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Public participation and GIS: report back

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· Introduction

Participatory Geographic Information Systems (GIS) has become an increasingly common subject (see *PLA Notes* 33, October 1998, p27-34), and raises both interest and strong feelings in the GIS and participatory development communities. At the moment, the use of GIS in a truly participatory context is in its infancy, and many would argue that participatory GIS is not a realistic possibility. However, key issues were identified at a recent workshop at the University of Durham, which was discussed in PLA Notes 33. These included:

- Defining a role for participatory GIS;
- How best to achieve a participatory GIS;
- Identifying constraints (e.g. capturing power relations in a GIS); and,
- Determining the added value of participatory GIS.

Participatory GIS was also was also discussed at a workshop in the USA run by the National Centre of Geographic Information Analysis. The specialist meeting in Santa Barbara in October 1998 aimed to explore these issues in detail, determine research priorities, and examine existing case studies of using public participation GIS, identifying their strengths, weaknesses and best practice. The Santa Barbara meeting was chaired by two of the participants at the Durham workshop, allowing for progression in the debate rather than replication.

The meeting was attended by about forty delegates, with backgrounds in the social sciences, natural resource management, urban planning and community support. The delegates were a healthy mixture of academics, NGO representatives, planners and information services professionals. What was less healthy, and may be indicative of the problems associated with using this type of technology in a participatory capacity, was that virtually all delegates were from the north.

It was pleasing that most of the participants, including those who were from a GIS rather than participatory background, appreciated that the participatory process was of overwhelming importance, and that the technical GIS issues were secondary.

A number of case studies were presented, including natural resource management issues in Australia, Canada, Hawaii, Ghana, Nepal and South Africa. Additionally, a range of urban planning case studies were presented, principally from the USA, involving different types of community action groups. It was interesting to note both the commonalities and differences between the rural, natural resource and urban case studies. Commonalities included the challenges and possible solutions to developing community representation when using GIS. The scope for the process being hijacked by an elite appears particularly great. A key difference is access to information and resources, with the availability of GIS at a community level being a serious limiting factor in southern rural areas.

What was alarming, however, was the number of case studies which purportedly presented participatory applications of GIS but just used census information or secondary data sources in a standard GIS environment. In many of these cases there was *no* active participation. It became apparent that there is a long way to go before participatory GIS can be correctly defined, understood or implemented.

On a more positive note, the meeting provided an excellent forum for dialogue between 'GIS' and 'participatory' participants. There was more common ground than disputes and a number of key issues were identified:

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- the need to define, identify and adopt best practice. This will require an emphasis on the participatory process, and necessitates a detailed knowledge of participatory techniques, and considerations of how these can be used when spatial information is desired;
- an emphasis on detailed monitoring and evaluation of processes, methods, accuracy and outcomes. The use of GIS means that accuracy issues become important, which has profound implications for classic spatial participatory tools, such as participatory sketch mapping;
- the importance of determining the 'added value' of using GIS and the nature of participation; and,
- a questioning of whether frameworks for public participation GIS can be developed.

Additionally, a detailed research agenda was drawn up, and a number of these are now being examined, via projects initiated through seed grants and reflecting on existing projects. Projects initiated via the seed grants include: transferring knowledge obtained from work in South Africa to community work in inner cities in the USA and developing participatory GIS frameworks for community forestry based on previously separate work in Nepal in Ghana.

The papers presented at this meeting can be found at the following website: **http://www.ncgia.ucsb.edu/varenius/ppgis/papers/index.html**

Additionally, there is a list-server up and running, dealing with issues of public participation in GIS. To subscribe, send an e-mail to **maiser@scifac.indstate.edu** and include the following message: **Subscribe PPGIS-Conf** in the text section of the email.

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