

## **REPORTBACK: HEARD GIS Workshop**

### ***Using GIS (Geographic Information Services) as an adaptive management tool to specify the problem of risk and to prioritise management interventions***

**Date:** Thursday 31 January 2002  
**Venue:** Rob Roy Hotel  
**Time:** 08h30 – 16h30  
**HIVAN Representatives:** Tanya Arntz and Moses Ndlovu

This workshop was hosted by HEARD, University of Natal and the Geodata Institute, Southampton University and supported by the KZN DoH and the British Council's Higher Education Links Programme. It was attended by representatives from the Medical Research Council, Africa Centre, National and Local Departments of Health, Social Development (Welfare) and Education, private doctors, Health Systems Trust, TBWA Hunt Lascaris amongst others.

#### ***The objectives of the workshop were to:***

- Provide a background awareness of GIS and how it can assist in decision-making in the context of HIV/AIDS
- Establish a rationale for adopting GIS-based decision support
- Create a project partnership to specify, design and implement the decision-support tools

Dr Sandile Buthelezi, Director: HIV/AIDS Programme, DoH KZN, opened the workshop by reiterating a need for informed management responses to the epidemic. Peter Badcock-Walters elaborated further on this need by motivating the case for a multisectoral approach to managing and mitigating the impact of HIV/AIDS. In his presentation, he mentioned that the emphasis of this project is the management of the epidemic, and that although it is understandable that there has been a lack of co-ordination in the past between key stakeholders, the time has come to foster a spirit of collaboration. This collaboration need not be viewed as a pressure-point, but rather as an opportunity. This collaboration needs to be undertaken within the following context:

- Each department needs to benefit from the collaboration;
- The range of endeavour and time-lines need to be resolved by stakeholders;
- Issues of ownership, protection of intellectual property and rights need to be clarified.

Mike Clark from the Geodata Institute at Southampton University then introduced the concept of spatial data and GIS, and how it can support the response to mitigate the impact of HIV/AIDS. As an introduction to the functionality of GIS, he gave the analogy of walking through the bush and hearing someone shout "LION!" The instinctive response to this would be: "WHERE"? One asks this in order to plan some kind of response: if one does

not know “where”, it is difficult to say “what”. GIS allows researchers and planners to answer the question “Where?” in that it allows for visual mapping of prevalence rates, location of clinics, schools etc. to assist with planning. KwaZulu-Natal is blessed with detailed and comprehensive spatial databases. GIS does not generate only maps but should provide deliverables that allow data to TALK to the user.

Prof Clark also introduced the value of adopting an adaptive management approach as opposed to a predictive approach in managing the impact of HIV/AIDS. The predictive approach “...focuses on trying to model future situations accurately enough to permit appropriate responses.”. This response is often plagued by uncertainties and if an incorrect assumption is made, a management failure or weakness is indicated. Adaptive management, on the other hand, allows management to complement predictive management with a monitoring approach. Key indicators are carefully monitored in order to inform management and planning decisions.

Using the education sector as an example, Peter Badcock-Walters (HEARD) illustrated how GIS decision-support mechanisms can assist development planners. Representatives from EduAction (Daniel Wilson), DoH/KZN (Shannon Rushworth) and the Africa Centre (Frank Tanser) also gave presentations on the actual implementation of GIS within their sectors. DoH based their presentation on the existing management of malaria and cholera, and EduAction used many examples, one of which being how routes used by circuit managers can be mapped on GIS systems. Frank Tanser presented data collected from the Hlabisa site relating to access to clinics etc.

After lunch Bob Curran from Integrated Marketing Information (IMI) presented on *South African Mindsets: Linking Lifestyles and Attitudes to HIV Risk*. IMI has done extensive work on “profiling” against the backdrop of information collected through socio-economic, marketing research and other relevant research agencies. They have divided the South African sector into different Living Standard Measurements (LSMs) and into different mindset categories. Research results are indicated by percentages next to each mindset category:

By-passed	7% of SA population
Entitlement	19% of SA population
Empowerment	13% of SA population
Old SA	18% of SA population
New SA	21% of SA population

In his presentation he suggested that the project team explore the possibility of working together in designing effective HIV/AIDS prevention strategies.

Most of the afternoon was spent in a panel discussion with Alan Whiteside, Peter Badcock-Walters, Mike Clark, Daniel Wilson, Shannon Ruthworth and Bob Curran. The convenors of the workshop expressed a commitment to

ensuring that ACTION arose out of the workshop. In order to further this, the following potential collaborators were identified to take this project forward:

Human Sciences Research Council (HSRC)

Traditional Local Government Affairs

Statistics SA

Provincial HIV/AIDS Unit

HST

Transport

Tourism

Government Departments: Water Affairs, Agriculture, Social Welfare, Education and Health.

Nelson Mandela Trust

NSAA

Government consultative lawyers

Love Life

Kaiser Foundation

Scott Wilson

Other partners (to be identified by stakeholders)

The outcome of the meeting was a mandate given to HEARD to take the process further by identifying key stakeholders and meeting with them. A comprehensive workshop report was to be compiled by HEARD and circulated amongst workshop participants, together with copies of the PowerPoint presentations made.