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Building communities with public buildings

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WATER, SANITATION, ENVIRONMENT and DEVELOPMENT

Building communities with public buildings

Professor Rodney Harber



South Africa is currently undergoing profound change. As the political grip of the former regime relaxes millions of people have swarmed to perceived opportunities in major cities. In Durban, for example, the population has quadrupled in less than twenty years with nearly two thirds of the residents living in shacks. This translocation has been accompanied by a severe economic downturn, trade unionism and political infighting.

The purpose of this paper is to demonstrate how the design, erection and use of public buildings have been used to give disorganised people a communal focus. Four very different case studies will be presented.

Mtumbane

A Technical Aid Centre in a village outside port St John in Transkei. The walls were built of stabilised mud with panels of different mixtures exposed as demonstrations of the durability of various mixes, such as different sand textures, grasses and stabilisers – examples were chemical copolymers, cement, cow dung, etc. Timber preservation was also demonstrated – charring, cleaning bark, old sump oil, exotic weeds, and mild commercial poisons. The roof consisted of wired bamboo trusses spanning twelve metres covered in iron sheeting, all eventually converted into what is now a creche and hall for 200 people at a cost of only \$5000. This all relates to the surrounding house upgrading programme.

Bottlebrush

Durban has over two million people living in shacks. This centre was commissioned by the City to stabilise a squatter community living on steep, marginalised land. Labour intensive construction was called for to qualify for a low interest loan, making on site manufactured blockwork the obvious choice. Motivational and labour payment problems will be discussed as well as how the accommodation requirements of hall, kitchen, kindergarten, offices and clinic overlap, to save money.

Nthlungwane

Restoring a burntout mansion into a community centre as an attempt at political reconciliation in a traumatised area on the edge of Durban. Warlords, security problems, armed hold-ups and problems of setting up sustainable management structures under these circumstances will be discussed.

Mbazwane

A major rural community facility on the economically deprived Makatini Flats near the Mozambique border. The process of community consultation with models, working "drawings" with models, and erection by unskilled labour using prefabricated pole trusses will be illustrated. Design criteria such as maximising duplication of components, "loose fit" for unpredictable final use, robust detailing, simple setting out, on-site sewage disposal, rainwater harvesting, etc.

In each case the new accommodation ensures that a variety of training programmes can take place and that mothers may participate due to the childcare facilities. Scores of people become trained in blockmaking and general building. The labour intensive nature of the construction ensures that as much of the final cost remains in the community as possible, together with basic tools for further use.

Most, importantly the representative committees set up to direct the implementation of public buildings enable disadvantaged people to recognise the potential of working together. They often move on to tackle other communal issues such as water and sanitation.