

# **COMMUNITIES, CO-MANAGEMENT AND WORLD HERITAGE: THE CASE OF KOKODA**

**Amy Louise Reggers**

**BBus (International Tourism)**

**BM (Hons)**

A thesis submitted in fulfilment of the requirements of the degree  
of

Doctor of Philosophy

July 2013

University of Technology, Sydney

## **CERTIFICATE OF ORIGINAL AUTHORSHIP**

*I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.*

*I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.*

*Signature of Student:*

*Date:*

## ACKNOWLEDGEMENTS

I would first like to extend my sincere gratitude to Associate Professor Stephen Wearing whom, without his encouragement and constant conceptualisation and reconceptualisation of my ideas, this thesis would not have been possible. Thank you for encouraging me to do this research. Thanks also to Dr Stephen Schweinsberg for your constant support and willingness to discuss my ideas at length, often. To my final supervisor Dr Genevieve Nelson, thank you immensely for your physical and mental strength in helping me get across the Kokoda Track, relatively unscathed. I am very grateful for your help throughout my research. I would also like to thank the University of Technology, Sydney and in particular UTS: Business for the financial support that gave me the opportunity to study at the Kuring-gai Campus and the editing assistance of Matt McDonald.

I would like to acknowledge the Kokoda Track Foundation for their financial and logistical support that made the fieldwork component of this study possible. I'd like to express my utmost thanks to Bob, who without your patience, strength and smile, I would not have been able to complete the Track. My gratitude goes to the whole team who crossed the Track in February 2012 and the many who saved me from a fall more than once; because of your help, I remained *Strongpela Meri* for the rest of this research. Thanks especially to Wampy for assistance with my data collection. I felt honoured to be learning and sharing culture and research with you every step of the way. I would like to acknowledge all the participants from the villages of the Kokoda Track, Port Moresby and those who reside in Australia. Thank you for your time and insights into the fascinating Papua New Guinea.

Thanks to my family and my friends for their support throughout the last four years of my research. To all the gals at the research lab; you make coming to work so much more fun. Finally to my new husband, without your tireless support, technical proficiencies and emotional stability, this thesis would not have been completed. Thank you for supporting me and my goal, for always believing in my abilities and for doing all the housework and cooking in the final few months! Now we can start our lives together, post PhD.

## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>CHAPTER ONE: INTRODUCTION.....</b>  | <b>1</b>  |
| 1.1 CONSERVATION PARADIGM: THEORETICAL AND METHODOLOGICAL UNDERPINNINGS                | 5         |
| 1.2 THE KOKODA TRACK CASE STUDY .....  | 7         |
| 1.3 RESEARCH QUESTIONS .....   | 10        |
| 1.4 DELIMITATIONS .....  | 12        |
| 1.5 THESIS OUTLINE.....  | 13        |
| 1.6 SUMMARY .....  | 15        |
| <b>CHAPTER TWO: LITERATURE REVIEW .....</b>  | <b>16</b> |
| 2.1 THE TRANSFORMATION OF NATIONAL PARKS: PROTECTED AREA MANAGEMENT ....               | 16        |
| 2.2 RELATIONSHIP BETWEEN NATURE AND CULTURE .....                                      | 18        |
| 2.3 GOVERNANCE OF PROTECTED AREAS.....   | 20        |
| 2.4 WORLD HERITAGE AREAS.....  | 25        |
| 2.4.1 <i>The World Heritage Convention</i> .....                                       | 25        |
| 2.4.1.1 Evolution of World Heritage .....  | 26        |
| 2.4.2 <i>Literature on World Heritage Areas</i> .....                                  | 28        |
| 2.5 CO-MANAGEMENT .....  | 32        |
| 2.5.1 <i>Defining Co-management</i> .....  | 33        |
| 2.5.2 <i>Conceptualising of Co-management</i> .....                                    | 36        |
| 2.5.2.1 Power-sharing .....  | 37        |
| 2.5.2.2 Institutional Building .....   | 38        |
| 2.5.2.3 Trust and Social Capital.....  | 39        |
| 2.5.2.4 A Process .....  | 39        |
| 2.5.2.5 Problem-solving.....   | 39        |
| 2.5.2.6 Governance .....   | 40        |
| 2.5.2.7 Knowledge Generation .....   | 40        |
| 2.5.2.8 Social Learning .....  | 41        |
| 2.5.3 <i>Moving on from Co-management: Adaptive Co-management</i> .....                | 47        |
| 2.5.4 <i>Adaptive Co-management and World Heritage Management</i> .....                | 52        |
| 2.5.5 <i>Pacific World Heritage – a testing ground for Adaptive Co-Management?</i> ... | 57        |
| 2.6 SUMMARY .....  | 64        |
| <b>CHAPTER THREE: METHODOLOGY .....</b>  | <b>65</b> |
| 3.1 RESEARCH PURPOSE .....   | 65        |
| 3.2 SITUATING THE RESEARCH .....   | 66        |

|       |   |           |
|-------|---|-----------|
| 3.3   | THE CASE STUDY AS A DESIGN FRAMEWORK .....  | 67        |
| 3.3.1 | <i>Case Study Selection Criteria</i> .....  | 69        |
| 3.4   | CONDUCTING THE STUDY .....  | 70        |
| 3.4.1 | <i>Contextualising the Study</i> .....  | 73        |
| 3.4.2 | <i>Role of the Researcher</i> .....   | 74        |
| 3.5   | RESEARCH METHODS .....  | 76        |
| 3.5.1 | <i>Interviews</i> .....   | 76        |
| 3.5.2 | <i>Focus Group</i> .....  | 78        |
| 3.5.3 | <i>Document Evidence</i> .....  | 79        |
| 3.5.4 | <i>Data Analysis and Presentation</i> .....   | 80        |
| 3.6   | POTENTIAL BIAS.....   | 82        |
| 3.7   | ETHICAL CONSIDERATIONS .....  | 83        |
| 3.8   | SUMMARY .....   | 84        |
|       | <b>CHAPTER FOUR: FINDINGS AND DISCUSSION .....</b>  | <b>85</b> |
| 4.1   | PART 1: LOCAL MANAGEMENT: CUSTOMARY LANDOWNERSHIP OF THE TRACK.....                         | 87        |
| 4.1.1 | <i>Legislation and who owns The Track?</i> .....  | 87        |
| 4.1.2 | <i>Landownership and Communities of the Track</i> .....                                     | 92        |
| 4.1.3 | <i>Community Management of the Track</i> .....  | 97        |
| 4.1.4 | <i>Summary</i> .....  | 101       |
| 4.2   | PART 2: STAKEHOLDERS IN REGIONAL MANAGEMENT: THE INFLUENCE OF TOURISM<br>ON THE TRACK ..... | 103       |
| 4.2.1 | <i>Conceptualising The Track</i> .....  | 103       |
| 4.2.2 | <i>Tourism Intermediaries and their role along the Track</i> .....                          | 108       |
| 4.2.3 | <i>Sustainable Development and Philanthropy Improving Community Livelihoods</i><br>.....    | 114       |
| 4.2.4 | <i>The Social Effects of Community-Based Tourism</i> .....                                  | 120       |
| 4.2.5 | <i>The Management Authority and their Perception in the Community</i> .....                 | 126       |
| 4.2.6 | <i>Summary</i> .....  | 134       |
| 4.3   | PART 3: NATIONAL MANAGEMENT: VALUES AND INTERNATIONAL PROTECTION OF<br>THE TRACK .....      | 135       |
| 4.3.1 | <i>Joint Understanding: Partners in National Level Management</i> .....                     | 135       |
| 4.3.2 | <i>The Government's role and priorities in Managing the Track</i> .....                     | 138       |
| 4.3.3 | <i>International Stakeholders and PNG's Obligations</i> .....                               | 142       |
| 4.3.4 | <i>Challenges for National Management</i> .....   | 145       |
| 4.3.5 | <i>Summary</i> .....  | 152       |

|  |  |            |
|--|--|------------|
| 4.4  | CONCLUSION .....   | 153        |
| <b>CHAPTER FIVE: INTERPRETATION, DISCUSSION AND IMPLICATIONS</b> |  | <b>154</b> |
| 5.1  | THEORETICAL DISCUSSION: HORIZONTAL AND VERTICAL CO-MANAGEMENT .....                  | 155        |
| 5.1.1  | <i>Local Level Co-Management</i> .....   | 157        |
| 5.1.2  | <i>Regional Level Co-Management</i> .....  | 161        |
| 5.1.3  | <i>National Level Co-Management</i> .....  | 169        |
| 5.1.4  | <i>Understanding Adaptive Co-Management as Governance for the Kokoda Track</i> ..... | 175        |
| 5.2  | OUTCOME AND IMPLICATIONS OF THE CASE STUDY: THE ROLE OF TOURISM .....                | 180        |
| 5.3  | IMPLICATIONS FOR THEORY AND PRACTICE .....   | 183        |
| 5.4  | ADDRESSING THE RESEARCH QUESTIONS .....  | 186        |
| 5.5  | SUGGESTIONS FOR FURTHER RESEARCH .....   | 189        |
| 5.6  | CONCLUSION .....   | 192        |
| <b>APPENDIX A. INTERVIEW SCHEDULE</b> .....                      |  | <b>194</b> |
| <b>APPENDIX B. INFORMATION SHEET AND CONSENT FORM</b> .....      |  | <b>195</b> |
| <b>REFERENCES</b> .....  |  | <b>197</b> |

## TABLE OF FIGURES

|  |     |
|--|-----|
| FIGURE 1: PACIFIC WORLD HERITAGE TIMELINE .....      | 59  |
| FIGURE 2: MAP OF KOKODA TRACK.....                   | 72  |
| FIGURE 3: ADAPTIVE CO-MANAGEMENT AS GOVERNANCE ..... | 156 |

## TABLE OF TABLES

|   |     |
|---|-----|
| TABLE 1: IUCN CATEGORIES OF PROTECTED AREAS .....   | 21  |
| TABLE 2: CHARACTERISTICS OF PROTECTED AREAS.....  | 24  |
| TABLE 3: WORLD HERITAGE LITERATURE SUMMARY .....  | 29  |
| TABLE 4: FACES OF CO-MANAGEMENT EXAMPLES .....  | 43  |
| TABLE 5: EVIDENCE OF THE CONCEPTUALISATIONS OF CO-MANAGEMENT FROM THE<br>GREAT BARRIER REEF WORLD HERITAGE AREA ..... | 46  |
| TABLE 6: TOTAL NUMBER OF PARTICIPANTS BY LOCATION .....   | 73  |
| TABLE 7: UNDERSTANDING EXISTING CO-MANAGEMENT AT THE LOCAL LEVEL THROUGH<br>BERKES' CONCEPTUALISATIONS .....          | 159 |
| TABLE 8: UNDERSTANDING EXISTING CO-MANAGEMENT AT THE REGIONAL LEVEL USING<br>BERKES' CONCEPTUALISATIONS .....         | 163 |
| TABLE 9: UNDERSTANDING EXISTING CO-MANAGEMENT AT THE NATIONAL LEVEL USING<br>BERKES' CONCEPTUALISATIONS .....         | 171 |

## **ABSTRACT**

This thesis examines co-management as a tool for exploring collaboration between stakeholders in the environmental management of natural resources. In particular, it explores how traditional landownership practices in Papua New Guinea (PNG) influence stakeholder collaboration. The research considers how co-management contributes to the development of tourism and the process of developing a protection policy required for the nomination of a World Heritage Area (WHA). The potential WHA used for this research is the Kokoda Track and Owen Stanley Ranges, PNG.

There is existing research on the changing role and legitimisation of local residents and resource users as key stakeholders in protected area management. This change can be seen in the shifting focus of international conventions and treaties, such as the World Heritage Convention (the Convention). The Convention has evolved since its inception and now recognises the need to understand the relationship between nature and culture and consequently seeks ways to create a space for the voice of the local. As a consequence, participatory approaches to conservation are reforming global protected area management. However, the research and literature reviewed in this thesis identifies that the process of engaging these key stakeholders meaningfully remains a challenge for those engaged in the management of natural resources. This appears to be particularly true where there are issues related to community-based property rights and common-pool resource use which do not fit into the pre-determined legislative frameworks of global protected area management such as World Heritage listing. Here the theory of co-management is applied to the case of the Kokoda Track WHA listing process in an effort to understand the interplay between traditional landownership practices and decentralised approaches to environmental management.

A qualitative research design was employed in this thesis incorporating informal interviews, document evidence and a focus group. The approach employed in the research considers that co-management is a process of managing relationships as much as managing resources. Therefore, an in-depth understanding of stakeholders and their relationships is pursued. The participants in this research included customary landowners of the Kokoda Track, as well as government and non-government participants, the local management authority and tourism operators. The research



findings suggest that the process of co-managing natural resources for subsistence livelihoods and tourism is a highly social and political process. It appears the success of tourism development on the Kokoda Track has been in most part due to the management of relationships between customary landowners and other stakeholders. The continuation of customary landownership, as a community-based legal system that is central to tourism, has ensured the voice of the local plays a part in ongoing management of the trekking industry.

Based on case study findings, a framework for exploring stakeholder collaboration in complex arenas was devised using Berkes' (2008) conceptualisations of co-management. This was then used to explore if customary landownership has contributed to enabling the voice of the local in the process of developing a nomination for WHA listing. The framework allows an exploration of both the *what* (the ends) and the *how* (the means) of co-management within the context of the Kokoda Track as a dynamic social-ecological arena. This process has revealed how social processes of managing the Kokoda Track for subsistence livelihoods and tourism sit within local level social structures which appear to emerge from tradition and custom. Hence, the case study provides insight into the complexities of negotiating development and conservation activities on land that is held constitutionally through customary landownership.

This thesis contributes evidence of how an understanding of the complexities of property rights, specifically community-based legal systems in countries like PNG, can contribute to decentralised approaches to working with local level stakeholders. This coincides with a current push for the inclusion of rights-based approaches to environmental management and conservation, ensuring social justice becomes a fundamental element in the process of establishing WHAs. With the movement towards elevating the rights of humans to the same level as that of nature protection, this thesis contributes specifically to how co-management might be used in the listing process of World Heritage and more broadly to the emerging dialogue of international biodiversity conservation and community values.

## LIST OF PUBLICATIONS ARISING FROM THIS THESIS

Since research commencement the following papers and presentations have been published on different aspects of this study:

**Reggers<sup>\*</sup>**, A., Schweinsberg, S. & Wearing, S. (in press) Understanding stakeholder values in co-management arrangements for protected area establishment on the Kokoda Track, Papua New Guinea. *Journal of Park and Recreation Administration* (Managing Global Protected Areas, Special Edition).

**Bott**, A.L. (2012) Working towards World Heritage: Examining the Kokoda Track, Papua New Guinea, UNITWIN Network Conference Libreville, 1–8 June 2012.

**Bott**, A.L., Grabowski, S., & Wearing, S.L (2011). Stakeholder collaboration in a prospective World Heritage Area: The case of Kokoda and the Owen Stanley Ranges'. *Cosmopolitan Civil Societies: An Interdisciplinary Journal*, 3(2), 35-54.

**Bott**, A.L., & Wearing, S. (2011) Exploring new paradigms: the evolving relationship between protected area management, tourism and communities in World Heritage, ISA-RC50/ITSA Conference Shangri-La, 8-12 August 2011.

---

<sup>\*</sup> The author's name changed throughout the PhD process.

## GLOSSARY

For the purpose of this thesis the following definitions are used.

**Customary Landownership:** ‘the term “Customary Land” refers to land that is not state land and is owned by the Indigenous People of Papua New Guinea whose ownership rights and interest is regulated by their customs’ (Department of Lands and Physical Planning 2005)

**Governance:** ‘is viewed as a social process that is used by society to guide relationships between a protected area agency and its constituencies as they go about articulating their interests, exercising their rights, meeting their social obligations, and mediating their differences’ (Nkhata & Breen 2010, p. 404)

**Tentative World Heritage List:** this is a list that is created by a State Party to the World Heritage Convention and ‘the tentative list is a planning tool that documents the location, description and values of an area, and compares it with other similar properties’ (Rao 2010, p. 164) for the processing of planning for nomination of a World Heritage Site.

## **LIST OF ABBREVIATIONS**

|         |  |
|---------|--|
| CBNRM   | Community Based Natural Resource Management                                      |
| CPR     | Common Pool Resources  |
| DEC     | Department of Environment and Conservation                                       |
| DSWEPaC | Department of Sustainability, Water, Environment, Populations<br>and Communities |
| ICDP    | Integrated Conservation Development Projects                                     |
| IUCN    | International Union for Conservation of Nature                                   |
| KDP     | Kokoda Development Program   |
| KI      | Kokoda Initiative  |
| KTA     | Kokoda Track Authority   |
| KTF     | Kokoda Track Foundation  |
| NRM     | Natural Resource Management  |
| PNG     | Papua New Guinea   |
| WHA     | World Heritage Area  |
| WHC     | World Heritage Committee   |
| UNESCO  | United Nations Educational, Scientific and Cultural Organisation                 |