Water law and the nature of customary water rights in Papua New Guinea

Lawrence Kuna Kalinoe
University of Wollongong

UNIVERSITY OF WOLLONGONG
COPYRIGHT WARNING

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part of this work may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the author.

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Unless otherwise indicated, the views expressed in this thesis are those of the author and do not necessarily represent the views of the University of Wollongong.

Recommended Citation
NOTE

This online version of the thesis may have different page formatting and pagination from the paper copy held in the University of Wollongong Library.

UNIVERSITY OF WOLLONGONG

COPYRIGHT WARNING

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
Water Law And the Nature of Customary Water Rights in Papua New Guinea

LAWRENCE KUNA KALINOE

Faculty of Law
University of Wollongong
February 1998

A thesis submitted in fulfilment for the requirements of the degree of Doctor of Philosophy at the University of Wollongong.
Certification

I certify that the substance of this thesis has not been submitted for any degree and is not being submitted currently for any other degree.

I certify that any help received in preparing this thesis, and all sources used have been acknowledged.

..................................

Lawrence Kuna Kalinoe
Abstract

Majority of the indigenous people in Papua New Guinea (about 87 per cent) live on their customary land by engaging in fishing, hunting, gathering and subsistence agriculture for their daily sustenance. Water is obtained directly from rivers, lakes, and other watercourses.

At present, Papua New Guinea is undergoing rapid economic growth in forestry, agroforestry, mining, and petroleum development activities. Most (if not all) of these natural resources development activities are conducted on customary land and in and around the environment in which the majority of the indigenous peoples live and on which they rely for their subsistence way of life. Many of these natural resource development projects have caused stress on the water resources: indeed in some instances, the projects have so impaired the quality of the water and water resources as to render such resources unsuitable for human consumption, and thereby adversely affecting the indigenous peoples’ subsistence way of life.

This has in turn prompted many indigenous peoples to aggressively assert their customary rights as customary right holders to the land and water resources. The now abandoned law suit by the customary water rights holders of the OK Tedi river discussed in Chapter 13 of this thesis stands as a pre-eminent example of this response.

The law in Papua New Guinea allows for the customs of the indigenous peoples of the country to be pleaded and applied as law. In keeping with this, statute law on water resources management does not extinguish customary water use rights but allows for co-existence with statute based water use rights. Whilst on the one hand statute based water use rights are elaborately specified, on the other hand, customary water rights are left unspecified and hence remain vague. The challenge therefore is to ascertain the nature of customary water rights. That challenge is the focus of this thesis.
To properly meet that challenge, it is imperative that we understand the customary regime by studying the customs, practices and perceptions of the owners of customary land adjacent to rivers, lakes and other watercourses about their rights over water and water resources (as holders of customary water rights).

This thesis attempts to do that by first exploring and presenting, by way of introduction in Part I, the general and basic water law principles pertinent to indigenous water use rights at common law and secondly in Part II, by scrutinising the statutory water law regime in Papua New Guinea to ascertain the possible impacts on the exercise of customary water rights. Thirdly and more importantly, Part III presents and discusses empirical field work data on the customs, practices and perceptions of customary water rights holders. Finally Part IV, attempts to ascertain the nature in law of customary water rights and the modes of establishing and enforcing customary water right at Papua New Guinea law.

In the final analysis, it is asserted in this thesis that customary water rights as they currently exist in Papua New Guinea are rights in the nature of property rights and therefore capable of enforcement by the holders of those rights in the event of breach. Customary water rights as they occur in Papua New Guinea are not mere water use rights but rather encompass and include not only the right to the take and use of water per se, but also the access rights to all of the other water resources, both living and non living which occur in the rivers, lakes and other watercourses which the indigenous people have rights over.
Acknowledgements

The gestation period for this work has been around three years. Over this period many people have offered their assistance, either in Australia or Papua New Guinea. Particularly in Papua New Guinea, so many people came forward and offered assistance that I am unable to recall all their names and record their specific assistance. To those people, I offer my sincere apologies and I hope that you will some how, some day get to see your contribution.

First and foremost I record my indebtedness to those many people in Papua New Guinea; particularly in the Upper Sepik river area, Ramu river area, Bulolo river area, Lake Kutubu area, Lake Kopiago area, Vailala river area, Baimuru/Kikori, Fly river area and the Angabunga river/Aroa river/Vanapa river areas, where field work was conducted. These countless good people freely and willingly shared with me their time and knowledge some of whom will find their names in the discussions in Part III of this thesis. Particularly in the Upper Sepik river and Chambri Lakes leg of the field work, I make specific mention of Mr Remence Joseph who was my motorised canoe driver for the entire eight weeks period. In this same leg of the field work, I also acknowledge the assistance of my field assistants, Mr Noah Kalinoe and Mr Wasawul Yalamai who all endured with me the long “back-breaking” motorised canoe trips up and down the Upper Sepik. In the Ramu river leg of the field work I acknowledge the assistance of my field assistant and host, Mr Carlton Yuami and his brother, Dexter. For the field work in Valilala/Ihu, I mention the assistance of my field assistant Mr Daniel Kivoyia and host, Mr Saki Maeoka. For the fieldwork in Baimuru/Kikori, I record my sincere gratitude to my field assistant and host Mr Evui Po’o and his family.

For the field work in Lake Kutubu, Lake Kopiago, Lake Murray, and Middle and Lower Fly river areas, I employed field research assistants. They were all students at the
University of Papua New Guinea in Semester I, 1997. They were all “locals” from these respective field work areas and were send out with prepared questionnaires to administer. They were, Peter Kusa (Lake Kutubu) Benjo Walango (Lake Kopiago) Kiomin Ningin (Lake Murray/Upper Fly River); Dometa Kaberka (Middle, Lower Fly river). To you all I record my sincere appreciation and gratitude.

Ms Jossie Moir-Bussy in Canberra and Mrs Lois Baduk of the Law Faculty, UPNG typed the thesis. Mrs Baduk however is responsible for the layout and the final outcome. To the both of them, I say “Thank you very much indeed.”

I also thank Mr Jack Rannells and wife Ms Eve Rannells for their respective assistance: Jack for proof reading and Eve for her continuous encouragement and support.

I am also obliged to thank my wife Evelyn and daughter Kulasamb and sister Carolyn for putting up with the long periods of absence from home in Australia, first in Canberra and later in Wollongong.

Furthermore, I thank my supervisor Professor Martin Tsamenyi for first having faith in me; and then being very supportive by way of his counsel and the many words and gestures of encouragements. I further extent my gratitude to all the staff at the Faculty of Law, University of Wollongong for their hospitality which translated into an excellent study environment to work from. Maria Agnew deserves special mention in this regard.

I received financial assistance to conduct field work from Highlands Gold Ltd and the University Research and Publications Committee of the University of Papua New Guinea. To both of these institutions, I am very grateful. In fact without their assistance, I would not have been able to stage the field work.

Above all, I give thanks to the All Mighty God for all the providence, particularly His mercy, forgiveness and protection over my life and my households in all these years.

Lawrence Kuna Kalinoe
Wollongong, February 1998
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Appeal Cases</td>
</tr>
<tr>
<td>ACF</td>
<td>Australian Conservation Foundation</td>
</tr>
<tr>
<td>AIDAB</td>
<td>Australian International Development Assistance Bureau</td>
</tr>
<tr>
<td>All E.R.</td>
<td>All England Reports</td>
</tr>
<tr>
<td>ANGAU</td>
<td>Australian New Guinea Administration Unit</td>
</tr>
<tr>
<td>BHP</td>
<td>Broken Hill Propriety Ltd</td>
</tr>
<tr>
<td>C.A.</td>
<td>Court of Appeal</td>
</tr>
<tr>
<td>Ch. D</td>
<td>Chancery Division</td>
</tr>
<tr>
<td>Ch.</td>
<td>Chapter</td>
</tr>
<tr>
<td>CLR’</td>
<td>Commonwealth Law Reports</td>
</tr>
<tr>
<td>D.L.R.</td>
<td>Dominion Law Reports</td>
</tr>
<tr>
<td>DEC</td>
<td>Department of Environment and Conservation</td>
</tr>
<tr>
<td>EPLJ</td>
<td>Environmental and Planning Law Journal</td>
</tr>
<tr>
<td>F.L.R.</td>
<td>Federal Law Reports</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation</td>
</tr>
<tr>
<td>H.L.</td>
<td>House of Lords</td>
</tr>
<tr>
<td>IASER</td>
<td>Institute of Applied Social and Economic Research</td>
</tr>
<tr>
<td>KB</td>
<td>Kings Bench</td>
</tr>
<tr>
<td>L.R.C. (Const)</td>
<td>Law Reports of the Commonwealth (Constitutional)</td>
</tr>
<tr>
<td>L.T.</td>
<td>Law Times</td>
</tr>
<tr>
<td>Mel L J</td>
<td>Melanesian Law Journal</td>
</tr>
<tr>
<td>MIM</td>
<td>Mount Isa Mines</td>
</tr>
<tr>
<td>MMC</td>
<td>Metal Mining Corporation</td>
</tr>
<tr>
<td>MRDC</td>
<td>Mineral Resources Development Company</td>
</tr>
<tr>
<td>MULR</td>
<td>Melbourne University Law Review</td>
</tr>
<tr>
<td>Nat Res J</td>
<td>Natural Resources Journal</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>NCD</td>
<td>National Capital District</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Government Organisation</td>
</tr>
<tr>
<td>NZLR</td>
<td>New Zealand Law Reports</td>
</tr>
<tr>
<td>OTML</td>
<td>Ok Tedi Mining Limited</td>
</tr>
<tr>
<td>P.C.</td>
<td>Privy Council</td>
</tr>
<tr>
<td>PNGLR</td>
<td>Papua New Guinea Law Reports</td>
</tr>
<tr>
<td>Q.B.</td>
<td>Queens Bench</td>
</tr>
<tr>
<td>SPC</td>
<td>South Pacific Commission</td>
</tr>
<tr>
<td>SPREP</td>
<td>South Pacific Regional Environmental Programme</td>
</tr>
<tr>
<td>Tas SR</td>
<td>Tasmanian State Reports</td>
</tr>
<tr>
<td>U of Calgary</td>
<td>University of Calgary</td>
</tr>
<tr>
<td>UBC Law Rev</td>
<td>University of British Columbia Law Review</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>Uni Toronto LJ</td>
<td>University of Toronto Law Journal</td>
</tr>
<tr>
<td>UNSW</td>
<td>University of New South Wales</td>
</tr>
<tr>
<td>UNSW LJ</td>
<td>University of New South Wales Law Journal</td>
</tr>
<tr>
<td>UPNG</td>
<td>University of Papua New Guinea</td>
</tr>
<tr>
<td>UQLJ</td>
<td>University of Queensland Law Journal</td>
</tr>
<tr>
<td>USP</td>
<td>University of the South Pacific</td>
</tr>
<tr>
<td>VLR</td>
<td>Victorian Law Reports</td>
</tr>
<tr>
<td>W.S.</td>
<td>Writ of Summons</td>
</tr>
</tbody>
</table>
List of Maps

Map 2: Upper Sepik River and the Chambri Lakes.
Map 3: The Ramu River, Madang Province.
Map 4: Main Rivers in Kairuku Hiri, Central Province.
Map 5: The Main Rivers in Gulf Province.
Map 6: The Main Rivers in Western Province.
Map 7: The Lakes of Southern Highlands Province.
Contents

Certification ........................................................................................................................................... ii
Declaration Relating to Disposition of Thesis ....................................................................................... iii
Abstract ................................................................................................................................................ iv
Acknowledgements ............................................................................................................................... v
Acronyms ................................................................................................................................................ viii
List of Maps .......................................................................................................................................... x

PART 1 Introduction ................................................................................................................................. 1

Chapter 1
Introduction .............................................................................................................................................. 2
A. Scope and Purpose ................................................................................................................................. 6
B. Methodology of Research ..................................................................................................................... 8

Chapter 2
Water Law ............................................................................................................................................... 10
A. Content and Concept of Water Law .................................................................................................... 11
B. Sources of Water Law ......................................................................................................................... 12
C. Customary Water Law ......................................................................................................................... 13
D. Water Rights ...................................................................................................................................... 15
E. Legal Classification of Water ............................................................................................................... 16
   1. Surface Water .................................................................................................................................. 16
   2. Water in Watercourse ....................................................................................................................... 17
   3. Underground Water .......................................................................................................................... 22

Chapter 3
Background To Understanding Customary Water Rights Claims By Customary Landowners In Papua New Guinea ......................................................................................................................... 24
A. Legal Pluralism .................................................................................................................................... 26
B. The Status of Custom and Customary Law in Papua New Guinea ..................................................... 28
   1. Custom at Common Law .................................................................................................................... 28
   2. Custom in Papua New Guinea ........................................................................................................... 30
   3. Customary Law in Papua New Guinea ............................................................................................... 31
Chapter 8
Incidents Of The Practice Of Customary Water Rights In
The Upper Sepik River Area ..................................................167
A. Introduction ......................................................................167
B. Presentation of Data .............................................................169
   (a) Land Use ...................................................................170
   (b) River/Lake/Watercourse Use Rights ...............................170
   (c) Resource Use ..............................................................174
   (d) Territorial Claims .......................................................175
   (e) Magico-Religious Considerations ..................................176
2. Customary Water Rights Practices in the May River Villages .........................177
   (a) Land Use ...................................................................177
   (b) River/Lake/Watercourse Use Rights ...............................177
   (c) Resource Use ..............................................................178
   (d) Territorial Claims .......................................................179
   (e) Magico-Religious Considerations ..................................179
   (a) Land Use ...................................................................180
   (b) River/Lake/Watercourse Use .........................................180
   (c) Resource Use ..............................................................180
   (d) Territorial Claims .......................................................181
   (e) Magico-Religious Considerations ..................................181
   (a) Land Use ...................................................................182
   (b) River/Lake/Watercourse Use .........................................182
   (c) Resource Use ..............................................................182
   (d) Territorial Claims .......................................................183
   (e) Magico-Religious Considerations ..................................183
   (a) Land Use ...................................................................183
   (b) River/Lake/Watercourse Use .........................................184
   (c) Resource Use ..............................................................184
   (d) Territorial Claims .......................................................185
   (e) Magico-Religious Considerations ..................................185
   (a) Land Use ...................................................................187
   (b) River/Lake/Watercourse Use .........................................187
   (c) Resource Use ..............................................................188
   (d) Territorial Claims .......................................................188
   (e) Magico-Religious Considerations ..................................189
C. Summary and Conclusion ..................................................................190

Chapter 9
Incidents Of The Practice Of Customary Water Rights In
The Lower Ramu River Area ..........................................................194
A. Introduction ......................................................................194
B. Presentation of Data .............................................................195
1. Land Use ......................................................................195
2. River/Lake/Watercourse Use ..............................................195
3. Resource Use ....................................................................197
4. Territorial Claims ........................................................................................................ 198
5. Magico-Religious Considerations ........................................................................... 198
C. Summary and Conclusion ......................................................................................... 199

Chapter 10
Incidents Of The Practice Of Customary Water Rights In
The Kairuku-Hiri ........................................................................................................ 201
A. Introduction .............................................................................................................. 201
B. Presentation of Data ................................................................................................. 202
   (a) Land Use ........................................................................................................ 202
   (b) River/Lake/Watercourse Use ........................................................................ 202
   (c) Resource Use ................................................................................................ 204
   (d) Territorial Claims .......................................................................................... 204
   (e) Magico-Religious Considerations ................................................................ 205
2. Customary Water Rights Practices In and Around the Aroa River Area .......... 205
   (a) Land Use ........................................................................................................ 205
   (b) River/Lake/Watercourse Use ........................................................................ 206
   (c) Resource Use ................................................................................................ 207
   (d) Territorial Claims .......................................................................................... 208
   (e) Magico-Religious Considerations ................................................................ 208
   (a) Land Use ........................................................................................................ 208
   (b) River/Lake/Watercourse Use ........................................................................ 209
   (c) Resource Use ................................................................................................ 209
   (d) Territorial Claims .......................................................................................... 209
   (e) Magico-Religious Considerations ................................................................ 209
C. Summary and Conclusion ......................................................................................... 209

Chapter 11
Incidents of the Practice of Customary Water Use Rights in
Selected Inland Water Areas of the Gulf Province .................................................... 211
A. Introduction .............................................................................................................. 211
B. Presentation of Data ................................................................................................. 212
   (a) Land Use ........................................................................................................ 213
   (b) River/Watercourse Use Rights ..................................................................... 213
   (c) Resource Use ................................................................................................ 216
   (d) Territorial Claims .......................................................................................... 216
   (e) Magico Religious Considerations ................................................................ 216
2. Customary Water Rights in the Pie, Ela, Poima and Purari River areas .......... 217
   (a) Land Use ........................................................................................................ 217
   (b) River/Lake/Watercourse Use Rights ............................................................ 217
   (c) Resource Use ................................................................................................ 218
   (d) Territorial Claims .......................................................................................... 219
   (e) Magico Religious Considerations ................................................................ 219
3. Customary Water Rights in the Era River Area .................................................... 220
   (a) Land Use ........................................................................................................ 220
   (b) River/Lake/Watercourse Use Rights ............................................................ 220
   (c) Resource Use ................................................................................................ 211
   (d) Territorial Claims .......................................................................................... 211
Chapter 12
Incidents of the Practice of Customary Water Rights In Selected Inland Water Areas of Western Province

A. Introduction ........................................................................................................... 224
B. Presentation of Data ............................................................................................... 225
   1. Customary Water Rights Practices in the Ok Tedi/Upper Fly River Areas ........... 225
      (a) Land Use ....................................................................................................... 225
      (b) River/Lake/Watercourse Use Rights ............................................................. 225
      (c) Resource Use ............................................................................................... 225
      (d) Territorial Claims ....................................................................................... 225
         Magico Religious Considerations .................................................................. 226
   2. Customary Water Rights Practices in the Middle Fly/Lower Fly River Areas ......... 226
      (a) Land Use ....................................................................................................... 226
      (b) River/Lake/Watercourse Use Rights ............................................................. 226
      (c) Resource Use ............................................................................................... 227
      (d) Territorial Claims ....................................................................................... 227
         Magico Religious Considerations .................................................................. 228
   3. Customary Water Rights Practices in the Lake Murray Area ............................... 228
      (a) Land Use ....................................................................................................... 228
      (b) River/Lake/Watercourse Use Rights ............................................................. 228
      (c) Resource Use ............................................................................................... 229
      (d) Territorial Claims ....................................................................................... 229
         Magico Religious Considerations .................................................................. 230
C. Summary and Conclusion ...................................................................................... 230

Chapter 13
Incidents of the Practice of Customary Water Rights in Lake Kutubu and Lake Kopiago, Southern Highlands Province ......................................................................................................................... 232
A. Introduction ........................................................................................................... 232
B. Presentation of Data ............................................................................................... 233
      (a) Land Use ....................................................................................................... 233
      (b) River/Lake/Watercourse Use Rights ............................................................. 233
      (c) Resource Use ............................................................................................... 234
      (d) Territorial Claims ....................................................................................... 235
         Magico Religious Considerations .................................................................. 235
   2. Customary Water Rights Practices in Lake Kopiago ........................................... 236
      (a) Land Use ....................................................................................................... 236
      (b) River/Lake/Watercourse Use Rights ............................................................. 236
      (c) Resource Use ............................................................................................... 236
      (d) Territorial Claims ....................................................................................... 236
         Magico Religious Considerations .................................................................. 236
C. Summary and Conclusion ...................................................................................... 237