An Information Systems Approach to Addressing Health Care Provision Challenges in Socially Marginalized Communities: Case of Grabouw Settlement in the Western Cape, South Africa

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Background and Purpose: This paper is part of wider collaborative research activities aimed at finding information technology-based solutions to socially marginalized communities in the area of health provision. This particular study is empirically scoped around Grabouw, a settlement in the Western Cape in South Africa. It is one of thousands of such settlements in South Africa which are alienated without equal access to education, health, transport, housing, jobs and a general descent livelihood. The fragmentation of South Africa's economy is largely attributed to its apartheid history where black Africans have been alienated from the mainstream economy.

   The purpose of the study is to apply one of the analysis tools, LACASA, which were developed within the ISD4D research group in order to understand the context of Grabouw community. The results will inform stakeholders of quick design approaches to reach usable, sustainable and useful solutions which address healthcare information needs of the community.

Methods: The paper follows the ISD4D's "Daisy" approach to locate the study within the group's wider research context. The LACASA analysis tool (Tiihonen, 2011), is then applied in order to understand the healthcare challenges and needs of the Grabouw community. Interviews with healthcare workers, the local government and individual community members were undertaken to define the Grabouw general context and healthcare landscape in particular. This contextual analysis will lead to the design and development of solutions in the next phase of the ISD4D research for this particular community.

Results: Preliminary observations are that Grabouw is an over-populated community with minimal healthcare facilities. There is very high unemployment and rampant crime. There are too many migrants from other African countries and also internally from far provinces of South Africa. The LACASA tool, adopted within the ISD4D research group, has been selected on the basis of its robustness to depict a rich contextual picture of a situation, thereby increasing shared understanding for information systems development.

Conclusion: The paper provides a comprehensive contextual situation of the Grabouw community. The overall aim is to develop information systems that act as a quick solution to current information provision problems around healthcare. The paper also provides a methodological contribution to systems design and development activities as the LACASA tool depicts an overall understanding of information needs.

Keywords: *ISD4D, LACASA, Contextual Analysis*