

Tasmania's Tarkine, Community Involvement, and the Sustainable Development Platform Method

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Introduction

The emergence of the Tarkine as a potential tourism drawcard for Tasmania presents a number of challenges and opportunities for local economic development and sustainable resource management. Opportunities include the potential to create an iconic international tourism destination, new wealth creation and employment opportunities, whilst challenges include the possible scaling back of resource extracting industries and changes to socio-cultural lifestyle choices within the region, particularly along the Arthur-Pieman Conservation Area (APCA) coastline.

Traditional polycentric approaches to the Tarkine's management are arguably inadequate to meet the needs of coordinated sustainable use and development of the Tarkine asset. A new approach is required that is capable of aligning divergent views into a cooperative, sensitive and appropriate management structure capable of delivering sustainable development outcomes for businesses, communities and other stakeholders. The Sustainable Development Platform Method (SDPM) offers one such approach.

The SDPM has been designed to enable the realisation and development of economic values inherent within natural and cultural environments, to encourage community involvement in management as well as to provide a source of funds that can resource sustainable management efforts. Securing these important financial incentives and resources requires a mechanism for the cooperative attainment of profits that can be procured through the development of Regional Innovation Systems (RIS).

Investigating a new policy trajectory that has the potential to support the sustainable and self-funded management of the Tarkine, whilst enabling private economic development, can provide a path forward for authentic, community-supported and participatory, resource management in the Tarkine.

Challenges and Opportunities

The Tarkine is a landscape that features rich and diverse ecosystems, globally significant cultural heritage values and small user communities that are at risk from poorly planned management approaches and transition strategies. The Tarkine is currently facing threats from: habitat loss and fragmentation; proposed and existing mining activities; human access impacts; invasive flora and fauna; vegetation clearing; wildlife harvesting; damaging recreational activities, and; climate change impacts. In addition, the Tarkine is a significant primary source of local wealth, employment and socio-recreational well-being.

Many of these management challenges are human induced and as such, require human responses that are coordinated, multifaceted and solutions oriented. Management responses can be centralised, market-based, hierarchical or collective¹ and each of these approaches may provide an effective solution or contributing component for the Tarkine's management. To effectively and cooperatively manage a resource such as the Tarkine, the preferable management approach should be capable of resolving resource focused community conflicts, addressing environmental and heritage decline, and minimising human impacts whilst maximising benefits.

According to Dietz, Ostrom and Stern², 'much environmental regulation in complex societies has been "command and control"', and that centralised approaches are often stymied by a lack of will and capacity to manage resource-rich ecosystems in a sustainable, economically efficient and user-supported way. Ostrom and others³ argue that self-governing institutional arrangements that localise and embed adaptive decision-making, supported by multi-layered governance arrangements, can positively contribute to sustainable resource management outcomes at the local scale. Community involved governance approaches that incorporate incentives provision and coercive compliance mechanisms are a central component of the SDPM. To enable effective governance, defining rules and boundaries for decision-making purposes is critical.

Community Involvement in the Tarkine's Future Management

In 2001, the Resource Planning and Development Commission (RPDC) received submissions from the public about the then future management of the APCA⁴. A local Conservation Management Trust approach to the APCAs management was a strong theme of the public submissions. The Parks and Wildlife Service (PWS), deciding against the current of public submissions and the recommendations of the RPDC, established a community-based management committee for the APCA that recent research⁵ has indicated has been reduced to something less than an advisory committee. Local community interest in natural areas management is still strong within the Northwest region as demonstrated during the community consultation processes undertaken during the consideration for Ramsar listing of Boullanger Bay/Robbins Passage⁶, and as revealed by recent research on the management of the Hunter Group of islands⁷. The design of institutional arrangements and governance rules for community involvement in the Tarkine's management will take time to perform and will require resourcing that can facilitate tacit, expert, cultural and community knowledge inputs.

¹ Fischer, A., Peterson, L., Feldkotter, C. and Huppert, W. 2007, Sustainable Governance of Natural Resources and Institutional Change – An Analytical Framework, *Public Administration and Development*, 27, pp.123-137.

² Dietz, T., Ostrom, E. and Stern, P 2003, The Struggle to Govern the Commons, *Science*, 302, 1907-1912.

³ Ostrom, E. and Janssen, M. 2004, Multi-level governance and resilience of social-ecological systems, in Spoor, M. (ed.) *Globalisation, Poverty and Conflict*, Kluwer Academic Publishers, Netherlands.

Mwangi, E. and Ostrom, E. 2009, Top-down Solutions: Looking up from East Africa's Rangelands, *Environment*, 51, 34-44.

⁴ RPDC 2001, *Inquiry into the finalisation of the Draft Arthur-Pieman Conservation Area Management Plan 2000*, RPDC, Hobart, Tasmania.

⁵ Henderson, D. and Campbell-Ellis, M. 2009, *A Review of Community Involvement in the Management of the Arthur-Pieman Conservation Area*, North-West Environment Centre, Burnie, Tasmania.

⁶ Dunn, H. 2001, *Boullanger Bay/Robbins Passage Ramsar site nomination: Report of Phase II – consultation and project outcomes*, Natural Heritage Trust and Birds Tasmania.

⁷ Campbell-Ellis, M. 2009, *Policy Design for Common Pool Resources Management: Sustainable Development Platform Methods in the Fleurieu Group of Islands, Tasmania*, Honours Dissertation, School of Government, University of Tasmania, Launceston, Tasmania.

Deliberative democracy and collective action theories offer guiding principles that can inform design considerations for community-involved management approaches.

Deliberative Democracy

Deliberative democracy is a governance process that facilitates discussion-based decision-making. According to Cohen⁸, deliberative democracy has five main features:

1. A deliberative democracy is an ongoing and independent association, whose members expect it to continue into the indefinite future.
2. The members of the association share (and it is common knowledge that they share) the view that the appropriate terms of association provide a framework for or are the results of their deliberation. They share, that is, a commitment to co-ordinating their activities within institutions that make deliberation possible and according to norms that they arrive at through their deliberation. For them, free deliberation among equals is the basis of legitimacy.
3. A deliberative democracy is a pluralistic association. The members have diverse preferences, convictions and ideals concerning the conduct of their own lives. While sharing a commitment to the deliberative resolution of problems of collective choice, they also have divergent aims, and do not think that some particular set of preferences, convictions or ideals is mandatory.
4. Because the members of a democratic association regard deliberative procedures as the source of legitimacy, it is important to them that the terms of their association not merely be the results of their deliberation, but also be manifest to them as such. They prefer institutions in which the connections between deliberation and outcomes are evident to ones in which the connections are less clear.
5. The members recognize one another as having deliberative capacities i.e. the capacities required for entering into a public exchange of reasons and for acting on the result of such public reasoning.

These design characteristics for devolved decision-making aim to be equitable, legitimising and trust building, as well as representative, deliberative and capable of genuinely influencing outcomes without avoiding the contentious issues that are critical to policy responses and decision-making. Pettit⁹ advocates three core constraints, being: (1) the inclusive constraint; (2) the judgemental constraint, and; (3) the dialogical constraint. These three constraints aim to provide all participants with an entitlement to participate and vote, and that 'less than a unanimous vote' should be 'sufficient to determine the outcome', to enable deliberation on 'presumptively common concerns' prior to voting on issues, and that deliberation should be conducted openly and in an 'unforced' manner that is selfless and polity free.

To enable community-based deliberative decision-making for the management of the Tarkine, current management agencies should devolve knowledge-based powers and decision-making autonomies to community-based participants. Deliberative management approaches require sufficient and timely information and resourcing that enables effective

⁸ Cohen J. 1989, *Deliberation and Democratic Legitimacy*, viewed 5 October 2009, <<http://philosophyfaculty.ucsd.edu/faculty/rarneson/ICOHENDELIBERATIVE%20DEM.pdf>>.

⁹ Pettit, P. 2001, *Deliberative Democracy and the Case for Depoliticising Government*, *University of New South Wales Law Journal*, 24, 3, pp.724-736.

deliberation and decision-making¹⁰, a commitment to mutual responsiveness, mutual support and joint activity¹¹, and a sense of shared *participatory* ownership of processes and associated outcomes. Ostrom¹² asserts that institutionalised *working* rules are required within the governance processes to guide human behaviour and enable effective monitoring and sanctioning of actions. The adoption of rules in a deliberative democracy sense, facilitates the realisation of the process commitment component of Cohen's deliberative democracy ideals, whereby participants share 'a commitment to co-ordinating their activities within institutions that make deliberation possible and according to norms that they arrive at through their deliberation'.

Collective Action

The challenge of collective action is to resolve the problems of collective *inaction* or *mis-action* through the removal of disincentives and the effective provision of collective goods¹³ to reduce the impacts that harmful actions have on resources¹⁴. Collective action theory has been applied by Ostrom and others as a possible pathway to solving the institutional and governance challenges of natural resources management. Community-based governance requires the design of institutional arrangements that establish and support the following five conditions, being¹⁵: (i) the resources and use of the resources by humans can be monitored, and the information can be verified and understood at relatively low cost; (ii) rates of change in resources, resource-user populations, technology, and economic and social conditions are moderate; (iii) communities maintain frequent face-to-face communication and dense social networks that increase the potential for trust; (iv) outsiders can be excluded at relatively low cost, and; (v) users support effective monitoring and rule enforcement.

Dietz, Ostrom and Stern¹⁶ assert that three general principles apply for the design of resilient and effective governance institutions for local resources management, these are;

- *analytic deliberation* – well informed dialogue between scientists, resource users, and interested members of the broader public;
- *institutional nesting* – that is complex and positioned within multiple layers of governance structures; and
- *institutional variety* – featuring multiple design types capable of diverse decision-making rules 'to change incentives, increase information, monitor use, and induce compliance'.

¹⁰ Hilder, P. 2006, Power up, people: Double devolution and beyond, *Public Policy Research*, December 2006 – February 2007, pp.238-248.

¹¹ Bratman, M. 1992, Shared Cooperative Activity, *The Philosophical Review*, 101, 2, pp.327-341.

¹² Ostrom, E. 2005, *Understanding Institutional Diversity*, Princeton University Press, Princeton, New Jersey, USA.

¹³ Ostrom, E. 1983, Collective Action. By Russell Hardin, reviewed work, *The American Political Science Review*, 77, 3, pp.839-840.

¹⁴ Hardin, R. 1982, *Collective Action*, John Hopkins University Press, London.

¹⁵ Dietz, T., Ostrom, E. and Stern, P 2003, The Struggle to Govern the Commons, *Science*, 302, 1907-1912.

¹⁶ *Ibid.*

According to Ostrom¹⁷, institutional design for collective action-based resource management should follow the eight principles presented in Table 1 below that incorporate both incentive and coercive socio-economic mechanisms.

Table 1 Design principles illustrated by long-enduring CPR institutions (Source: Ostrom 1990, p. 90).

1. *Clearly Defined Boundaries*
The boundaries of the resource system (e.g. groundwater basin or forest) and the individuals or households with rights to harvest resource products are clearly defined.
 2. *Proportional Equivalence Between Benefits and Costs*
Rules specifying the amount of resource products that a user is allocated are related to local conditions and to rules requiring labour, materials, and/or money inputs.
 3. *Collective-Choice Arrangements*
Most individuals affected by harvesting and protection rules are included in the group who can modify these rules.
 4. *Monitoring*
Monitors, who actively audit physical conditions and user behaviour, are at least partially accountable to the users or between users and officials.
 5. *Graduated Sanctions*
Users who violate rules are likely to receive graduated sanctions (depending on the seriousness and context of the offences) from other users, from officials accountable to these users, or from both.
 6. *Conflict-Resolution Mechanisms*
Users and their officials have rapid access to low-cost, local arenas to resolve conflict among users or between users and officials.
 7. *Minimal Recognition of Rights to Organise*
The rights of users to devise their own institutions are not challenged by external government authorities, and users have long-term tenure rights to the resource.
- For resources that are parts of larger systems:*
8. *Nested Enterprises*
Appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organised in multiple layers of nested enterprises.
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Collective action-based governance institutions designed to enable community-based management can provide a pathway for the sustainable use and development of the Tarkine for social, cultural, environmental and economic benefits. Such an approach, supported by a locally nested collaborative network that engenders authority and legitimacy and provides the needed capacity and resourcing for community-based governance is an output of the SDPM and its associated RIS.

¹⁷ Ostrom, E. 1990, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, N.Y., U.S.A.

Regional Innovation Systems

Philip Cooke¹⁸ asserts that innovation is a key component of the knowledge economy within which globalised financial systems operate; and that clustered innovation networks, capable of delivering RIS, have become a core ingredient for individual regional prosperity. Regional economies and individual enterprises are competing in competitive global markets, where businesses and communities are increasingly exposed to new and dynamic market environments. RIS promote local development¹⁹ that is socially and territorially embedded²⁰, aligned with regional path dependencies and trajectories²¹, and that aim to construct competitive advantages²².

Cooke²³ describes an RIS as having five key components, being: (1) the *region*, which is capable of supporting innovative economic development; (2) *innovation*, embodied through the ‘commercialisation of new knowledge’; (3) *networks*, built on ‘reciprocal, reputational or customary trust and co-operation-based linkages among actors that coalesces to enable its members to pursue common interests; (4) *learning*, particularly ‘institutional learning’ that develops and embeds new ‘knowledge, skills and capabilities’, and; (5) *interaction*, being both formal and informal communications and association activities that aim to ‘learn, critique or pursue specific project ideas or practices of collective and individual economic, commercial or communal relevance’. These five components are encapsulated within the SDPM approach which provides overarching principles that support the construction of RIS.

RIS can reveal specific resource configurations that are built on the available natural and human attributes within the Tarkine and can provide the SDPM with a means to develop market-based incentives that encourage participation and a commitment to sustainable management as well as providing a source of fiscal resources for the implementation and ongoing application of the SDPM for the Tarkine’s management.

Applying the SDPM to the Tarkine

Nagendra and Ostrom²⁴ argue that ‘under appropriate conditions, communities can devise appropriate operational and collective-choice arrangements that enable the sustainable use of natural resources’. To achieve sustainable development outcomes within the Tarkine, the

¹⁸ Cooke, P. 2004, Introduction, in Cooke, P., Heidenreich, M. and Braczyk, H. (eds) *Regional Innovation Systems: the role of governance in a globalized world*, (2nd ed.), Routledge, London, UK.

¹⁹ Cooke, P. 2001, Regional Innovation Systems, Clusters, and the Knowledge Economy, *Industrial and Corporate Change*, 10, 945-974.

²⁰ Muscio, A. 2006, From regional innovation systems to local innovation systems: Evidence from Italian industrial districts, *European Planning Studies*, 14, 6, pp.773-789.

²¹ Heidenreich, M. 2004, Conclusion: the dilemmas of regional innovation systems, in Cooke, P., Heidenreich, M. and Braczyk, H. (eds) *Regional Innovation Systems: the role of governance in a globalized world*, 2nd ed., Routledge, London, UK.

²² Cooke, P. 2007, To Construct Regional Advantage from Innovation Systems First Build Policy Platforms, *European Planning Studies*, 15, 2.

²³ Cooke, P. 2001, Regional Innovation Systems, Clusters, and the Knowledge Economy, *Industrial and Corporate Change*, 10, 945-974.

²⁴ Nagendra, H. and Ostrom, E., with Saundry, P. 2007, Governing the commons in the new millennium: A diversity of institutions for natural resource management, in Cleveland, C. (ed.) *Encyclopedia of Earth*, Washington, DC, USA, Environmental Information Coalition, National Council for Science and the Environment.

application of the SDPM may better suit the needs of communities that place multiple values on the area and maintain deep and connected relationships with the Tarkine. The SDPM approach aims to provide communities with the necessary fiscal resourcing to actively manage the Tarkine whilst providing mechanisms for altruistic, profit seeking and vested interest participation in decision-making processes. Design considerations for the SDPM fall into four key fields. These fields are: (1) desirable outputs of a SDPM; (2) essential inputs and characteristics of a SDPM; (3) barriers hindering the success of a SDPM, and; (4) solutions to SDPM barriers.

Desirable Outputs of a SDPM

The SDPM provides a collective action-based approach to natural area management that can be applied to the Tarkine to provide coordinated and multifaceted solutions to management challenges and opportunities that deliver and maintain environmental, social, cultural and economic benefits. The use of the SDPM enables a holistic and strategic resource management and planning approach capable of providing valued and recognised process outputs that enhance community capital. These processes aim to provide network-based competitive advantages, community authority and management legitimacy.

Essential Inputs and Characteristics of a SDPM

Desirable SDPM characteristics include the creation and support (mutual and external) of responsive, adaptive and collective choice-based nested networks that are institutionally embedded and capable of fostering creative tension. This network aims to facilitate stakeholder participation resulting from altruistic, profit seeking, and vested interest-based incentive and coercive motivators. Through respected and applied deliberative democracy processes, community leadership can emerge and a shared vision and goals for CPR management will be developed that encourages the creation of mutually agreed to working rules, the assignment of devolved powers, and the development of community accepted authority supported by socio-economic graduated sanctions. The network should also provide avenues for participation by new entrants and emerging stakeholders that are open and inclusive, whilst providing a scale of influence based on perceived stakes and multifaceted sustainability criteria designed through collective choice-based deliberation. In addition, the network should contain a knowledge management system that enables the creation and distribution of new and existing knowledge and learning opportunities, and provide an avenue for suasive knowledge delivery.

Important to the SDPM approach is the definition of the Tarkine's resource boundaries that are subject to the application of the SDPM approach to enable contextual rulemaking, resource evaluation (including the definition of resource condition indicators and the identification of social and community capitals) and stakeholder identification. To assess resource conditions and facilitate effective monitoring, low cost, accurate and timely resource specific information that incorporates the precautionary principle of sustainability is required to identify resource limitations, and production and innovation barriers. This assessment should be thorough and exhaustive and should include natural and human resources (specifically community, industry, government and academic), regional capabilities, competences, core competences and dynamic capabilities within the region and defined resource area, whilst revealing inherent path dependencies and existing trajectories. An output of the resource assessment and audit process should be the definition of property rights within the Tarkine that feature proportional equivalence between benefits and costs, and can

be exclusively assigned to provide long term access and input into decision-making processes that result in genuine influence and tangible outcomes. Furthermore, the SDPM should provide participants with the opportunity to develop skills and capacities through internal and external mechanisms.

Barriers Hindering the Success of the SDPM

Challenges exist for the application of the SDPM within the Tarkine. Existing polycentric governance systems, bureaucratic barriers, and unsupportive legislation and policy frameworks discourage community-based participation and can significantly stymie efforts to establish devolved management. Regional management and economic lock-ins inhibit innovation and participation at the regional and individual scales and could contribute to the failure of a SDPM approach to the Tarkine's management and associated RIS. In addition, the potential for a lack of organisational will within existing management authorities, poorly managed past efforts at community-based management, and stakeholders 'who can disproportionately benefit from resisting new rules – or, imposing ones that they benefit from rather than others'²⁵ further complicate the application of a community-based management approach within the Tarkine.

Solutions to SDPM Barriers

Institutional embeddedness is the principle concern for SDPM success. Dense and well nested socio-relationships, supported by embedded and institutionalised networks can significantly benefit efforts that seek to align policies and provide supportive mechanisms for collective action-based approaches to the Tarkine's management challenges. Collective approaches should be capable of providing socio-economic incentives, rewards and punishments (for example, graduated sanctions) to provide the best opportunity for the SDPM approach to reduce barriers and be accepted by stakeholders.

The SDPM Approach

The SDPM is an adaptation of the Regional Development Platform Method (RDPM) developed by Harmaakorpi and Pekkarinen²⁶. The SDPM incorporates sustainability criteria absent from the RDPM and results in a nine phase approach to resources management. These nine phases are diagrammatically presented in Figure 1, followed by a brief descriptive explanation of each phase.

²⁵ E. Ostrom 2009, pers. comm., 4 October

²⁶ Harmaakorpi, V. and Pekkarinen, S. 2003, The Concept of the Regional Development Platform and Regional Development Platform Method (RDPM) as a Tool for Regional Innovation Policy, *43rd Annual Conference of European Regional Science Association*, Jyväskylä, Finland.

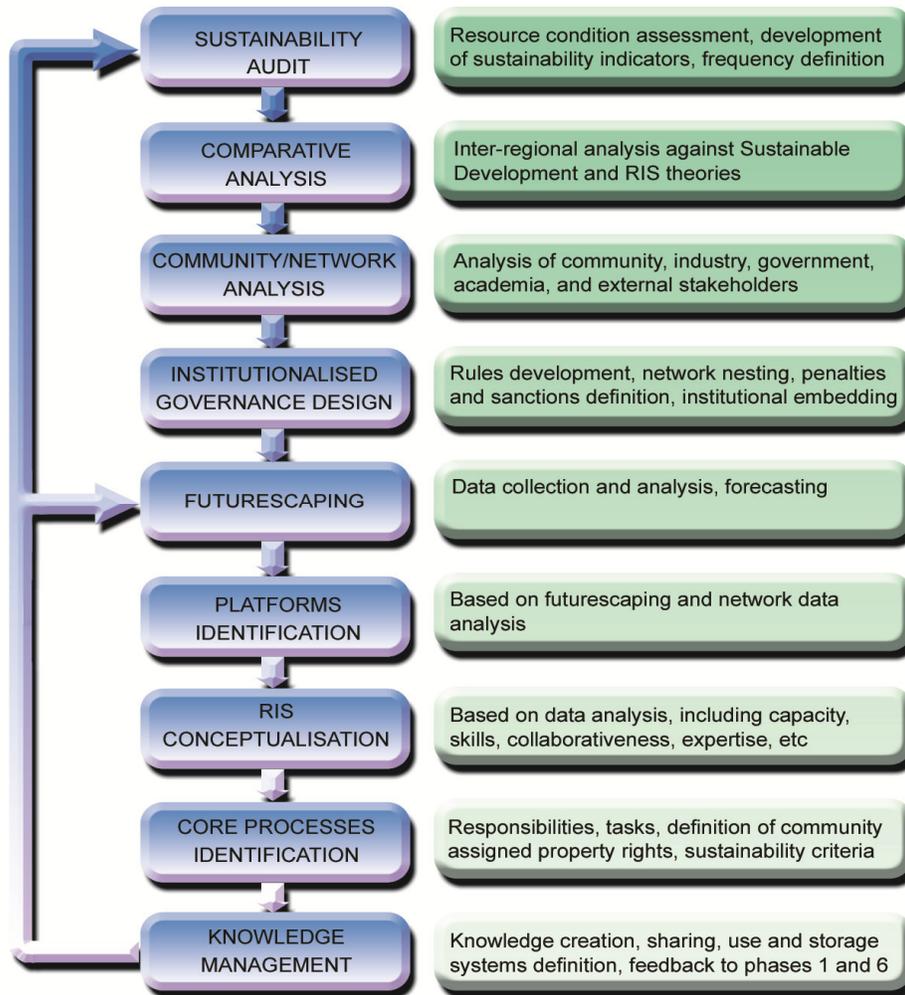


Figure 1 Conceptualisation of the SDPM approach.

The first phase of the SDPM, the **Sustainability Audit**, seeks to independently assess the sustainability of current resources and to conduct an audit of resource conditions. This is done to provide sustainability checks and balances and to identify resource condition indicators. This task should be independently performed by experts either annually or bi-annually to enable effective monitoring of resource providing systems. This phase also identifies environmental management actions capable of improving resource conditions and provides a trigger for the application of identified environmental management actions funded through SDPM generated RIS.

The second phase of the SDPM, **Comparative Analysis**, aims to provide an inter-regional comparison of natural and human resource conditions against sustainable development and RIS theories. This phase attempts, as with the RDPM, to ‘learn from the past, compare what has been done in other regions, and to try and do some benchmarking’²⁷. The research conducted in this phase should include a detailed background study of regional assets,

²⁷ *Ibid.*

industries, communities, academic institutions and government participation. This phase utilises statistical data combined with intrinsic and tacit knowledge.

The consideration of these factors assists identify regional capacity for the SDPM approach and also provides important data that guides decision-making processes throughout its application. The basic method, as explained in the RDPM²⁸, is presented in Figure 2:

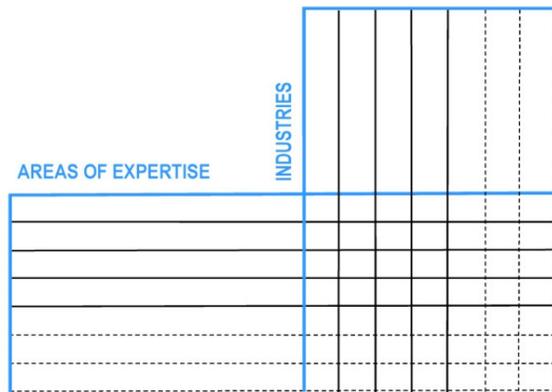


Figure 2 Principle of Industries and Areas of Expertise in the Regional Development Method (Source: Harmaakorpi and Pekkarinen 2003, p. 10).

The third phase of the SDPM, **Community / Network Analysis**, builds on the preceding phase to explore the potential network(s) that could participate in and contribute to the SDPM approach. This phase is explorative in nature and involves undertaking a detailed stakeholder analysis and SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, the purpose of this phase is to begin building the network relationships that will form the key component of the SDPM approach to enable effective nesting and embedding of institutional and governance arrangements.

Phase four, **Institutionalised Governance Design**, is arguably the most critical and complex phase in the SDPM. This phase seeks to involve and effectively network self-identified and research identified participant stakeholders and process leaders, and to nest the resulting community-based network within local and regional community settings whilst embedding associated institutional relationships to maximise collaboration and cooperation across all governance scales. This phase involves defining the collective action-based governance structure (including specific leadership components and their defined tasks and responsibilities) and associated working rules, and defining rewards and penalty systems that involve socio-economic graduated sanctioning mechanisms. Importantly, this phase also defines the structural governance conditions that scale involvement and influence in decision-making processes to reflect participant stakes in the applicable resources and associated management process.

Phase five, **Futurescaping**, begins with a grounded path dependent basis from which future megatrends are identified using statistical data. This analysis aims to reveal the success or failure chances of existing and possible trajectories based on network and regional capabilities. The Futurescaping phase should also provide a detailed and statistically supported view of possible futures and expected resource conditions.

²⁸ *Ibid.*

The sixth phase, **Platforms Identification**, stems from the preceding analyses and in particular the Futurescoping and Sustainability Audit to, as with the RDPM, ‘define the potential development platforms in the region’²⁹. This phase attempts to identify as many platform opportunities as can be realised given the inherent regional and resource constraints and the capacity and interest of the network participants to explore individual platform opportunities. Harmaakorpi and Pekkarinen identify within the RDPM, that this phase of finding the ‘promising combinations of industries and areas of expertise while taking into account the possibilities offered’ aims to reveal the most ‘fruitful’ platforms where, in the context of the SDPM, resources that are rare, unique and non-substitutable, but *can be managed sustainably* are selected for RIS platform development.

The seventh phase of the SDPM, **RIS Conceptualisation**, aims to create a ‘shared understanding of the environment where innovation policies are conducted’³⁰. This phase involves identifying likely network participants and associated institutional resource configurations (through invitation or self-nomination) to pursue a specific RIS platform. The RIS Conceptualisation phase also creates a shared individual platform vision that supports and guides the identification and definition of core processes associated with the particular RIS platform.

Phase eight of the SDPM, **Core Processes Identification**, the aim of which, like the RDPM, is to exploit the ‘*potential existing in the defined development platforms*’³¹. The SDPM approach extends the scope of this phase to include participant created and defined responsibilities and tasks, how sustainability indicators will be reported against monitoring criteria, and how specific resource property rights will be assigned and enforced (aligned with the broader working rules). Participants must own, create and define these core processes within the constraints of the larger collective SDPM network, and must be willing, as with the RDPM, to ‘invest resources to develop the core process’³² and, by extension, to invest resources into the overarching SPDM-based resource management approach, including tithed fiscal resources derived from successful SDPM developed RIS to fund environmental management actions identified in the first phase.

The relationship between phases five through to eight are presented in Figure 3.

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ *Ibid.*

³² *Ibid.*

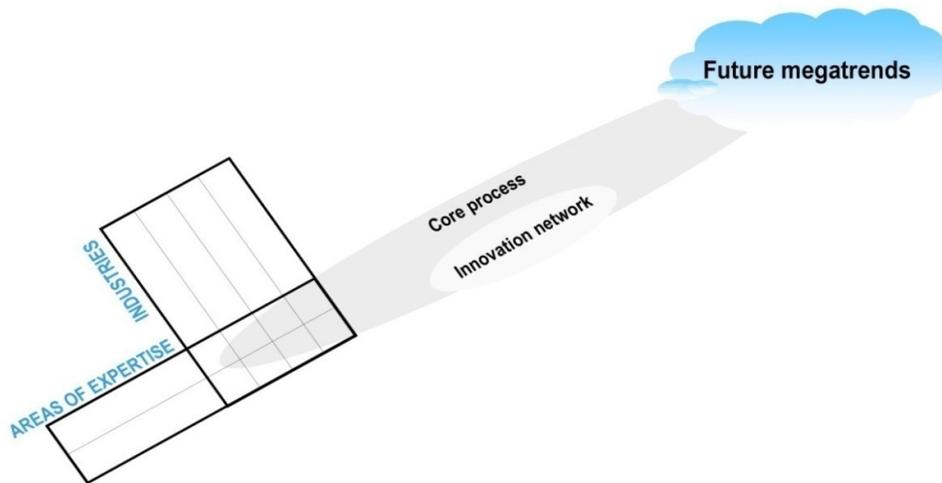


Figure 3 Principle Description of a Core Process (Source: Harmaakorpi and Pekkarinen 2003, p. 12).

The final phase, **Knowledge Management**, supports and develops the innovative capacity and competitive advantage of the SDPM network that is reliant on learning and knowledge creation and its dissemination. This phase of the SDPM approach aims to harness and coordinate the learning and knowledge capacity within the SDPM network to foster opportunities for new knowledge creation and sharing, and broad institutional learning. This phase feeds directly back into phases one and six to ensure that knowledge is distributed at critical phases of the SDPM process and to ensure that knowledge is not lost.

Conclusion

The Tarkine presents Tasmania with a new opportunity to develop a revenue stream for remote communities that are currently reliant on fragile economic inputs and global markets. Current management approaches within the Tarkine are either exploitative and do not provide genuine multiple-use, or are largely absent. Allowing current management approaches to continue is likely to result in ongoing changes to existing ecosystem qualities, which may limit the future opportunities for tourism. Finding a solution that meets human and ecosystem needs is preferable to inaction; the SDPM approach to the Tarkine's future management provides a policy option capable of delivering a sustainable development solution.

The significance of the SDPM lies within its capacity to eliminate the need for exogenous funding that is inherent within current approaches to resources management. The SDPM does this through the creation of RIS that sustainably provide wealth through optimal, innovative and collaborative resource configurations that are nested within institutionalised network relationships. This wealth generation leads to fiscal resourcing for genuine community-based management of the Tarkine and associated environmental management actions, supported by a participatory and deliberative governance approach.