

## Supplementary Material

### **CSIRO and land research in Papua New Guinea 1950–2000: part 2: post-Independence**

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*PNGRIS Phases II and III publications*

- 1 J.C. Saunders, *Agricultural Land Use of Papua New Guinea: map with explanatory notes Scale 1: 1,000,000*, PNGRIS Publication No.1, (Canberra, 1993), p.12 + 1 map on 4 sheets,  
<https://publications.csiro.au/rpr/download?pid=legacy:2186&dsid=DS1>,  
viewed April 2018.
- 2 J.C. Saunders, *Forest Resources of Papua New Guinea: map with explanatory notes Scale 1:1,000,000*, PNGRIS Publication No. 2, (Canberra, 1993), p. 18 + 1 map on 4 sheets,  
<https://publications.csiro.au/rpr/download?pid=legacy:2187&dsid=DS1>,  
<https://publications.csiro.au/rpr/download?pid=legacy:2187&dsid=DS2>,  
<https://publications.csiro.au/rpr/download?pid=legacy:2187&dsid=DS3>,  
<https://publications.csiro.au/rpr/download?pid=legacy:2187&dsid=DS4>,  
<https://publications.csiro.au/rpr/download?pid=legacy:2187&dsid=DS5>,  
viewed April 2018.
- 3 B.B. Trangmar, L.R. Basher, W.C. Rikjse and R.J. Jackson, *Land resource survey, Upper Ramu Catchment, Papua New Guinea*, PNGRIS Publication No. 3, (Canberra, 1995), p.91+col.maps,  
<https://publications.csiro.au/rpr/download?pid=legacy:2188&dsid=DS1>,  
viewed April 2018.
- 4 E.T. Hammermaster and J.C. Saunders, *Forest Resources and Vegetation Mapping of Papua New Guinea*, PNGRIS Publication No. 4, (Canberra, 1995), p. 294 & 1 map sheet,  
<https://publications.csiro.au/rpr/download?pid=legacy:2189&dsid=DS1>,  
<https://publications.csiro.au/rpr/download?pid=legacy:2189&dsid=DS2>,  
viewed April 2018.
- 5 J.A. Bellamy and J. R. McAlpine (compilers.), *Papua New Guinea Inventory of Natural Resources, Population Distribution and Land Use Handbook*, PNGRIS Publication No. 6, (Canberra,1995), p.162,  
<https://publications.csiro.au/rpr/download?pid=procite:5cc8b276-5e5b-4be8-a963-72e16c644645&dsid=DS1>, viewed April 2018.
- 6 B.B. Trangmar, D.J. Giltrap, S.J. Burgham and T.J. Savage, *Land suitability assessments for selected crops in Papua New Guinea*, PNGRIS Publication No. 8, (Canberra, 1995), p.48+col.maps,  
<https://publications.csiro.au/rpr/download?pid=legacy:2191&dsid=DS1>,  
viewed April 2018.
- 7 J.A. Bellamy, *Rainfall Erosivity in Papua New Guinea*, PNGRIS Publication No. 9, (Canberra,1995), p.38,  
<https://publications.csiro.au/rpr/download?pid=procite:cff25091-c123-4ff8-a7b6-4bc49a4def41&dsid=DS1>, viewed April 2018.

The following are unpublished additional material:

8. L.R. Basher, B.B. Trangmar and W.C. Rijkse, *Handbook for land resource survey methods in Papua New Guinea*, PNGRIS Report No. 1, (Landcare Research New Zealand Ltd and CSIRO, Canberra, 1995), p. 94.
9. R. Croome, *Updating land use and forest mapping in Papua New Guinea. Procedure to update PNGRIS land cover mapping and information*, PNGRIS Report No. 2, (CSIRO, Canberra, 1994), p.16.
10. B.B. Trangmar, L.R. Basher and W.C. Rijkse, *Land resource survey Upper Ramu catchment Papua New Guinea. Database attributes*, PNGRIS Report No. 3, (Landcare Research New Zealand and CSIRO, Canberra, 1995), p. 114.
11. P. Bleeker and J. Quigley, *Resource planning for Provincial planning. Application of PNGRIS to 1:250,000 resource mapping for Madang Province*, PNGRIS Report No. 4, (CSIRO, Canberra, 1995), p. 41 + maps.
12. J. McAlpine and J. Quigley (compilers), *Natural resources, land use and population distribution of Papua New Guinea. Summary statistics from PNGRIS*, PNGRIS Report No. 7 (CSIRO, Canberra 1995), p. 78.
13. T.J. Savage, J.B. Quigley, B.B. Trangmar and J.R. McAlpine, *Provincial Resource Atlas of Madang Province, Papua New Guinea* (unpublished, 1995), p. 27 incl. 19 maps).
14. T.J. Savage, J.B. Quigley, B.B. Trangmar and J.R. McAlpine, *Provincial Resource Atlas of Eastern Highlands Province, Papua New Guinea* (unpublished, 1995), p. 24 incl. 16 maps).
15. T.J. Savage, J.B. Quigley, B.B. Trangmar and J.R. McAlpine, *Provincial Resource Atlas of Morobe Province, Papua New Guinea* (unpublished, 1995), p. 29 incl. 21 maps.

*Extension of PNGRIS to other countries*

Philippines Land Use Information System (LUIS)

As the relevance and applicability of the PNGRIS methodology to other less developed countries of the south-west Pacific and south-east Asia became recognised, requests began to be made to the Australian Development Assistance Bureau (ADAB) for funding of similar projects in other countries of the region. As a consequence, members of the PNGRIS team participated in a series of other projects which extended knowledge and use of the new methodology.

In 1984 McAlpine brought his CSIRO survey experience and the PNGRIS methodology to the ADAB-funded Zamboanga del Sur Development Project in the Southern Philippines.<sup>16</sup> This work led subsequently to a request to ADAB from the Philippines National Economic Development Authority for training in the PNGRIS methodology for government officers engaged in national and regional development planning. A series of ADAB-funded training workshops was held in Canberra, during which the PNGRIS team members assisted Filipino trainees in compiling maps and

resource data from Zamboanga del Sur into a prototype microcomputer-based information system similar to PNGRIS, and eventually known as “LUIS” or Land Use Information System.<sup>17</sup> A pilot application of the methodology at regional level was also undertaken in the Central Visayas region of the Philippines, with further in-country development of LUIS to meet the needs of the regional government.

#### Vanuatu Resource Information System (VANRIS)

While located within the CSIRO Division of Tropical Crops and Pastures, the PNGRIS team entered into discussions with officers of the Queensland Forest Service (QFS) regarding potential collaboration on an AIDAB-funded project in Vanuatu. The CSIRO component of this project resulted in the delineation and mapping at 1:50,000 of some 5,800 RMUs and development of a microcomputer-based information system (VANRIS). A VANRIS Handbook<sup>18</sup> provided detailed descriptions of the RMU attributes, and a classification of the environments of Vanuatu was made using VANRIS<sup>19</sup>. The system was implemented on PCs installed in a number of Vanuatu government departments, whose officers received both workshop and on-site training.

Following the VANRIS project, and in recognition of the need for ongoing technical support for the system, AusAID funded a further programme of “hotline support”, which involved in-country assistance to VANRIS users by a locally-based computer specialist, backed up by members of the former VANRIS team when necessary. Such ongoing support was essential in ensuring the continued use and longevity of the system in a less developed country.

16. Zamboanga del Sur Development Project, *An Evaluation of the Land Resources of Zamboanga del Sur*, (Manila, 1984).
17. CSIRO/AIDAB Workshop, 'A Land Use Information System for Zamboanga del Sur Province, Republic of Philippines', in *CSIRO/AIDAB Workshop on Land Use Information Systems*, (unpublished, Canberra, 1985).
18. J.A. Bellamy (ed.), 'Vanuatu resource information system : VANRIS handbook', (unpublished, Brisbane, 1993).
19. CSIRO Brisbane and the Department of Primary Industries Forest Service, *The Environments of Vanuatu. A classification and atlas of the natural resources of Vanuatu and their current use as determined from VANRIS* (unpublished, Brisbane, 1992).