



Participatory GIS *practice* in SIDS, Opportunities and Challenges

Pacific GIS&RS User Conference
USP, ICT Auditorium
Suva, Fiji Islands
18 November 2015


Giacomo Rambaldi
Sr Programme Coordinator, ICTs
CTA, Netherlands
pgis.cta.int
cta.int



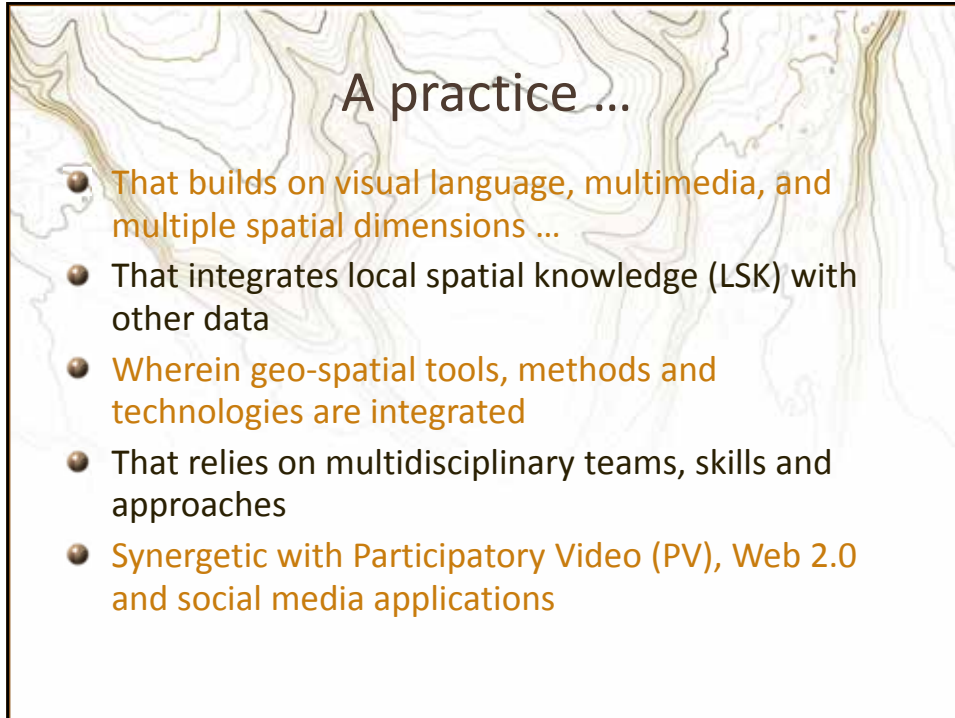
Text and images copyright G. Rambaldi©
Unless otherwise specified

What is it all about?

- Participatory GIS (**PGIS**) is a **practice** in its own right developing out of participatory approaches to development and spatial information management and communication.
- ... result of a spontaneous merger of Participatory Learning and Action (**PLA**) methods with Geographic Information Technologies (**GITs**).



Participatory
Geographic
Information
System



A practice ...

- That builds on visual language, multimedia, and multiple spatial dimensions ...
- That integrates local spatial knowledge (LSK) with other data
- Wherein geo-spatial tools, methods and technologies are integrated
- That relies on multidisciplinary teams, skills and approaches
- Synergetic with Participatory Video (PV), Web 2.0 and social media applications



In which contexts?

- Community-based planning and management
- Awareness raising, education and social learning
- Communication and advocacy (policy making)
- Climate change adaptation (SIDS)
- Community-based Disaster Risk Reduction
- Management and amelioration of territorial conflicts
- Self-determination
- Knowledge Management
- Safeguarding ever-evolving intangible cultural heritage and identity building

Local Spatial Knowledge

- Resource use, control and access
- Places of historic, cultural and spiritual significance, ancestral grounds
- Gender and age-related areas
- Local names, local myths, cosmovisions
- Perceptions of hazards and risks

Tools, methods and technologies



Ground maps



Images courtesy Dave de Vera, PAFID

Image courtesy of © PAFID

Tools, methods and technologies



Image © G. Rambaldi/NIPAP

Tools, methods and technologies



Image courtesy CyberTracker Conservation, © Rolex/Eric Vandeville





Strengthening local voices in planning and policy-making processes



Tools, methods and technologies



Image © G. Rambaldi/NIPAP

Tools, methods and technologies



Image © MELCA-Ethiopia

Focus on Participatory 3D Modelling (P3DM)

P3DM merges traditional spatial information
... with local spatial knowledge (ISK)



P3DM works best at scales
larger than 1:10,000

P3DM facilitates visualizing mental representation of space




Ovalau Island, Fiji

- 1:10,000 scale
- 528 km²




Source: (GoogleEarth)

Mapping land and sea



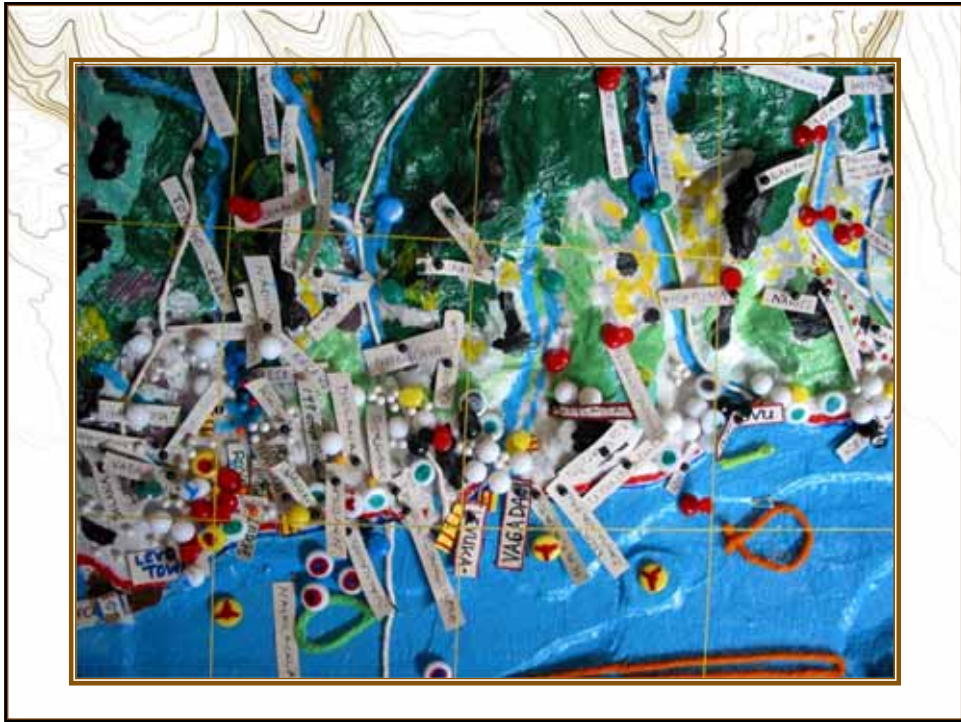
- 28 villages
- 82 elders
- 32 students
- 6 teachers



- Highest : 627 m a.s.l.
- Lowest: - 90 m

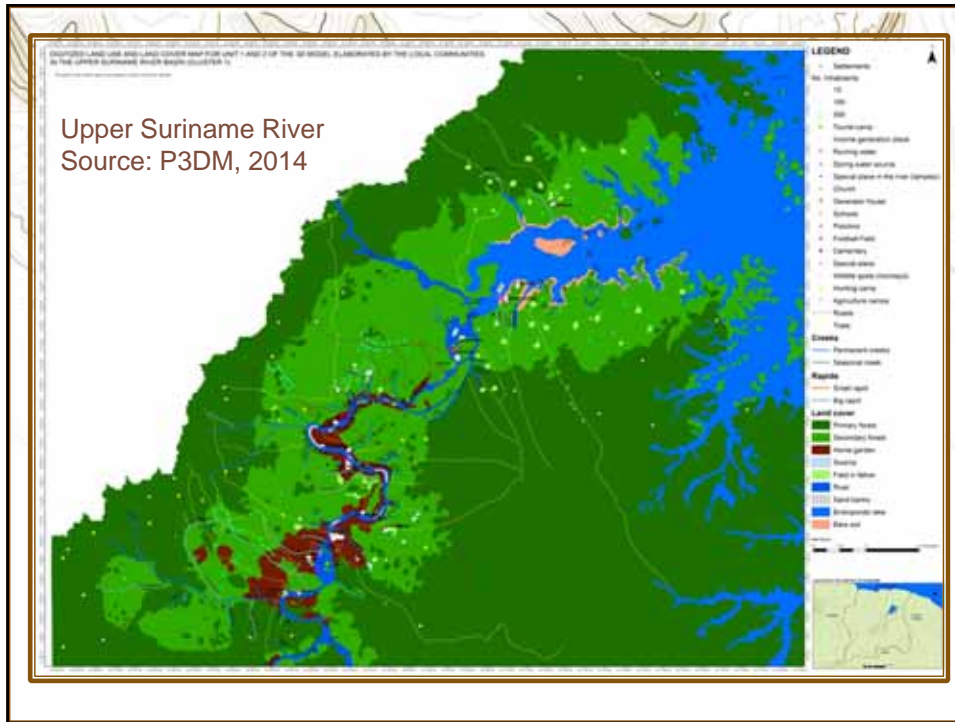








Participatory GIS Practice in SIDS, Opportunities and Challenges
 By Giacomo Rambaldi, 18 November, 2015
 Pacific GIS&RS User Conference, Suva, Fiji, 16-19 November 2015



SoemakaTonga	Nederlands	Soemaka Tonga	Nederlands
BAU GOON	Voetbalveld	PASI	Loop pad
KALANG WATA	Waterleiding	WAGI PASI	Afwatering
GOONBASUWAA	Waterbron	Koko di ta koo	Seizoenwiel
GEEBI	Bezuigleiding	Koko di ni ta koo	Personenauto baan
FAJA WASU	Gevechten huis	GAAN Kiki	Klein punt gang na koo
Sko	School	Piki kiki	Klein te koo na koo
Tuakung	Kostgevend kamp	LID	Rivier
FBI	Politieak	GAAN DANG	Grote stroomwieling
SEMBE (10)	Inwoners (10)	PIKI DANG	Klein stroomwieling
SEMBE (100)	Inwoners (100)	MEER	Meer
SEMBE (500)	Inwoners (500)	GOWU BAAKOR	Gouwenbaak
Keiki	Kind	VIA VIA	
Teerist kampu	Troepen kamp	MASIA MASIA	
mbetir oc liba	Faam waerom pla	PAW MATU	Paanak bar
Hondi kampu	Ingeniekamp	KAPEE MATU	Schouwen bar
LAMPESI	Aankomst in veld	KAPEE	Verlaten koo
WOOO KAMIA	Plak van gele water met	SANDU BANGI	Zandbank
Opakani goon	Vlegveld		

Legend Matrix

Layer	MOUPO	MOOU	GAPONDWO	ROUDDGET	TEELEG	TUMHSAT	LOGOMO	TIRING	SANDU	MOUPO	MOOU	GAPONDWO	ROUDDGET	TEELEG	TUMHSAT	LOGOMO	TIRING	SANDU	
MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO	MOUPO
MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU	MOOU
GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO	GAPONDWO
ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET	ROUDDGET
TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG	TEELEG
TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT	TUMHSAT
LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO	LOGOMO
TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING	TIRING
SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU	SANDU

Confidential layers



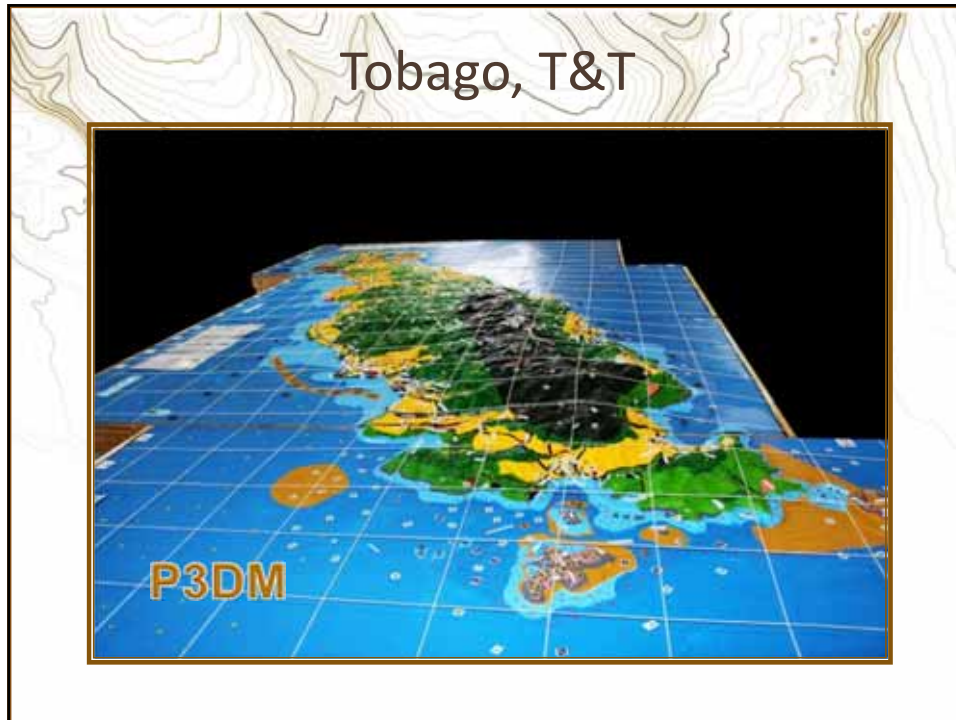
Manase, Savaii Island, Samoa



Image courtesy © P. Amerika, MNRE







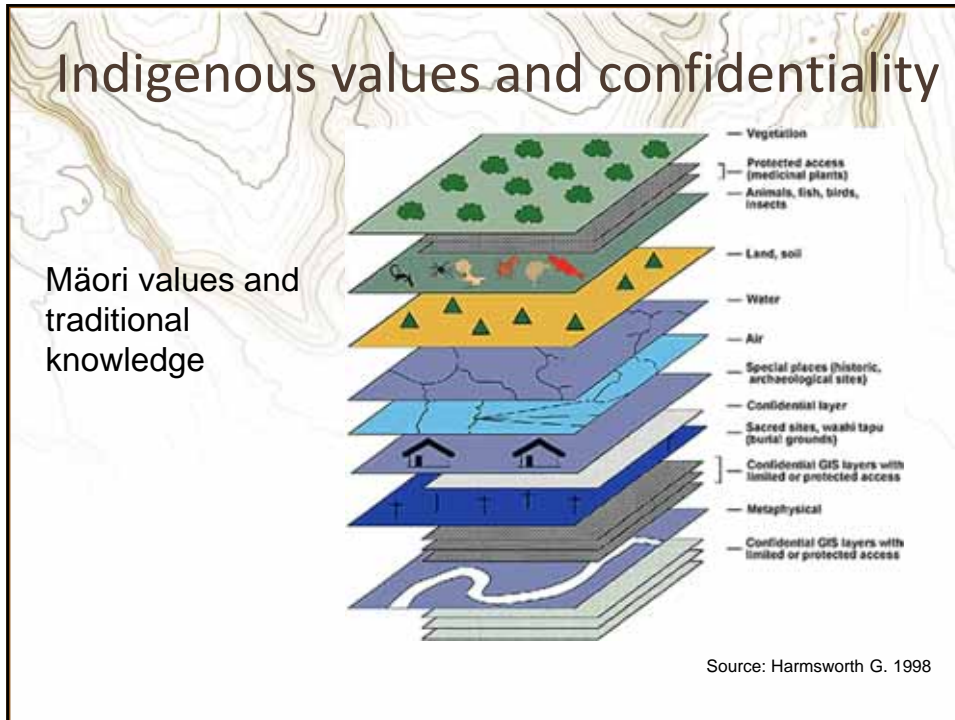


Who will gain and
Who will loose?

“GIS turns local knowledge into public knowledge and out of local control.

This can be used by outsiders to locate resources and development needs, or merely, to extract more resources, or to increase control from the outside.” *Abbot et al. 1998*

PGIS applications may be used to legitimise decisions which in fact were taken by outsiders



Training Kit on Participatory Spatial Information Management and Communication

DVD 1 of 2

Training Kit on Participatory Spatial Information Management and Communication

CTA IIFAD

Good practice promoted

<http://pgis-tk.cta.int>



Online Resources

- www.iapad.org (P3DM resources)
- www.ppgis.net (e-discussion list)
- www.p3dm.org (P3DM locations in the world)
- <http://pgis.cta.int> (CTA activities on PGIS)
- <http://pgis-tk.cta.int> (PGIS training kit)
- www.vimeo.com/channels/pgis (video collection)

CTA

The slide features a background of a topographic map. A group of people is shown sitting around a table, looking at a map. A cluster of colorful location pins is on the right. The CTA logo is at the bottom right.