Best Practices in Building Healthy Communities

A consolidation of lessons learned in the housing development process

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Community Participation

Importance

- Better fulfils specific needs of community
- Creates sense of ownership and fosters pride in the community
- Generates local employment opportunities
- Provides skills and training for future jobs
- Enhances community cooperation and collaboration throughout project development
- Enables community buy-in of innovative technologies

Implementation Methods:

- Project Steering Committee
- People's Housing Process
- Community Education and Training
- Prototyping

The Gap

- Underutilisation of participation opportunities
- Problems with current programmes
- Lacking balance between bottom-up and top-down approaches

Filling the Gap

- Increase implementation of current methods
- Current programme improvement
- Incorporating initiatives used by other organisations
- Multi-method approach

Community Participation:
Project Steering Committee

Features

- Promotes transparency and understanding of project
- Relays community needs to project manager
- Allows for negotiation and community input in project decisions
- Enhances leadership skills to members

The Gap

- Only current leaders of CBOs eligible for membership
- Community representatives biased towards personal organisation's members
- Leaders do not always identify with community needs
- Improperly and inadequately informed community
- Opportunity for undemocratic selection methods exist

Case Studies

- Belhar-Pentech Project, Belhar

Filling the Gap

- Identifying potential future leaders to be eligible for the committee
- Allow membership opportunity for non CBO leaders
- Periodically surveying individual community members
  - Awareness and understanding level
  - Needs and wants in project
  - Satisfaction with progress
- Creating guidelines requiring supervised, democratic elections

Community Participation:
People's Housing Process (PHP)

Features
- Completely bottom-up method
- Beneficiaries contribute "sweat equity" saving money on labour costs
- Saved money used for additional housing materials
- All project related decisions made by the future home-owners
- Workshops and training for PHP beneficiaries

Case Studies
- Witsand iEEEco Village, Atlantis

The Gap
- Only successfully implemented for projects with 300 or fewer houses
- Non-professional labour leads to lesser quality construction
- Time consuming
- Flexible policy leads to deviation from original purpose

Filling the Gap
- Adjust process for larger scale projects
- Devise a partnership between professionals and community
- Engage entire community to utilise individual skills in each project
- Create structured policies for different types of PHP:
  o Managed
  o Large scale
  o Small scale

Community Participation:
Community Education and Training

Features
- Programmes like HCE educate beneficiaries about the housing process and responsible home ownership
- Training and education workshops are used for specific projects
- Booklets, pamphlets and posters can be used

The Gap
- Illiteracy accounted for minimally in communication mediums
- Classes not made available to all communities (pilot programme)
- Beneficiaries often unable to visualize concepts
- Individuals often do not grasp long term value of lessons
- Inadequate distribution of information

Case Studies
- Witsand iEEEco Village, Atlantis

Filling the Gap
- Less reliance on written explanations
- Use programmes in all new housing developments
- Create visuals, models and prototypes
- Show, rather than describe, long term benefits
- Utilise multiple approaches to share information
  - Flyers and posters
  - Skits
  - Radio shows and audio tapes

Community Participation: Prototyping

Features
- Promotes understanding and acceptance of innovative technologies
- Leads to community support or buy-in
- Show houses can be used to let beneficiaries to choose top-structures
- Technologies can be tested before completely investing

Case Studies
- Indlovu Centre, Khayelitsha
- Stonehouse Project, Paarl

The Gap
- Show houses not readily used
- Infrequent use with innovative technologies
- Creation of prototypes generally late in planning process
- Time consuming
- Little opportunity for feedback

Filling the Gap
- Construct show houses for every project
- Encourage use by project managers
- Use prototypes at beginning of planning
- Use existing projects as prototypes for new projects
- Allow for improvement suggestions from beneficiaries

Green Technology

Importance
- Provide healthier environment in addition to benefitting the community
- Increases awareness and fosters sense of caring for nature
- Reduce waste and cost

Implementation Methods
- Dry sanitation
- Rain-water harvesting
- Recycled and Local Building Materials
- Passive Solar Energy

The Gap
- Often limited knowledge of existing technologies
- Community buy-in challenging with innovative technologies
- Perception that implementation is difficult
- Not widely implemented
- Current policy unsupportive
- Time and funding limited

Filling the Gap
- Provide project managers with database of innovative technologies
- Include lessons on innovative technologies during employee training
- Adjust community perception for buy-in
  - Use by elites; politician support, celebrity support
  - Education
  - Prototyping
- Supply project managers with support and special funding for green technology use

Green Technology: Dry Sanitation
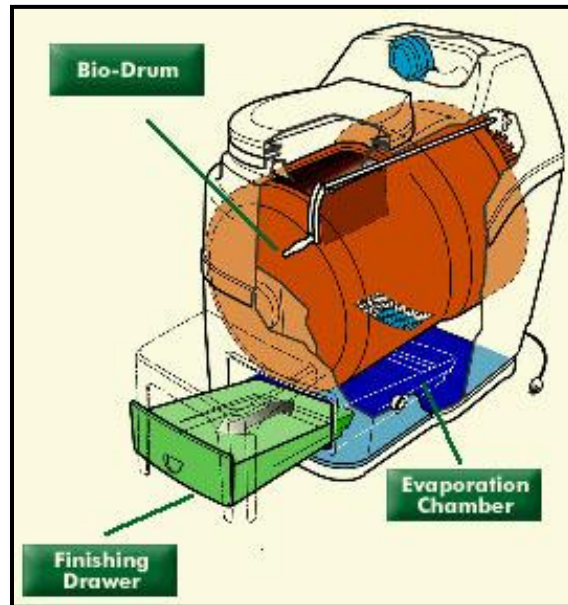
Current HD Practice
- Flush toilets
- Some dry sanitation initiatives

Features
- Requires no water or sewer infrastructure
- Organisms or dehydrating agents used to break down faecal matter
- Specific storage period for matter to sufficiently break down
- Creates organic compost

The Gap
- Policy only allows for flush toilets
- Viewed as dirty and substandard by community
- Incorrect usage and maintenance of existing models
- Possibility of sickness spreading

Case Studies
- Indlovu Centre, Khayelitsha

Filling the Gap
- Creating policy that supports dry sanitation use
- Adjusting community perception through education and support from elites
- Periodic assessment of toilet use to ascertain level of success
- Allowing enough time for stored matter to decompose or dehydrate completely

Green Technology: Rain Water Harvesting

Current HD Practice
- None

Features
- Collection of water from rooftop and courtyard run-off
- Stored in above or below ground tanks
- Used for domestic purposes
- Less of a dependence on municipal water supply
- Saves money for both city and beneficiary

The Gap
- Not widely implemented
- Lack of rain water in dry season
- Misused through ingestion
- Incorrect tank size, resulting in standing water
- Possibility of sickness due to contamination and insect infestation

Case Studies
- Indlovu Centre, Khayelitsha

Filling the Gap
- Increase knowledge of technology and communicate practicality of use
- Supplement with municipal water
- Inform community of risks from ingestion
- Survey families on size and current water usage
- Educate community on proper use

Green Technology:

Recycled and Local Building Materials

Current HD Practice

- Mortar and concrete block or brick

Features

- Using resources available at project site
- Reusing waste materials from demolition sites and movie sets
- Obtaining off cuts from companies for potential building materials
- Creates employment opportunities
- Transportation costs minimized or eliminated

The Gap

- Policies require use of brick or cement blocks
- Difficult to find waste material suppliers
- Viewed as substandard, second-hand house by beneficiaries
- Time consuming to collect, clean, and reuse materials

Case Studies

- Stonehouse Project, Paarl
- Eco-beam Construction
- Indlovu Centre, Khayelitsha

Filling the Gap

- Utilise pilot programmes to gain HD support and policy flexibility
- Create a database of previously used suppliers
- Explain benefits
- Refer to materials as recycled, rather than waste
- Employ locals and develop skills to increase productivity

Green Technology: Passive Solar Energy

Current HD Practice
- Used in some projects

Features
- Regulates house temperatures using sun; warm in winter, cool in summer
- Specific house construction to make best use of sun
  - Northern facing houses
  - Large windows on north side, small on south side
  - Specific roof pitch and eve length
  - Uncarpeted, high thermal mass floors

The Gap
- Not widely implemented
- Current design orients house with regard to infrastructure
- Beneficiaries do not always take advantage of full solar benefits

Case Studies
- Stonehouse Project, Paarl
- Witsand iEEEco Village, Atlantis

Filling the Gap
- Spread knowledge of successful implementation
- Balance solar energy features with town planning layout and infrastructure placement
- Use flyers and meetings to inform beneficiaries how to optimize use of solar energy

Mixed-Use Development

Importance
- Work, home, and social opportunities within close proximity of each other
- Self-sustainable environment
- Urban sprawl minimized by condensed communities
- Transportation less necessary
- Promotes entrepreneurship and employment
- Social and health problems reduced

The Gap
- Underutilised form of development
- Land mainly allocated for only residential housing
- Little collaboration between economic, housing, and community development departments

Case Studies
- Joe Slovo Park, Milnerton
- Sakhasonke Village, Port Elizabeth

Filling the Gap
- Policy to incorporate social and economic opportunities in housing projects
- Allocate land for mixed-use development without decreasing number of housing opportunities
- Make use of interdepartmental collaboration
- Allow private investors to develop businesses within communities

Community Facilities

Importance

- Provide opportunities for social programmes and services
- Aid in building social and economic networks
- Help prevent crime, drug abuse, violence, and other social problems
- Can contribute to health awareness and directly improve individual's health
- Empower youth
- Create a space for community gatherings

The Gap

- Lack of synergy between housing and community development
- Space allocated not always developed
- Do not always meet community needs
- Often inadequate number of facilities present
- Community land often forfeited for housing opportunities

Case Studies

- Indlovu Centre, Khayelitsha
- Du Noon, Milnerton

Filling the Gap

- Expand interdepartmental collaboration
- Synchronize development of both housing and non-residential facilities
- Increase community and leadership participation
- Allow the community to determine type of facilities needed, without option of elimination

Collaboration

Importance
- Increases communication by expanding the knowledge base
- Synergy enhances abilities and efforts of each individual
- Increases possibility for innovative projects
- Maximum utilisation of resources
- Decreases duplication of mistakes through sharing

Case Studies
- Edward Street Project, Grassy Park

The Gap
- Communication between regions not promoted
- Minimal interaction with departments outside of the housing process
- Insufficient sharing of lessons learned between departments, regions, and NGOs

Filling the Gap
- Periodic round table meetings between regional heads
- Project focus groups with all departments beneficial to the community
- Seminars with representatives from different organisations to share experiences, perspectives and suggestion

Case Studies

Belhar-Pentech

The Belhar-Pentech housing project site, depicted by the yellow border, was is a Northern Region greenfields project in Belhar, located east of the Cape Town CBD. Belhar is a neighbourhood of government subsidy housing that was built during the apartheid era. During our time in Cape Town, this project was in the planning and design stage.

Witsand iEEECO Village

The Witsand iEEECO-village (integrated Energy Environment Empowerment Cost Optimisation-village) human settlement project in Atlantis, is a Northern Region informal settlement upgrading project being completed in two phases. Phase one was started in 2000 and was being constructed, completed and allocated during our time in Cape Town. It was considered a pilot for the rest of the project. Phase two was in the planning stage, and would also follow the energy efficient housing model.

Du Noon

We also studied a completed project to identify previous mistakes and current problems. The Du Noon housing development is a Northern Region project that included 2,964 housing units that were completed in 2000. Since that time, problems such as defective houses and incorrectly allocated units as well as social problems have been discovered.

Joe Slovo Park

This housing development was the first low-income community created after apartheid ended. It was strategically located next to an industrial area and an upscale residential neighbourhood, in order to support integration and maximize employment opportunities. It is currently very dense due to its prime location and, therefore, a need for more housing has been recognised. Depicted below , the green site allows for 60 free standing housing opportunities; the yellow sites, 200 housing opportunities.

Indlovu Centre

The Indlovu Centre is a project funded by the Shaster Foundation. It is located in Monwabisi Park of Khayelithsa, and currently includes a youth centre, health clinic, soup kitchen, guest house and crèche, all of which were built using innovative technology and community participation. Current and future initiatives at the Indlovu Centre include a community centre and housing using the same innovative technology.

Stonehouse Project in Mbekweni

At the Mbekweni Housing Development, located near Paarl in the Western Cape of South Africa, the Stonehouse Project was created by the Department of Local Government and Housing. This is an innovative research project in which local and recycled materials, solar energy and community participation were used. The purpose of the project was to see what innovative ideas were plausible and accepted by the community.

Eco-beam

Eco-beam is a company, created by Mike Tremeer, which uses sand-bag and eco-beam technology to construct houses. This technology is inexpensive and can be built using community participation. It has been used to build houses throughout South Africa, and has also been used in all buildings at the Indlovu Centre.

Edward St. Project in Grassy Park

The Edward St. Project is a Southern Region initiative in the planning stage. Managed by Pauline Houiniet, the project will use technologies similar to the Stonehouse Project as well as innovative community participation and interdepartmental collaboration.

Sakhasonke Village

Located in Port Elizabeth in the Eastern Cape, this subsidized housing village was a pilot project sponsored by General Motors South Africa Foundation, the Social Housing Foundation, and the Social Housing Focus Trust. The goal of the project was to support socio-economic development of low-income communities, essentially establishing a mixed-use development neighbourhood. Houses were two story duplexes, with a few triplexes, in order to densify the area, and were placed around an open, green community space. A community centre functioned as a hall, a crèche, and a place of worship. Housing design also provided for space alongside homes with the opportunity to expand or to create gardens.