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The Australian Rangeland Society

TOWARDS A MEASURE OF FOOD SELF SUFFICIENCY
FOR ABORIGINAL MICRO-COMMUNITIES

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Introduction

A comparatively new demographic phenomenon occurring in the central Australian arid rangelands is the establishment of micro-communities, of homelands or outstation Aboriginal people, scattered throughout what is now Aboriginal land (1). These people are seeking to achieve a measure of cultural integrity.

The communities are usually based on an extended family, dominated by one or more men who are either the traditional owners of that land or the traditional managers (2) of that land.

I have used the word micro-community to describe these groups because I believe they are the smallest socio-administrative unit in the Northern Territory. In the N.T., towns are administered by the Local Government Act; communities that are not gazetted as towns but have sufficient people can be gazetted as communities and be administered by the Community Government Act. Outstations or homelands come under neither and have been left to develop as best they can. The establishment of such groups raises many questions both for the Aboriginal people living in them and for scientists and technicians involved in working in the area of rangeland management.

The single most important issue in the 70s for central Australian Aboriginals was the question of land rights. The question that faces them in the 1980s is that of land management.

Since people generally adopt models of management that they have previously been exposed to, this paper will briefly examine the socio-economic history of central Australia. Some of the options available for the establishment of these homelands or micro-communities will be examined.

Socio-Economic History

Prior to European contact, Aboriginal people were nomadic hunters and gatherers, existing in an environment that bound man to the land in a relationship which is often incomprehensible to non-Aboriginals. This relationship achieved a balance between all components of the environment.

The opening up of the inland began with John MacDougall Stuart, and the subsequent explorations of Burke and Wills, Leichhardt, Giles and others until the 1870s, commenced a period of dynamic social change that continues today.

The construction of the overland telegraph, which connected Adelaide and Darwin, was closely associated with the establishment of a pastoral industry in the 1870s. Pastoral settlement was marked until World War II by an attitude of conquer and control towards Aboriginal people by both settler and Government officer alike. Acts of retribution lead to bloodshed on numerous occasions (Hill 1970).

The granting of award wages on pastoral properties during the 1950s and 60s terminated the feudal relationship which often existed between white owner and Aboriginal worker and as a consequence many Aboriginal people drifted into Government settlements. These settlements rapidly became institutionalised bureaucracies. They were overpopulated with people from different tribes and clans and were administered by a Public Service system more suited to urban Australia than the rangelands. It is little wonder that such communities became a source of social and physical conflict.

With the advent of self determination and the rush of funds that accompanied that policy in the 1970s, many Aboriginal people took advantage of such changes and moved back to their traditional areas in an attempt to develop a neo-traditional lifestyle protected by distance from the influence of white society.

As a consequence, Aboriginal people have been exposed to two models of management in their contact with Europeans, i.e. rangeland

exploitation and bureaucratic administration. The former has been responsible for quite considerable destruction of the environment. The latter has consumed enormous amounts of energy, money and labour for very little return, in terms of production, or management of the environment.

Altogether, Aboriginal people have been exposed to three types of management models which I have called:

- (i) Traditional
- (ii) Exploitative
- (iii) Bureaucratic

Aboriginal people must be provided with a fourth model, one that is compatible with the neo-traditional lifestyle that they wish to establish and equally compatible with the environment. If such a model is not developed and the historical models of exploitation and/or government bureaucracy are continued, the consequences for rangeland management may be disastrous.

This alternative model must have food self sufficiency as an integral part of its design. By producing his own food for his own consumption, man enters into a different relationship with his land than that of the hunter and gatherer, and different again from the man seeking to make a profit from his land.

To be compatible with the ultimate goal of effective rangeland management, several questions must be answered. These are:

- (i) How technically efficient can food production become?
- (ii) How economically efficient can it become?
- (iii) What is the impact on the environment?

This paper is too short to answer all of these questions, but I would like to review some of the potential problems of food production in neo-traditional situations.

Food Self Sufficiency

Traditionally, rangelands have permitted both agricultural and

pastoral activities. Cattle, camels, goats and horticultural production represent possible options as sources of food and cash for micro-communities.

Aboriginal people have already had considerable contact with cattle and camels. The rural extension programme at the Institute for Aboriginal Development (I.A.D.) is currently working with 16 cattle enterprises. The I.A.D. has received requests from five micro-communities in the Pitjantjatjara area to investigate the potential of a camel industry and a further one from a micro-community north-east of Alice Springs for assistance with a goat industry. In regard to horticultural activities, gardens in the micro-communities are common. Thirty-six of fifty micro-communities visited by the I.A.D. extension programme in the last year had a garden.

Given the above interest in food producing activities, it is clear that Aboriginal people have a distinct desire to achieve greater levels of food self sufficiency. Pastoral enterprises have been of prime importance in most instances but horticultural activities are becoming increasingly important.

A. Pastoral Enterprises

Historically the pastoral activity which has been dominant on Aboriginal land is that of beef cattle production.

For the reasons discussed below, micro-communities are looking towards alternative livestock enterprises as potential sources of food and income. Camels and goats could complement and in some cases replace existing beef cattle herds.

i) Beef Production.

Minimum management practices have been a common feature of the cattle industry in central Australia, although economic developments since World War II have demanded more efficient management. The advent of the brucellosis and tuberculosis programme in the late 1970s has further emphasised the need for sophisticated management practices with regard to labour, land and capital to achieve disease-free status

and still remain economically viable.

How many Aboriginal enterprises will survive the impact of the brucellosis and tuberculosis programme is not clear. Some have already achieved disease-free status or are about to, others will cease to operate as cattle enterprises.

It is apparent that the possibility of micro-communities operating cattle enterprises on a low technological base and growing in management ability as their expectations increase is no longer an option. Disease eradication requirements must be met and high levels of management are required to make a large scale enterprise viable. Consequently, there is no time for management skills to develop and for micro-communities to become major pastoral operations gradually.

Cattle enterprises can continue to provide a valuable and comparatively cheap source of protein to a population consistently under the threat of malnutrition. What may conceivably occur is that micro-communities will run small "killer" herds to maintain a protein supply for their people. These herds would not require the high levels of management and labour input necessary in commercial herds.

ii) Camels.

Feral camels have existed in significant numbers in central Australia since the 1920s and 30s, when Afghan drivers let their stock go rather than kill them following their replacement by motorised transport. Up until the 1960s, many Aboriginal people continued to use them as a means of conveyance.

Mathewson (1981) indicated that there are markets in the Middle East for camel meat. The development of a camel industry would provide an alternative, culturally acceptable enterprise which could generate a substantial income. Such an industry could also provide a source of meat to micro-communities.

The main advantages of camels for the micro-communities are:

- (i) They require a less complex infra-structure than cattle, e.g. fewer bores, fences etc.
- (ii) They may have a less detrimental effect on the environment than cattle.
- (iii) They are physiologically adapted to arid rangeland conditions.
- (iv) They require only low levels of management at present.

iii) Goats.

Goats have been the "enfant terrible" of arid rangelands. Mismanagement of goat enterprises has increased desertification throughout the world. Management of goats in terms of efficient use of the environment requires a thorough knowledge of land/animal interactions. This knowledge may not exist among Aboriginal people (Mackenzie 1980).

This is of necessity only a brief review of the potential for pastoral activities. Where does it lead us? What is indicated is that there is potential for livestock activities which can provide food and cash to the micro-communities of rangeland Australia.

How to ensure that such activities are technically, environmentally, and economically efficient, is a question that must be answered. It is a question that all who are involved in rangeland management must be prepared to assist in answering.

Livestock activities are only one half of the food story. Agricultural or more specifically horticultural activities are the other.

B. Horticulture

Last and Wikilyiri (1977) ascertained that tomatoes, grapes, melons and citrus fruits were popular among Aboriginal people, and the number of gardens in the micro-communities of central Australia have validated their conclusions.

Last and Wikilyiri (1977) and Miles (1976) suggested that trickle irrigation was an appropriate technique for use in arid rangeland communities. Phillipot (1977) showed that it is more economically efficient than other techniques, given low management input. Further, such a method can achieve quite high levels of production for relatively low levels of capital investment.

In terms of food production, horticulture represents a real option to Aboriginal people. However the conditions which Last and Wikilyiri (1977) defined as being necessary for the successful development of a horticulture enterprise in an Aboriginal community still apply.

These are:

- (i) Clearly defined purposes, i.e. is the garden for food, employment, profit, or a combination of these?
- (ii) A good water supply.
- (iii) An easy method of irrigation for the operator.
- (iv) Knowledge about growing food: the correct fertilizers and the control of pests is needed.
- (v) Sufficient fencing and sufficient tools.

It is the responsibility of scientists, extension workers and rangeland managers to provide information and assistance, so that the impact of such projects is not environmentally destructive. Advice on potential environmental impact is more likely to be accepted if advisers are seen to be useful in assisting people achieve greater measures of food self sufficiency.

Conclusions

It is obvious that human habitation of arid rangelands has an impact on the management of such lands. It is likely that numerous scattered micro-communities will have a greater effect than a few large communities if current management practices continue. Micro-communities could easily become operative units in implementing non-destructive management practices but if they become impoverished then land management will be minimal.

A co-ordinated extension programme can provide the information, training and technological advice to field workers, community advisers and community leaders that will enable the micro-communities to achieve greater levels of efficiency in food production and utilization of land.

I would suggest that by achieving greater levels of food self sufficiency the micro-communities may be more receptive to concepts of effective rangeland management.

The expertise already exists in Alice Springs, but it is scattered throughout a variety of Departments, agencies and groups. There is an urgent need to co-ordinate such expertise not just for the micro-communities but for all inhabitants of central Australian rangelands who wish to live in empathy with their environment.

Footnotes

1. The Aboriginal Land Rights Act 1977 (N.T.) granted traditional land owners title to reserve land and provided a means of claiming vacant crown land. This act was complemented in South Australia by the Pitjantjatjara Land Rights Act (1980) which did the same for the traditional owners of the North West Reserve.
2. In traditional Aboriginal society, there are people who own land and people who are responsible for managing it.

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