Remote Indigenous Housing in Australia – A Social Assessment

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Abstract

Social Assessment, although better known in the area of natural resource management, provides a methodology that has wide application. Its balance between primary and secondary information and the emphasis on key issues enables focused problem-orientated research. This is illustrated through discussion of a policy research project into remote indigenous housing in Western Australia and the Northern Territory areas of Australia.

The provision of adequate remote indigenous housing has long been a contentious issue in Australia. Attempts to meet this need have led to the development of a wide range of housing and housing-related programs in remote indigenous communities. These programs tended to remove involvement in housing from communities to external program and project managers. The current challenge is to find ways to integrate the plethora of programs while promoting the concept of indigenous governance.

The complexity of the institutional environment addressed by this research project led to the development of an additional social assessment tool. This tool, called institutional mapping by the multidisciplinary research team, provided a mechanism to both understand the different programs as well as a starting point for program-integration workshops and interviews. The institutional mapping tool is a starting point for a soft systems analysis of the research issue.

This paper discusses the research project, the social assessment methodology, the institutional mapping tool and argues for a more explicit use of soft systems methodology in complex situations.

1. Introduction

Social Assessments (or Social Impact Assessments) have been conducted in a wide range of situations. These situations however, are mostly single-site projects that have a natural resource focus. Here, the Social Assessment focuses on exploring project alternatives with a view to minimising the negative aspects of the project and maximising the positive.

This paper argues that Social Assessments have a far wider application, particularly in so-called "wicked" problem situations which, as opposed to "tame" problem situations, do not have a clear solution. The concept of "wicked" problems was developed by Rittel and Weber in 1973 to characterise complex problems which have no single right or wrong solution, only better or worse courses of action and where stakeholders do not agree on "the problem" (Buckingham Shum 1997; Barry & Fourie 2001).

There are few reports in the literature of Social Assessments of complex or "wicked" problems and this is possibly because the current Social Assessment practice is focused mainly on the project level. In addition, most Social Assessments do not adopt an approach that is conducive to the analysis of complex problems. Aspects of Soft Systems Methodology

offer such an approach that is well suited to institutionally complex projects. This assertion is illustrated with reference to a research project on the "wicked" complex problem of remote Indigenous housing in Australia and the tool of institutional mapping that was developed for the project.

The paper begins with an outline of the research project and the development of the institutional mapping tool. It then discusses the areas of overlap between Social Assessment and Soft Systems Methodology before discussing additional features of Soft Systems Methodology that are often implicit in Social Assessment but made explicit in Soft Systems Methodology and where Social Assessment can learn from the developments in Soft Systems Methodology. Aspects of Soft System Methodology are then applied to a "wicked" research issue from the research project discussed below.

2. The Research Project

The research presented in this paper was conducted by the Remote Area Developments Group (RADG) of Murdoch University in Perth, Australia for the government-funded Australian Housing and Urban Research Institute (AHURI). The AHURI research agenda has focused on housing and urban research and policy in the past. However, due to the inequality in housing between Indigenous and non-Indigenous Australians, their brief was extended to Indigenous Housing (AHURI 2004). The research project in question was conducted in 2002/2003, in response to the first inclusion of Indigenous housing research into the agenda. It focused on the integration of Indigenous housing programs and community perceptions of these programs. This paper focuses on the first of these issues, the integration of Indigenous housing programs.

2.1 Research Process

Social Assessment, following the soft systems approach developed by Taylor, Bryan and Goodrich, was the primary method used (Taylor, Bryan & Goodrich 1995). This is an analytical inductive and issues-orientated approach which ensures that the research responds to the issues in a particular situation. In addition, although the discussion of the research process below gives the impression of a linear progression, the process involved continual iterations and a constant process of conceptual model-building to explain the research issues.

A literature review and the gathering of secondary information began at the inception of the project. It focussed on Indigenous housing and governance history, policies, programs and key national policy developments that give direction to policy. Indigenous housing in Australia has a long and complex history and there is currently a wide disparity in housing between Indigenous and non-Indigenous Australians, despite many attempts to remedy the situation at both State and National level (Neutze 2000). Due to the rapidly changing nature of housing policy, particularly in Western Australia, the gathering of secondary information became an ongoing process, essential to an understanding of the context of the project.

A User Group or Steering Committee, made up of government and related bodies involved in Indigenous housing policy, was established. The purpose of the User Group was to guide the project to ensure the research's relevance to policy. They highlighted the remote Indigenous housing issues which were relevant for them. Several Steering Committee meetings were held and regular contact was maintained which, in most cases, also ensured access to up-to-date information sources. All research outputs were circulated, inter alia, to the Steering Committee prior to dissemination.

Due to the complexity of Indigenous housing in Australia, two jurisdictions were used as case studies – a region within Western Australia and a region within the Northern Territory. The selection of the final case studies was determined by three factors: first, input from the User Group, second, the personal contacts of the research team with the community and regional organisation members and third, the cost and logistics involved in visiting the communities. To explore the operation of the Indigenous housing system, it was decided that the case

studies should reflect the different "levels" within the system. These "levels" as represented in both the Western Australia and the Northern Territory Region are:

Communities (two in each region) – the beneficiaries of the housing programs,

Regional Indigenous Non-Government Organisations – organisations thorough whom grant funding is often channelled, one in each region;

Elected Aboriginal and Torres Strait Islander Council (**ATSIC) Regional Councils** – the statutory body which, at the time of fieldwork, decided on funding for the different communities, one in each region;

State/Territory Housing Funding Agencies (IHANT and AHIC): The Housing Bilateral Agreements between the States and Territories established the Indigenous housing funding amounts and parameters for a period of 5 years. In the Northern Territory this agreement established The Indigenous Housing of the Northern Territory (IHANT) whereas in Western Australia, the Aboriginal Housing and Infrastructure Council (AHIC) was established. These relatively new bodies are the peak housing agencies in each jurisdiction and form the major attempt at program integration (Government of Western Australia 2002; Northern Territory Government, ATSIC & FACS 2002).

Commonwealth Government Departments: - these organisations fund different aspects of the Indigenous housing system.

Four diagrams are attached to this paper to illustrate the complexity of the system and they are discussed in the next section.

Profiles were drawn up on each of the organisations mentioned above. These profiles were initially compiled from secondary information. This was then updated with a series of telephone interviews and two fieldwork trips. The profiles were a useful multipurpose tool. Not only did they provide necessary pre-fieldwork information but also enabled the development of an initial Institutional map which provided a starting point for discussion. In their draft form they were discussed with each of the case studies during fieldwork for confirmation and approval of the details contained therein. They were then further updated after the final fieldwork and sent to the case studies with the research findings prior to sending the report to the Research Institute.

As mentioned above, the key issues relating to housing program integration and community governance guided the fieldwork. These were determined by the User Group as well as by the communities, regional organisations and regional government institutions involved in the study.

3 Institutional Mapping

As discussed above, Social Assessments do not routinely deal with "wicked" institutionally complex program environments as presented by this project. The team therefore developed an additional tool to understand and analyse the institutional environment which we called "Institutional Mapping". The concept of institutional mapping developed as a result of an organigram of the Commonwealth Indigenous Housing Programs in 2000 which appeared in the Indigenous Funding Inquiry (Commonwealth Grants Commission 2001 p.151) and a very brief description of institutional analysis on the World Bank website (World Bank 2002).

The need for a tool to portray the complex layers of organisations and programs emerged prior to the first round of fieldwork. The research team found that a schematic portrayal of the different organisations and programs assisted them to understand the relationships between agencies and programs. The research team drew up institutional maps to represent their understanding of the interrelationships and workshopped these during the first round of fieldwork. Feedback was obtained from different sources and the institutional maps continually updated during fieldwork to capture inputs. Early in the fieldwork, the team realised that two types of institutional maps were needed:

- an Organisational Map which illustrates the formal relationship between agencies and programs (Diagrams 1 and 3); and
- a Process Map which illustrates the flow of funding and information between organisations (Diagrams 2 and 4).

These institutional maps provided an extremely useful tool and specific institutional maps were developed for each meeting and workshop as well as maps showing the relationship of the specific map to the wider institutional framework. The discussion of the institutional maps often provided a starting point for discussion and fulfilled two objectives. Firstly, it afforded an opportunity to test the accuracy of the institutional maps from different perspectives and, secondly stimulated discussion on the relationships between the particular institution, other institutions and the related Indigenous housing programs. Many people commented that they had never before understood how different organisations related to each other. Individuals who understood the overall Indigenous housing institutional structure of Western Australia and the Northern Territory were few and far between.

Four institutional maps are attached to this paper to illustrate the complexity of the Indigenous housing system:

Diagram 1 illustrates the different organisations at different levels within the Indigenous Housing System in Western Australia and the Northern Territory;

Diagram 2 illustrates the flow of funding from the Commonwealth Government to the peak West Australian housing body, the Aboriginal Housing and Infrastructure Council (AHIC). A similar Institutional Map was drawn up for the Northern Territory;

Diagram 3 illustrates the organisations involved in remote Indigenous housing in the Kullarri Region of West Australia. A similar Institutional map was drawn up for the Central Remote Region in the Northern Territory;

Diagram 4 illustrates the flow of funds between the organisations in Diagram 3.

These institutional maps focus on the "higher" levels of the housing system and additional maps were also drawn of community organisations with their relationships to the other activities in the community such as schools, shops, clinics and even income-producing tourism activities.

4. Social Assessments and Soft Systems Methodology

Systems thinking is a useful concept or meta-theory to understand complex entities that are themselves made up of interrelated parts. The essential elements of a system are that, within its environment, it transforms inputs into outputs. It has to change and adapt to its environment. Systems thinking principles are typical of the biological world and have been widely used in the sciences. These systems share a number of features, firstly that there is an objective reality and that the system has defined goals. The logic of this type of systems thinking, which has become known as "hard systems" is that predictive models can be developed which will identify optimal solutions (Clegg & Walsh 1998). Soft Systems Methodology or SSM developed out of a process of investigation that came to the conclusion that "hard systems" may not always be appropriate in every situation. The name synonymous with the development of SSM is that of Peter Checkland who has spent over 30 years developing the field of SSM (Checkland 2000b; Checkland 1999).

It is beyond the scope of this paper to discuss the development of Checkland's SSM approach in detail. His retrospective article (Checkland 2000b) provides a detailed overview of the development of the field. One of the key aspects of SSM is that it recognises that there is no objective reality. This is especially important in dealing with "wicked" problems where a problem or issue is viewed differently by different people. That people view and interpret the world differently, as a result of different cultures, values and experiences is a central assumption of SSM (Clegg & Walsh 1998). It is taken as a given that people with different interests, roles and responsibilities in a specific problem situation would view and interpret the problem differently. In addition, there are no clearly defined objective 'problems' but

rather 'problem situations' (Checkland 2000a). SSM 'problem systems' and 'wicked problems' share many characteristics, for example they are difficult to define, have no obvious solutions and often have strong moral, political and professional dimensions (Buckingham Shum 1997; Barry & Fourie 2001).

Checkland developed a seven-stage process of SSM which he published one of his key books "Systems Thinking Systems Practice" in 1981. There is considerable overlap with the process of Social Assessment and this is illustrated in Figure 1.

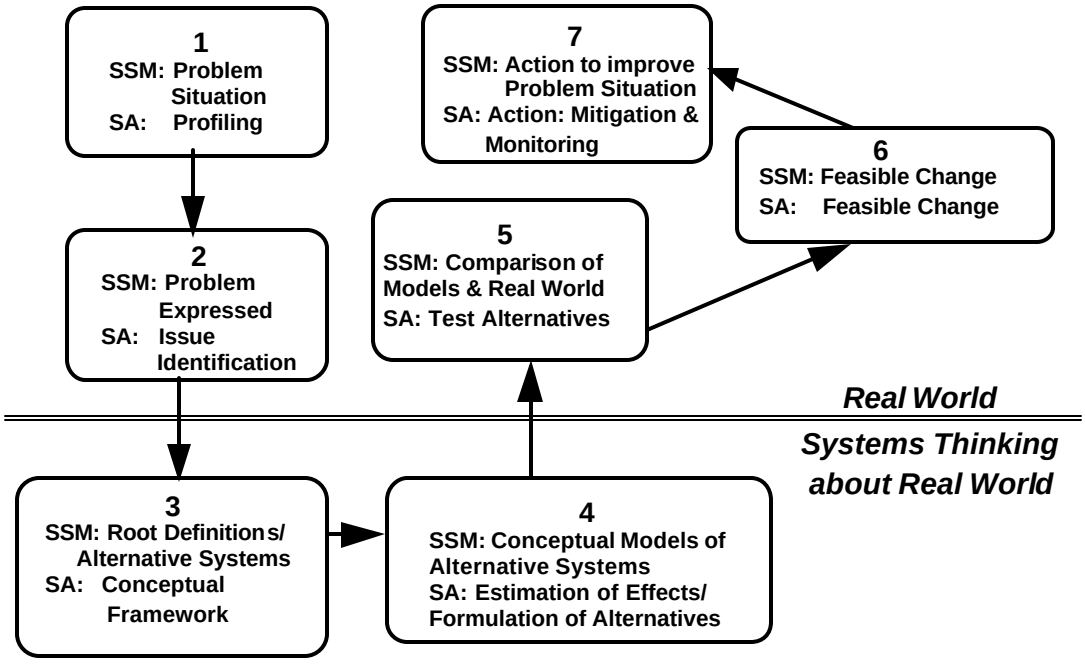

Figure 1: A Diagrammatic Comparison of the Process of Soft Systems Methodology (SSM) and Social Assessment (SA) Adapted from Rose 2004 and Taylor, Bryan and Goodrich, 1995

As mentioned, the Social Assessment approach used in the research project discussed above follows that of Taylor et al who adopt a soft systems approach. It is particularly SSM's conceptual approach that has influenced their social assessment approach (Warren et al. 1992; Taylor, Bryan & Goodrich 1995). Pollard (1998:51) comments that systems theory will become more important as social assessment moves away from project-based studies (Pollard 1998). This paper argues that there are demonstrable advantages to adopting more explicit aspects of SSM into social assessments.

There are considerable similarities between the soft-systems methodology and the approach to issues-orientated social assessment. Both SSM and Social Assessments are attempts to conceptualise the 'problem situation' holistically but with a focus on specific issues or problems. Both SSM and Social Assessment are sufficiently flexible to be used in different settings such as this relatively technocratic research project – following Taylor et al's four category approach (Taylor, Bryan & Goodrich 1995 p 30). In support of a research orientation to SSM, Rose argues that although SSM originated as a vehicle for action research, it is also an effective social science research tool (Rose 1997).

As far as actual process is concerned, both follow an inductive and iterative process. Participation of people involved in and affected by the potential changes is also a core concept in both methods. In addition, much of the success of both methods depend on the skill and experience of the practitioner – to a certain extent both are intuitive processes. The conceptual model-building characteristic of both require insight and lateral thinking to view the 'problem situation' or 'issue' from different perspectives.

As far as the differences between SSM and Social Assessment are concerned, SSM offers a more detailed and structured methodology – probably reflecting its origins in the "hard" sciences. In contrast, social assessment has been criticised for its lack of a single methodology (Lockie 2001; Pollard 1998). This is probably due to its origins in various of the 'soft' social sciences. In recent years, Checkland and his colleagues have developed a more flexible application of the seven stages mentioned above which is even more closely aligned with the Social Assessment process. Probably the most significant difference between SA and SSM is that SA incorporates long-term Monitoring and Management in relevant projects. Nevertheless, SSM does provide some tools, concepts and process detail that could be adapted for SA.

5 An Application of a Soft Systems Social Assessment

The utility of adopting aspects of SSM on an as-required basis is best illustrated through an example of a brief Soft Systems Social Assessment application to the analysis of the remote Indigenous housing project. The seven stages of SSM as outlined in Figure 1 will first be discussed followed by the relevance to the research project.

Stage 1: In SSM, the problem and the key role-players are identified and the terms of reference for the study are negotiated as are aspects such as confidentiality and data availability. Were the project an action-research policy project, there would need to be active participation of the person who enabled the study to occur (the client), the 'person who is responsible for or 'owns' the problem (the problem-owner) and the person who hopes to improve the problem situation (the problem-solver) (Clegg & Walsh 1998; Jackson 2000).

As this was a research project, the broad terms of reference were established by AHURI, namely Indigenous housing program integration.

Stage 2: A description of the problem situation, often diagrammatically represented in 'rich pictures'.

The "problem situation" of the complex Indigenous housing program is represented in the institutional maps in Diagrams 1 through 4.

Stage 3: Definitions of different perspectives of the system (root definitions) are written, encapsulating the what, the how and the why. These can be task-based or issue based. But are usually stated as a system to do P, by (means of) Y, in order to Z" (Rose 2004; Checkland 2000b).

In practice, a range of system descriptions (root definitions) would be developed to see which provide insight into the problem situation. In this case, it is not practical to develop many system descriptions so two will be developed. These two definitions are useful in the analysis of the research as the debate around Indigenous housing does include two opposing perspectives, namely a focus on the supply of adequate housing (Definition 1) and the need for a process to enable communities to demand houses that meet their needs (Definition 2) Definition 1 and 2 also illustrate the difference between a task-based system and an issue-based system.

Definition 1: Task-based: A system to construct Indigenous housing, using tax dollars, to meet political requirements that all Australians have a similar standard of housing.

Definition 2: Issue-based: A system to enable and empower Indigenous Australians, using tax dollars, to fulfil their own development objectives.

Stage 3 of SSM also introduces the mnemonic CATWOE which is essentially a memory aid for some aspects of the system that should be considered. These are

Customers of the system (the beneficiaries or victims of the system);
Actors in the system (the people who conduct the activities of the system);
Transformation that occurs in the system (what the system transforms from one state to another, the input to the output),

Weltanschauung or world view (the underlying values and assumptions of the system or what makes the transformation process worthwhile);
Owners of the system (those who have the power to stop the transformation); and,
Environmental constraints (the elements the system has to take as given) (Rose 2004)

Stage 4: Conceptual Models are built based on the descriptions of the systems developed in Stage 3 - the CATWOE and the "3 E's":
E[1] efficacy (will it work, will it achieve the transformation);
E[2] efficiency (is the system the optimal use of resources); and
E[3] effectiveness (does the system achieve long term goals) (Checkland 2000b; Rose 2004).

A key aspect of Stage 4 is determining how the 3E's will be measured.

For the research project, the performance criteria to monitor the conceptual model built from the descriptions in Stage 3 are:

***E**[1] Efficacy – are houses built*
***E**[2] Efficiency – are the houses that are built an efficient use of available resources (in this case tax dollars)*
***E**[3] Effectiveness – do the houses that are built meet the needs of both the beneficiaries and the "owners" of the system.*

***Conceptual Model 1:** based on the task-based Definition 1: A system to construct Indigenous housing, using tax dollars, to meet political requirements that all Australians have a similar standard of housing.*

The task-based definition of the Indigenous housing system outlined above is amplified through making the following explicit:

***C**ustomers: Indigenous people are the beneficiaries of the housing system but they are inadequately involved in the process.*
***A**ctors: The plethora of Indigenous housing agencies in Diagrams 1 to 4.*
***T**ransformation: The system transforms tax dollars, through a complex bureaucracy, to contractor-built houses*
***W**eltanshauung or World View: An externally-imposed political imperative to construct houses in Indigenous communities to a standard and design similar to that in non-Indigenous communities. The world view does not generally recognise that traditional Indigenous people may not want a "western– style" house.*
***O**wners: The system is "owned" by Commonwealth and State or Territory governments. They control the funding and largely the nature and form of the housing.*
***E**nvironmental constraints: There is a deeply entrenched bureaucracy which would make the dramatic transformation of the system difficult.*

Monitoring the Conceptual Model 1 against the 3 E's has the following results:

***E**[1] Efficacy – houses are built*
***E**[2] Efficiency – houses are often not a particularly efficient use of tax dollars as they are often built by external contractors, using skills and materials external to the community, to a very high standard. Money is often spent on large high standard housing that could perhaps better be spent on other community priorities.*
***E**[3] Effectiveness – the houses meet the needs of the "owners" of the system (X number of houses built to a high standard) but often not those of the beneficiaries.*

***Conceptual Model 2**: based on Definition 2: (Issue-based): A system to enable and empower Indigenous Australians, using tax dollars, to fulfil their own development objectives.*

This issue-based model is developed by considering the following:

***C**ustomers: Indigenous people are the beneficiaries of the housing system, according to values established in the region by Indigenous people for indigenous people*
***A**ctors: Regional Indigenous agencies with decision-making links to the communities they serve;*

***T**ransformation: The system empowers the Indigenous people to decide on the use of tax dollars, for culturally-appropriate housing*
***W**eltanshauung or World View: This system embodies a culturally sensitive world view that recognises that people and communities have different values and priorities. As far as possible it empowers Indigenous people to make sound informed decisions about the development of their communities.*
***O**wners: The system would be regionally owned by Indigenous people with checks and balances to ensure fair use of resources.*
***E**nvironmental constraints: Many remote Indigenous communities have been disempowered and are frequently dysfunctional. Any attempt to assist communities to achieve their own development priorities would need to be accompanied by sensitive capacity-building programs.*

Monitoring the Conceptual Model 2 against the 3 E's has the following results:

***E**[1] Efficacy – houses are built*
***E**[2] Efficiency – houses are an efficient use of tax dollars as they are built using local or regional skills and to a standard agreed upon locally.*
***E**[3] Effectiveness – the houses do not meet the needs of the "owners" of the system (X number of houses built to a high standard) but would meet those of the beneficiaries who would decide on the standard of construction and the resources spent on housing versus other priorities.*

***Stage 5 -7*:** A comparison of the conceptual models with the problem situation and the 3E's which results in feasible changes

As mentioned above, in a detailed application of SSM, the practitioner would have developed several different conceptual models in Stage 4. This stage involves the comparison of the conceptual models with reality, a process that highlights problem areas in the actual problem situation and provides direction for future intervention. It should highlight issues such as structural issues and attitude and value differences.

As it to be expected from a 'wicked' problem, Stage 4 illustrates that neither of the two conceptual models developed are likely to work very well in reality. Significantly, the Weltanshauung or World View of the two models are very different and this is, in reality, at the heart of the current problems in Indigenous housing. A compromise between the two extremes is likely to be the most workable solution.

***Recommendations** for improvements to the system could look something like this: (long-term/short term)*

Longer term Recommendations: A more demand-focused system (Conceptual Model 2) offers a more efficient use of resources but there is a significant imbalance between what the current "owners" of the system and the beneficiaries of the system want as the output – standard houses on the one hand and appropriate housing as part of a local development process, on the other. This would involve the following changes:
Attitudinal: Recognise that the system beneficiaries have a right to make decisions on their housing and local development and be involved in decisions involving funds spent in their areas;
Support: Enable and support the skills necessary to achieve this greater decision-making role in matters that concern local communities through mentoring, facilitation and leadership development.
Structure and Process: The decisions regarding the allocation of Indigenous housing funding are made at State or Territory level. Given the vast differences within these areas, devolution of decision-making to the regions or sub-regions makes more sense. This would be supported by a process of development planning at local or regional level. This would require the obvious changes in the current Indigenous housing structure and process.

Short-term Recommendations: During fieldwork, system beneficiaries stated that they would like to develop usable skills and ensure that these skills are used within the community in

future. Communities also requested that project control not be centralised but be closer to communities.

The resulting short-term recommendations are that any project should ascertain the relevant local skills that could be used and identify potential trainees who could be trained in necessary skills through the project. These less tangible project objectives should receive as much attention in project management as the tangible.

The brief analysis discussed above illustrates that a Social Assessment of a "wicked" problem situation can be significantly enhanced through using some of the tools of Soft Systems Methodology.

6 Conclusion.

Social assessments have a significant role to play in so-called "wicked" complex social problem situations. Soft Systems Methodology offers a well-developed 'tool kit' that are designed for use in complex problem situations. This paper has attempted to illustrate, with reference to a remote Indigenous housing project in Australia, that aspects of soft systems methodology provide some structure for social assessments of complex policy and institutional environments.

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Diagram 1: The Indigenous Housing System

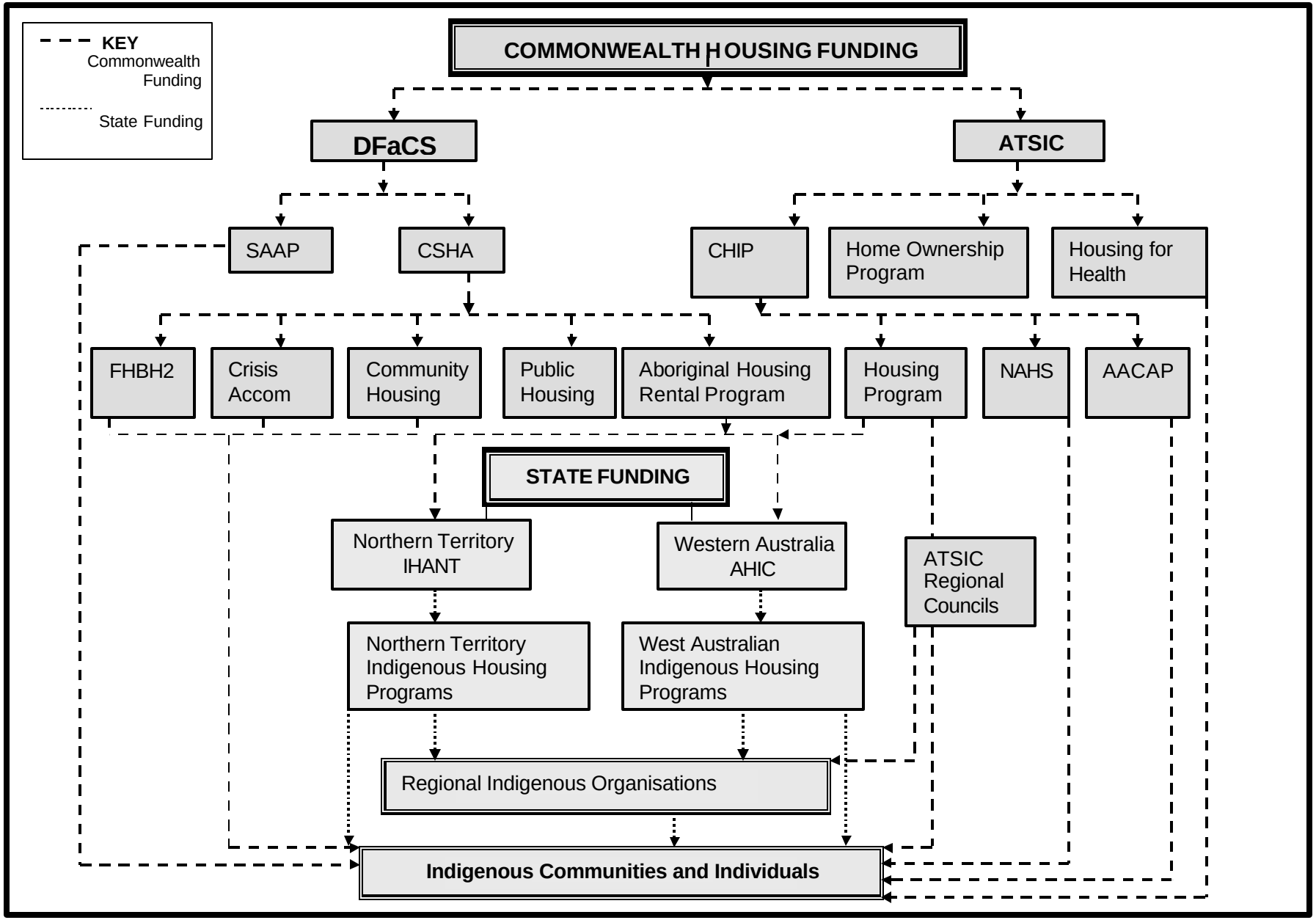

Diagram 2: West Australian Funding Flows

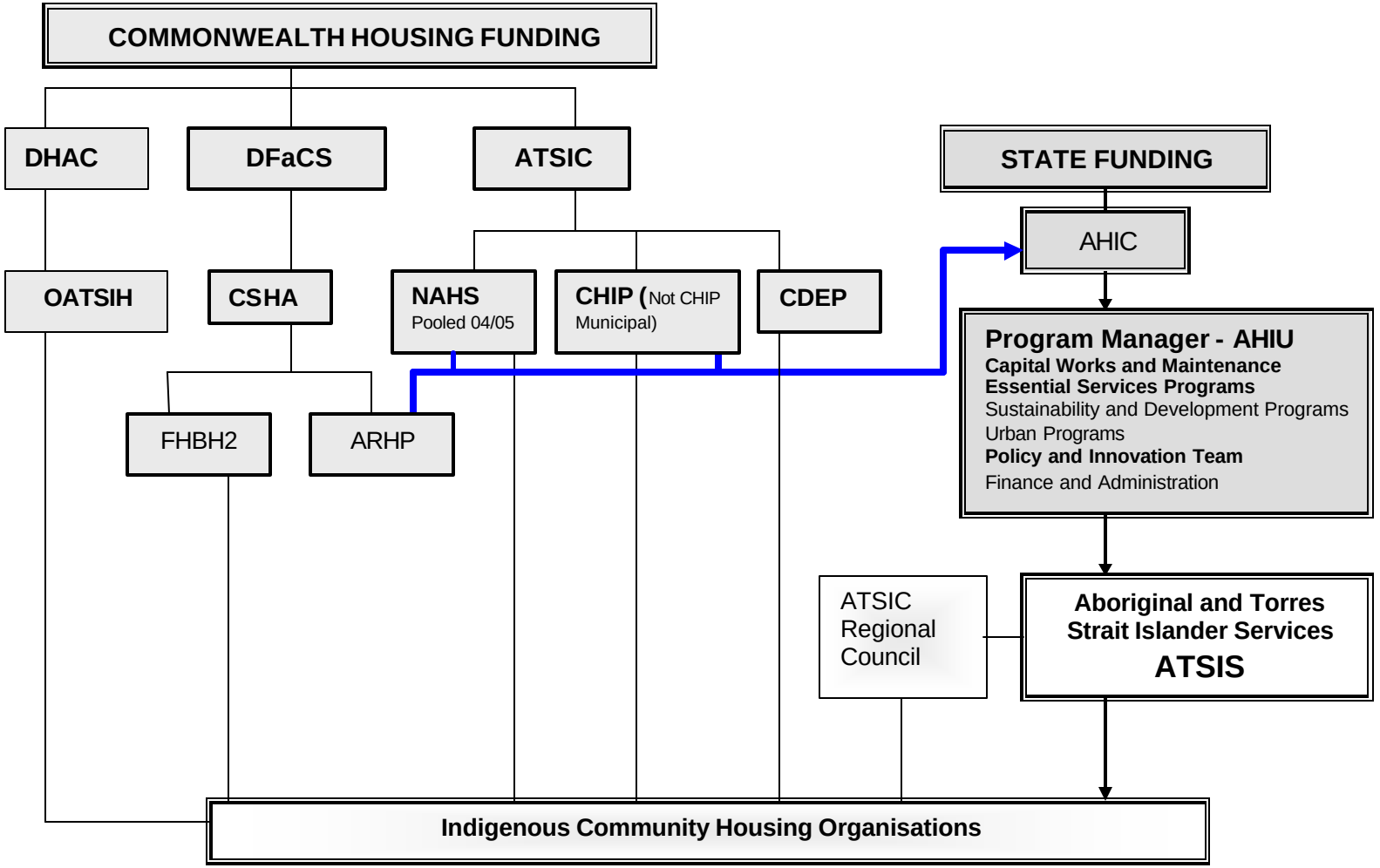

Diagram 3: Kullarri Regional Organisational Structure 2003 - 2004

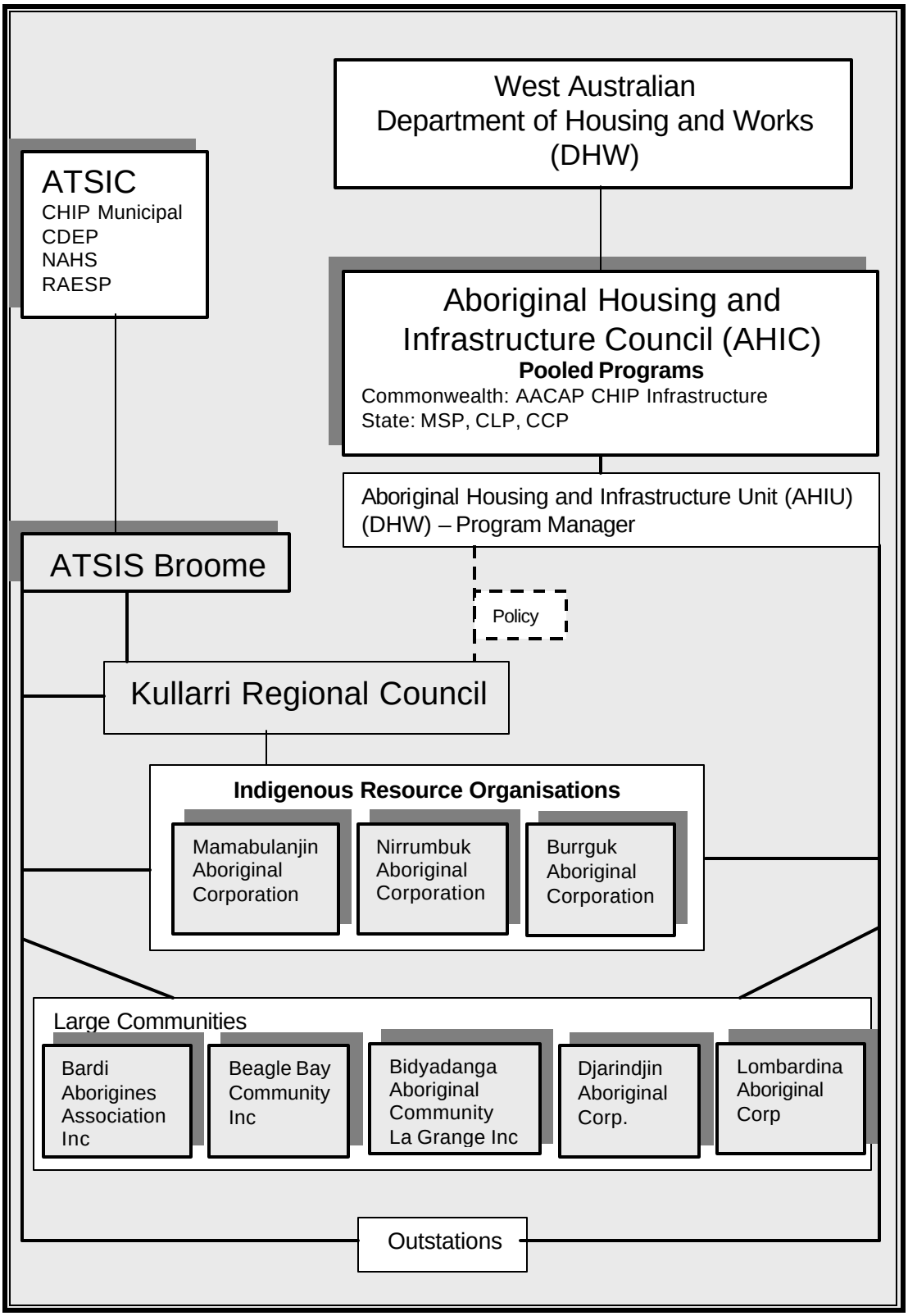

Diagram 4: Kullarri Regional Funding Process 2003 - 2004