjatjaka man, is one of the traditional practices being documented by the project. David Callow

The Desert Raisin (Solanum centrale) or 'kampurarpa' is a low shrub whose fruits are eaten fresh or dried. David Callow



The Bush Bean (*Rhyncharrhena linearis*), or 'wintjulanypa', is a common climbing plant found throughout the area. The whole plant can be eaten.



A bush apple or mulga apple. These are insect galls that form when a wasp lays its eggs on a stem and the plant grows a protective swelling, or gall, around the developing insects. The apples are an important component of traditional Aboriginal diets. David Callow

Caustic Weed (Euphorbia Drummondii),

'mangka mangka', is not eaten, but the

whose local Aboriginal name is

sap is applied to skin complaints.



The Wild Fig (*Ficus platypoda*), or 'ili', is a large shrub whose fruits are eaten fresh or dried and ground into a paste for later use. David Callow

Business enterprise

While the communities' capabilities continue to strengthen, a range of business ideas are evolving. In all communities, traditional knowledge about the local plants will be documented in various ways (books, CDs, brochures, databases, web sites), and used to build enterprises such as tourist ventures, native plant nurseries and the production of food, personal care products or medicines.

At Ceduna in South Australia, Heather Coleman, chairperson of Tjutjunaku Worka Tjuta Inc. (an Aboriginal partner organisation in *Plants for People*), says the community is discussing the development of a native plant trail for tourists. This trail could stretch some 200 km between different Aboriginal communities involved in *Plants for People* and other programs and include such things as a greenhouse, horticulture plot and interpretive signs.

'The trail could link activities and programs run by other agencies in neighbouring communities, such as



Johnny Briscoe, one of the traditional owners of the country surrounding Titjikala, is a senior man in the Tapatjatjaka Community. As a Nunkari (similar to an Aboriginal doctor), he has been integral in identifying plants in the Titjikala area used in traditional medicine and as bush tucker. Durd Callow

growing native plants for bush tucker, with a *Plants for People* activity based in Ceduna, Coleman says.

'Early next year we hope to get all the communities and homeland groups together to look at what each group is doing, so that we can link and support other projects and prevent duplication.'



As 'bush tucker' projects are already underway in some South Australian communities, Coleman says bush medicine may become more of a focus at Ceduna. While identifying medicinal compounds in native plants is an important part of *Plants for People*, it's unlikely to provide a significant business opportunity, given Intellectual Property issues and the cost and time involved in developing medicines. However, scientific testing of extracts of native plants used by the Aboriginal people for medicinal purposes will add value to the traditional knowledge.

'We will give information from the laboratory tests



back to the communities, which they can then use, in a book or tourism trail for example, to support their traditional knowledge or belief,' says Dr Susan Semple, a pharmacologist at the University of South Australia.

'For example, they may say something is used for skin infections, and we may find that it has antibacterial activity.'

The Titjikala community is developing a knowledge register, which Semple says could eventually be used by the community to negotiate a joint venture with a pharmaceutical company to develop medicinal products.

'It could happen, but it's more likely the communities will aim at the herbal medicine market in the short term,' she says.

Educational-based ventures will also play an important role in business. The Titjikala community, for example, has been developing a web site called Tapatjatjaka Plants, which is owned and controlled by the community. The site contains text and sound, with English subtitles and stories about different plants in the three Aboriginal languages of the region. While access to parts of the site will be restricted, as directed by the Tapatjatjaka Community Government Council in accordance with the wishes of community members, access to other parts of the web site will be open.

It is anticipated that the site will help local children improve their English and cultural knowledge. The site, and similar ventures, should also help Australians better appreciate their native environment and its original inhabitants.

'These kinds of projects have the potential to help Australians develop an appreciation for the natural environment – for what it is, not what we've tried to transform it into,' Cheers says.

'They will also help engender the respect of whitefellas for Indigenous culture by revealing its richness and the depth of Indigenous knowledge through plant products and plant-related ventures.' • Wendy Pyper

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