



ELMT “GOOD PRACTICE” BIBLIOGRAPHY

PARTICIPATORY NATURAL RESOURCE MAPPING

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A. INTRODUCTION

Participatory mapping is an investigative process and tool, utilizing visual and discursive techniques to better understand local (community) natural resources, together with their management, dynamics and related challenges, with potential solutions to those challenges. It is a relatively rapid way of gaining information from those who live with and use these resources, and thus have accumulated a wealth of knowledge about them. Additionally it is a way of facilitating the sharing of information amongst community members, together with a reflection process considering the use, management and challenges of those resources (including likely discussion and debate), and identifying locally-rooted solutions that community members can carry forward. It is anticipated that pastoral institutions will play a central role in this problem solving process through the development of a community action plan.

The mapping process facilitated by a development agent provides space for selected community members to describe, discuss about and reflect upon the natural resources they use and/or have used in the past (together with changes and causes of changes in this use). The mapping may take place on the ground or on a piece of paper. A checklist of questions is used by the facilitators to gather information, in relation to the objectives of the mapping exercise. Once maps are drawn, they are presented back to the community members for confirmation and adjustment. Community ‘ownership’ of the map and mapping process should be central. Participatory mapping can be used in conjunction with other mapping processes and tools including 3-D Modeling and GIS.

B. USEFUL DOCUMENTS

1. SOS Sahel Ethiopia (2007) Participatory Field Methods, Unpublished document for SC/US PLI Consortium

This is a key document for practitioners carrying out participatory mapping and community action planning. Designed as a manual for assisting field staff to facilitate mapping processes it provides a step by step guide to mapping of natural resources, including checklists for team make-up, semi-structured discussions and documentation.

Available from the NRM TWG: fionaf@savechildren.org.et

2. IIED and CTA (2006) Participatory Learning and Action 54: Mapping for change: practice, technologies and communication, London: IIED and CTA

www.iied.org/NR/agbioliv/pla_notes/pla_backissues/54.html

PGIS is an evolved form of community mapping, the result of a spontaneous merger of Participatory Learning and Action (PLA) methods with Geographic Information Technologies and Systems (GIT&S). If used appropriately, PGIS practice may have profound implications and stimulate innovation and social change. PGIS aims at placing control on access and use of culturally sensitive spatial data in the hands of those who generated the data thereby protecting traditional knowledge and wisdom from



external exploitation. The articles represent a considerable depth of experience, documenting established and cutting-edge tools and a selection of articles on theory and reflections from practice – including ethical considerations, potential pitfalls and other lessons learnt from experience. Tool based case studies are presented from around the world including from Asia, Africa and South America, while aspects of theory based on practice are reflected upon and discussed.

3. Kumar, S. (2002) *Methods for Community Participation*, IT Publications, UK, ISBN 1 85339 554 4

This immensely practical and comprehensive manual covers the concepts, practice and methodology of participatory development, focusing primarily on how to achieve participation. It is rich with insights from the field, particularly from India, China and Nigeria. Among its many unique features are: - it provides inclusive methodologies for reaching people - it suggests practical ways of making peoples participation a reality - it is designed to suit the needs of those working in diverse development sectors - the author provides space for innovation while encouraging creativity and flexibility - it contains tips on best practices as well as on attitudes and behaviour, while drawing attention to limitations and precautions - it adopts a simple step approach and provides a 'ready reckoner' of 24 methods to suit different development activities and contexts.

4. Longley, PA, MF Godchild, DJ Maguire and DW Rhind (2001) *Geographical Information Systems: Principles, Techniques, Management and Applications*, New York, John Wiley

This book combines the basics of GIS with the solving of problems, which often have no single, ideal solution. Issues such as problem solving are discussed and related to the context within which GIS has developed. Principles are presented and questioned such as issues of representation, measurement, the nature of geographic data and uncertainty. Different GIS techniques including software, modeling, geographic data are presented. Appropriate forms of analysis are described and followed by a section on management and policy. A very comprehensive and useful publication on the subject.

5. Rambaldi, G. and J. Callosa-Tarr (2002) *Participatory 3-Dimensional Modelling: Guiding Principles and Applications. Philippines: ASEAN*

www.iapad.org/publications/ppgis/p3dm_arcbc_lr.pdf

6. Rambaldi, G. and J. Callosa-Tarr (2000) *Manual on Participatory 3-Dimensional Modeling for Natural Resource Management. Philippines: ASEAN.*

www.iapad.org/publications/ppgis/p3dm.pdf

3 dimensional modeling is a relatively new addition to mapping processes. It adds an exciting and enlivening layer to maps drawn flat. The above two documents provide a comprehensive introduction to the approach. Further information can be found in the IIED/CTA collection of documents described above (No. 2 in this selection).

7. McCall, M. 2006. *Applying Participatory-GIS and Participatory Mapping to Participatory Spatial Planning and to Local-level Land and Land Resources Management Utilizing Indigenous and Local Spatial Knowledge: A Bibliography*

This bibliography can be found on an excellent website which is dedicated to participatory mapping and GIS. The website also acts as the central node for a network of practitioners working with PGIS. Links are given to other relevant websites and publications.

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8. Hodgson, D. and R. Schoeder. 2002. "Dilemmas of Counter-Mapping Community Resources in Tanzania" in *Development and Change* Vol 33: 79-100.

'Counter-mapping' is the mapping against dominant power structures. This article briefly reviews the counter-mapping literature and compares four projects from the Maasai areas in Tanzania to explore the pitfalls of the efforts. Not only does this comparison highlight the different approaches to counter-mapping being used, but also presents a series of political dilemmas that are typical of counter-mapping including conflicts, privatization, problems related to theory and practice of 'community-level' political engagement, and critical questions involving the agency of 'external' actors such as conservation and development donors, the state and private business interests.

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9. Techniplan 2004. *Review of Past and Present Trends of the Pastoral Areas of Ethiopia. Volume 1. Natural Resources. Study 4 Geographical Information Systems (GIS). For FDRE and MOaRD. Addis Ababa & Rome, 2004: Techniplan, Unpublished Report.*

This report which is part of a country wide study on pastoralism by the government pastoral extension team provides a summary of all work that was being carried out using GIS and mapping at the time (2003-4). Though some of this information is now out-of-date, the report provides a useful starting point for working on GIS in the country and introduction to who is doing what and how.

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