

**A MODEL OF COMMUNITY DEVELOPMENT AND GENDER EQUITY
THROUGH ACCESS TO INFORMATION TECHNOLOGY**

Communitas

ISSN 1023-0556

2006 11: 137 - 152

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ABSTRACT

Marginalised people, in their everyday life, do not know where and how to access information for their own survival and development. This information would, if correctly applied, enable them to participate in social, political and economic processes associated with development. The three key aspects that articulate a model of community development through information are gender, participation, and Information Communication Technologies (ICTs). From the literature review, practical experience and case studies, it has been clear that most community projects do not explicitly address the gender, participation and ICT aspects. The model of community development presented in this article is a tool for making local and external information available and accessible to marginalised members of a community so that they can use it for their own development.

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BACKGROUND, AIM AND METHODOLOGY

Between the 1970s and 1980s there was a clear division between mainstream and alternative forms of development locally and globally. Recently the gap has been minimised because mainstream development thinking has incorporated various aspects of alternative development such as equity, gender, sustainability and participation (Haines 2000).

Castells (2001) suggests that the greatest current need is for swift and widespread information. Modern mass communication should be available to multiply informational resources. He further argues that national economic and social development is impossible without some modern information multiplier together with mass communication to fast-forward communication.

The main focus is to bring the benefits of the information age to poor, illiterate or semi-literate women, socially defined as subordinate in their homes and communities (Mitter 2000). The dangers affecting the success of any project should be identified in advance to avoid the impact of power struggles.

Communities are not homogenous but are structured. Various hierarchies limit the extent to which the voices of the marginalised are heard. Limiting factors include power relations, gender relations, urban-rural divide, social classes, educational levels, political differences, cultural differences such as religion, language and ethnicity e.g. racial differences, physical or psychological disabilities, economic differences and displaced communities as a result of political or social issues, and natural disasters (Legaobe et al. 2000).

For three months, from 15 July to 15 October 2000, at Germany's University of Hamburg, nine female researchers from across the world worked together on a project with the aim of addressing the question of how communities can use information for their own development. The group was composed of researchers from seven different countries.

The main theme of the project was "Information as a Social Resource" with a further 13 sub-projects, namely: Community Development through Information, Cultural Modes of Self-Expression and New Media, Curiosity, Intuition and Information Technology, Future Education, Health Care Information, Identities and Globalisation, Information Kiosk, Knowledge Architectures, Media Industries and Democracy, Reconstruction Gender on the Internet and Virtual Communities and Visions of Citizenship. Some 200 female researchers participated in the project. Each sub-project had about 20 group members. All projects were related to each other and the link was the exchange of timely and accurate information. Each group reported on their subject and the focus group reported on community development.

The community development researchers that worked closely with the supervisor and the director were grouped into units composed of nine qualified researchers. The researchers had experience in the field of community development work. They grouped

themselves according to their field of specialisation. The first three members specialised in gender, the second three in participation and the last three in community development and ICTs.

This article uses primary and secondary data. Primary data was collected by taking minutes of daily meetings, community visits and excursions, interviews and focus group discussions were held every two weeks with Information Kiosk group members, a community development coordinator and the director. Secondary data was collected from a literature (book) survey and other library information, personal experiences, and documented case studies. The model developed was based on experiences, case studies and reports but not on the results of an actual project. There was no raw data to be processed, therefore there are no tables and graphs in this article.

Community and development are the terms used mostly in this article, it is therefore necessary to define both terms. For the purpose of this article a community refers to a number of people who live together, and who may share some traditions, norms, values or interests. A community is, however, not homogeneous, being made up of different groups (communities) of people positioned in various power relations that might be enabling or constraining, and so create conflict. Development is defined as an ongoing process of betterment and the improvement of quality and equality of life, as defined by the person or people concerned. This involves problem solving, and life long learning, and includes social, cultural, political and economic factors.

The aim of the study was to understand and refine gender, participation and ICTs as well as the links between these concepts. It further explores the factors on how communities can use ICTs for their development and sustainability. It was hypothesised that the proposed model may identify issues of resources that can be used as guidelines for community development through information projects.

GENDER AND DEVELOPMENT

The subject of gender and development is indeed a topical issue world-wide. South Africa is not alone in this issue. Gender and development has been received with varying degrees of acceptance in the various cultural groups as it touches on historical, established cultural values and accepted common practices. Information available within society has improved the situation, as some people have received and perceived it as a means to adjust the structure of society while others avoid discussing the subject. Gender therefore became a conflicting factor affecting the sustainability of community projects in mostly marginalised communities.

Gender is being female or male and is linked to socially-given attributes, roles, reproductive roles, productivity, decision-making, responsibilities and experiences. Gender relations are therefore the relations between men and women, and include a consideration of how power is distributed between the sexes. Gender relations vary according to time and place, between different groups of people and other social relations e.g. class, race and ethnicity (Chambers 1999). Gender and Development

(GAD) theory recognises that women's lives are strongly shaped by men, therefore it attempts to promote women's empowerment and initiate change in gender relations which must involve men and women alike (March et al. 1999).

Gender equity is only possible by addressing gender relations and re-thinking developmental practices in rapidly changing social environments. Gender shapes the opportunities and constraints that women and men face in securing viable livelihoods, as well as building strong communities across cultural, political, economic and ecological settings. The use of gender relations as an analytical category shifts the focus away from viewing women in isolation from men. The concept and struggle of gender relations examines the relative position of women and men when the division of resources, benefits, rights and responsibilities, power and privileges, are concerned (Kabeer 1999).

GENDERED TRADITIONAL RESPONSIBILITIES

A breakdown of the traditional gender role according to Eade and Williams (2000:208) identify traditional roles for males and females. The gendered traditional responsibilities, according to the Women in Development (WID) approach, are as follows:

Reproductive role

Women: Child bearing and rearing. Child bearing is biological and forces women to stay home, thereby limiting their power to directly contribute towards the country's economy. In South Africa the labour law allows women to work and take maternity leave when needed, but the impact of the law does not appear to be applicable in the marginalised areas (rural areas).

Men: No continuous responsibility, but may have occasional domestic tasks.

Productive role

Women: Engage in formal economy or informal economy. In many households women may be sole income earners. They are responsible for improving the family's welfare and by doing so they also contribute to the country's economy e.g. running crèches and pre-school centres.

Men: Men represent the majority of labour force in formal economy and usually are primary income earner in the household.

Community managing and community politics role

Women: An extension of reproductive role in community action takes place. Because of the scarcity of goods and services needed in reproductive role; e.g. unpaid community work (collecting firewood, water); they also engage in social activities in the

community (various types of festivals). Most of their time is taken up by doing the unpaid work in marginalised areas. Challenging these positions is impossible due to the social environment and matriarchal role of stereotyped elders.

Men: Unpaid community work as an extension of reproductive role also takes place, for example collecting water, firewood. In addition they are involved in the governance of their society. As traditional leaders of the village, they are involved in decision-making, organising and managing of political issues and political parties.

As the gap between female and male gender responsibilities is immense, bridging the gap remains a challenge. Little emphasis is placed on the similarities between gender responsibilities and how the similarities can be exploited to enhance community development. WID and GAD are sometimes used interchangeably, but there are some basic differences. The WID approach was developed in the 1970s, with the objective of designing actions and policies to integrate women fully into the development processes. The GAD approach was developed in the 1980s with the objective of removing disparities in social, economic and political equality between women and men as a pre-condition for achieving people-centered development. Both approaches are still in use and are applicable in different situations. The model reported on in this article assumes the GAD approach.

A greater understanding of the gender equality concept and clarification of misconceptions still remains a priority and a challenge. Men's and women's attitudes and behaviour are strongly influenced by stereotypical definitions of masculinity. This is especially important in the area of ICTs and development, as technology projects usually exclude women, either explicitly or implicitly. Therefore, all new development initiatives should include a gender analysis to demonstrate the potential for involvement of women in technology-based activities. There are numerous tools available for gender analysis. This article explores Gender Analysis and Women Empowerment which can be applied in ICT projects and in any other community development projects. A brief description of gender analysis approaches according to March et al. (1999: 106-108) is therefore essential.

FIVE COMMON ASPECTS OF GENDER ANALYSIS

The Social Relations Approach states that all institutions have five distinct, but inter-related dimensions of social relations e.g. rules, resources, people, activities and power. The relations are presented in the form of questions (March et al. 1999: 106-108). The five questions tend to challenge the traditional gender roles when used in conjunction with the strategic gender interventions.

- Who does what, when and where? (It is useful to also ask who does not, and cannot do specific tasks.)

- Who has access to resources of production, knowledge, technology, time and decision-making?
- Who has control over resources of production, knowledge, technology, time and decision-making?
- Who benefits from the existing organisation of productive community and household resources?
- How and to what extent do cultural systems, poverty alleviation policies, development planning and technology projects address the different needs and interests of the community in general and of the women in particular?

The outcome of the gender analysis would show how the respective genders perform within a traditional society. The analysis does not address the “why” issues in the five major analysis questions. Answers to the why-questions should highlight the opportunities for women to participate in ICT community projects. Because why-questions are not asked, the opportunity to introduce the gender sensitivity in any community projects with a strategic objective can be lost.

According to March et al. (1999: 112-113) gender strategic interventions include the following:

- Introduction of gender sensitisation of both men and women in community.
- Encouragement and increasing recruitment of women at professional levels and in decision-making positions.
- Women’s ownership of productive assets allowed by the law.
- Women and girls’ education encouraged.
- The institutions and developmental projects adoption of gender-aware participatory planning and evaluation methods.
- Encouragement of women’s vocational skills training, political and legal awareness.
- Development of clear aims and objectives of gender policy.
- Developing clear gender impact indicators suitable to each organisation.

WOMEN EMPOWERMENT

Gender Analysis is not the only method to explore gender equality. Women Empowerment is equally important. It is therefore important to introduce the Women’s Empowerment Framework to help understand community development through information from a gender perspective (March et al. 1999). The framework is based on an understanding that poverty arises from oppression and exploitation rather than lack of productivity. Within this framework, development means, “enabling people to take charge of their own lives, and escape from poverty” (March et al. 1999: 92). The

framework is based on two different tools, namely: levels of equality and levels of recognition of women's issues.

The levels of equality and levels of recognition of women's issues have been used as a basis for strategic planning and human resource gender development. From a strategic planning perspective the levels of equality and woman specific issues have been used for transformatory planning, monitoring and evaluation of performance over time. The focus of the gender development is on training, both technical training and awareness raising and management training. In addition, it is strongly ideological, emphasising the importance of challenging aspects of gender relations and as such is useful to identify the gap between rhetoric and reality in development interventions. Levels of equality can be measured by using the hierarchical scale ranging from control, participation, conscientisation, access and welfare.

Levels of equality

According to Longwe (2000: 151-152) the level of equality is one of the criteria for recognition of women's issues. There are five levels of equality and they are hierarchical. The higher the level that the intervention focuses on, the more likely that women's empowerment will increase. An ideal intervention does not have to show activities on every level. The five levels are arranged from the highest to the lowest level of empowerment and equality:

1. *Control*: This is the highest and most important level of women's empowerment. This means more than just participation. It includes equality of control in all areas, including factors of production and the distribution of the benefits. This level is rare and need to be reinforced and applied in ICT community projects.
2. *Participation*: Participation is concerned with women's equal participation in the decision-making process. Participation should be a central part of needs assessment, project formulation, implementation and evaluation. Equality of participation implies involving women in the same ratio in decision-making as men: women ratio in the community at large.
3. *Conscientisation*: This refers to the promotion of an understanding of the difference between sex and gender roles, and those gender norms, which are socially and culturally constructed, can and should be changed. Therefore, division of labour should be fair and agreeable to both sides and not involve economic or political domination.
4. *Access*: This involves women's access to the factors of production on an equal basis to men, for example to own the property and be able to start a business.
5. *Welfare*: This refers to addressing women's basic needs such as food supply and medical care. Women who personally generate income can easily afford their welfare because they are in the budget.

The measurement of the level of equality during the development programme is the means to describe the stage of upliftment of the women concerned and is a symbol of improvement. The level of the women's recognition in the community project demonstration allows the community developer to evaluate and rank the level of empowerment of any women participating in the project. The measurement of the degree of involvement can be further simplified by using the scale ranging from negative, neutral and positive levels.

Level of recognition of "women's issues"

It is important to assess whether project objectives are in support of the women's development goals and to establish the extent to which women's issues are addressed. Women's issues are defined as "all issues concerned with women's equality in any social or economic role, and involving any levels of equality" (March et al. 1999: 95). The question: "Are women recognized for their input towards the organization or project?" may be asked. By rewarding output the standard of performance is likely to be repeated.

Three levels of recognition of women's issues scoring method are shown (March *ibid.*):

1. *Negative* level – no or too little mention of women's issues.
2. *Neutral* level – conservative level. Women's issues are recognized but only up to the point where women are not worse off after the intervention. However, impact of group dynamics in all sectors is omnipresent and as a consequence all projects that involve women will affect men's position and *vice versa* to some extent. Therefore no project can claim gender neutrality.
3. *Positive* level – concern with women's issues and improving women's positions in the community, unlike in the situation in Case Study One where a successful project was hijacked by powerful people.

There are some potential limitations. The focus on a hierarchy of levels of empowerment can make empowerment appear as a linear process when in reality it is far more complex than that. The hierarchies of levels neither allow focus on marginal impacts of interventions, nor the relative importance of different resources. In this context one school of thought views the hierarchical approach as being too ideological and thus confrontational for those not committed to women's empowerment.

Ideally sharing ICT tools equally in the community will result in better production of information and thus resource utilisation, particularly if both women and men participate in community development.

PARTICIPATORY APPROACH

Participation enforces community responsibility and accountability. Communities should own and protect their projects and as a result the project will benefit the community. Developers of community projects should take cognisance of these facts and it is their input and the manner in which the intervention is being done that will

ensure the success of the ICT community projects participatory approach. The literature often reports on the absence of the participatory component in ICT community projects simply because the statements on what should be done are theoretical. There is not much evidence on how it can be done in practice. Case Study One is an example of the importance of participatory planning and the impact of gender on power relations.

Participation is the processes whereby people share and exchange their knowledge, experience, ideas, opinions, skills and information in order to make decisions and to take clear and useful action towards development. Participation involves the community or group taking and sharing equal responsibility from the start, the process and the outcome of any initiatives. Participation means that people have the right to say no (Cousin 1999).

Communities are dynamic with unique characteristics such as traditional beliefs and a specific way of life. Participants need to be sensitised to their fears, experiences, perceptions, background, culture and social conditions of the communities which can affect any facet of the participation procedure. Social dynamics must be respected. The acknowledgement of the skills, experience, creativity and indigenous knowledge of the community members is imperative, and a display of trust that the community can do something for itself is crucial (Cousin 1999). Participation promotes ownership and ownership carries responsibilities which enforces the sustainability of a project.

The process of establishing a participatory project implies that facilitators need to identify research and planning methods that are culturally appropriate and go beyond gender neutrality. The focus should be on:

- Methods that could explore and change the ideological basis of gender relations.
- Sensitizing men in a non-threatening way.
- Expressing gender issues on a meaningful manner.

The process includes role-play, videos, plays, reversed gender roles; men could play the role of women, and *vice versa* (Humble 1999; Murthy 1999).

It is important to keep in mind that these methods should be used not only to describe gender differentiated needs, but also to analyse and change the causes of those needs. Men are asked to analyse females in terms of the realities of gender relationships and are invited to make recommendations with regard to the quality of life within the hierarchical structure in the community and *vice versa*. The developers of ICT projects need to address and deal with men's concerns and fears surrounding women's empowerment and how this is critical and important for gender equality (Guijt & Shah 1999). Such approaches in deep rural areas are impossible but successful if it is done with local people, their context, and is culturally sensitive.

The setting where discussions take place is also important. If women find it difficult or uncomfortable to discuss gender related issues amongst men, women-only groups need to be initiated. Success in such groups are dependent on:

- The ability to encourage all women to participate and voice their opinions.
- Sensitising dominant females to their domination and unobtrusive members need to be encouraged to participate in the debates.
- Establishing feedback mechanisms between community and other stakeholders. Parties involved should be flexible, open and accept criticism, suggestions, changes and recommendations (Murthy 1999).

The author is aware that the power struggle and conflicts will always surface.

Community participation is essential in upgrading the communication systems in the community. "...Learning to work with conflict and to model it in the training sessions means preparing participants to deal better with the inevitable community based conflicts. This allows differences, attitudes and emotional expression within the group, and conflict becomes part of the development process" (Cousin 1999: 68). Therefore facilitators and the community need to identify available ICTs in the community, and analyse, evaluate and improve them to ensure maximum benefit (Snowdon 1999). Participation is only possible if the environment allows it.

According to Cousin (1999: 68) the approach that promotes participation includes processes such as:

- Creating an enabling environment: Facilitators need to create policies that are conducive to equal participatory development.
- Participatory approach guidelines for facilitators: Through research and planning methods that are culturally appropriate and go beyond gender neutrality.
- Dealing with conflicts: Conflict may take any form, for instance urban vs. rural divide, gender imbalances, racial, economic, political, traditional vs. modern way of life.
- Bridging the gap between communities and ICTs: Identifying common and traditional ICTs, integrate them with modern ICTs and provide training where necessary.
- Mechanism for awareness raising on ICTs: Various media must be used to broadcast development programmes e.g. radio, television, pamphlets, books, plays, songs, folklore.

Community participation in community development projects helps to provide resources relevant to community needs. This article explores the participatory approaches to development. It is envisaged that the outcome could be used to facilitate and ensure that there is genuine involvement of the community and to manage the people participating, especially those voices of women and rural people that might be suppressed. The model that is proposed emphasises the important questions that can be used to introduce and enforce participation for the success of the ICT projects.

In recent years there has been an increasing focus on the importance of ICTs for community development. Whilst accepting the value of ICTs, the publicity surrounding

new ICTs should be avoided and the wide variety of telecommunication tools that is available to network rural with developed regions should be embraced. Technologies alone cannot turn information into useful knowledge (Mitter 2000).

INFORMATION COMMUNICATION TECHNOLOGIES AND DEVELOPMENT

Each community can use many of the technologies that are available in a way that suits their specific circumstances and needs. The importance of the spoken word and oral traditions used in many cultures as a means of exchanging information should never be underestimated. Sharing knowledge and providing entertainment are examples of the powerful role that these technologies can play. The Food and Agriculture Organisation (FAO) report called “Voices for Change” reported that information exchange for illiterate rural women occurs mainly during local festivities, when they fetch water, and at the marketplace (Snowdon 1999). The awareness of the importance of such social information exchange processes and the impact the process can have on the introduction of new ICTs, will assist in understanding the overall impact on the social fabric. As service provision changes, e.g. tap water is provided in the home, alternative forms of communication might be needed.

Information and communication technologies are digital technologies, facilitating the acquisition, processing, presentation, management and transmission of information. They include, for example, the micro-electronic, photonics, computer and telecommunications industries (National Research and Technology Foresight 1999). To date, there are 54 Multi Purpose Community Centres (MPCC) - including seven satellite sites – that have been established in South Africa.

The definition of ICTs is in recognition of the fact that computer technology is not the only communication tool for community development. Thus, included in the general understanding of ICTs, are also indigenous folklore, proverbs, radio, printed media, books, newspapers, telephone, telegram, fax, television, recorded audio visual material, and computerised forms i.e. internet, automatic teller machines and Compact Disk Read Only Memory (CD-ROM) (Etter 1999). There is no preference given to any of these tools. Depending on the community context, different tools will be appropriate at different times.

ICTs have been used in a variety of ways within a development context, including telemedicine, distance education, for agricultural production and marketing, in times of disaster, for political empowerment and democratisation, as a basis for small business and income generation, and to improve quality of life through communication with distant relatives (Balit 1999; Bayes, Von Braun & Akhter 1999; Benjamin 2000; Hudson 1984; Richardson & Ramirez 2000; Rose 1999).

It is important to emphasise that ICTs alone do not ensure community development or empowerment, nor can they overcome cultural hierarchies and power differentials in a community. The identification of a balance between old established practices and the introduction of new technologies are very critical.

A MODEL OF COMMUNITY DEVELOPMENT THROUGH ICTS

Based on the inputs of Hamburg University in Germany, a model was developed. Projects that may benefit from the model include telecentres, also known as Multipurpose Community Centers or Information Kiosks, commonly known as Information Communication Technology Centres and Internet Cafés. This model assists the facilitator to think through, question and design a community development project. It will assist with the identification of the extent to which the ICT approach taken is participatory at a general level, gender issues and the specifics of the project in a marginalised setting. The model is sensitive to gender, participatory objectives and involvement of ICT tools was developed in a marginalised setting.

Vision

The vision of those initiating the project should be made clear and be open to change according to the priorities of the community.

Goal and objectives (to be specified for each project, these questions are intended to provide a guide in the formulation of project objectives):

- What are the participatory goals?
- What are the gender-related goals?
- What are the ICT related goals?

Once these have been decided on with the community, then the specific objectives can be formulated accordingly.

Context (in each case the constraints and possibilities should be considered at *state, market, community and household levels*)

- *Participation*
 - Who is participating, and who is not and why?
 - Who controls policy at governmental, organisational and local level?
 - What are the existing and possible areas of conflict and why?
 - What participatory methods/approaches are being used and how suitable are these methods?
- *Gender issues*
 - What is the gender context? (This should be analysed at five levels: control, participation, conscientisation, access and welfare.)
 - What are the current practical and strategic gender needs?
- *ICTs*
 - What ICTs are currently available?
 - Who has access to and control of these?
 - What information is currently available?

- For whom is this information available/accessible/applicable?
- Who owns and controls this information?
- What information is needed?
- What expertise is available to sustain is operations?

Impact indicators (collect at beginning and at regular intervals)

The specific impact indicators depend on the problem being addressed, the aims and objectives, and intervention, and thus should be defined by the community concerned. As a guide, indicators should be developed for each of the following three categories (two examples of each are included):

- *Participation*
 - % of women and men taking part in meetings
 - number of steering committee meetings held
- *Gender*
 - % of women in training programmes
 - % of women in management positions
- *ICT*
 - Information available before and after implementation
 - % of marginalised group now accessing ICTs

Intervention (the specifics would be defined for each project, each of these issues should be considered)

- *Participation*
 - Set or lobby for policies that encourage equal participation, control and access
 - Provide conflict resolution/mediation skills
 - Ensure that the marginalised in the community (as defined) are genuine participants
 - Ensure that all stakeholders/participants are actively involved in all parts of the project cycle, including in decision-making
- *Gender issues*
 - The intervention should address all five levels: control, participation, conscientisation, access and welfare
 - Practical and strategic gender needs (as identified) should be addressed
 - Women should be actively involved in all aspects of the project cycle

- *ICTs*
- The intervention should address the information needs of the target group
- The indigenous information, knowledge, skills, experience, creativity, etc should be valued and acknowledged
- Appropriate training should be provided
- Utilise existing ICTs together with new ICTs
- Ensure the resources needed (financial, technical, users skills, etc) are available

The model encompasses the four pillars of management, namely: planning, organising, controlling and directing. The control and evaluation is important for the projects to be sustainable. The recommended management style is one of facilitating and coaching rather than supervisory or a dictatorial management style. The process of development is likely to have conflicts and uncertainty. With respect to the impact indicators and interventions suitable for the situation are recommended as sampled in the model to control and prevent the situation. Community development is aimed at empowering communities and strengthening their capacity for self-sustaining development. It therefore requires proper structure of community development with trained facilitators. Facilitators take care of community felt needs of gender in a participatory approach utilising ICTs and the project becomes a Community Based Organisation (CBO).

CONCLUSION

This basic model of community development can work. On-going evaluation of progress is important and must be done to reflect and receive feedback. The model presents an integrated and flexible framework for gender sensitive and participatory development through access to information technology. The model includes aims and guidelines to expose community inequalities and distribute information timeously to enhance community empowerment. Through the discussions that took place in Hamburg, and by reflecting on the traditional role of gender in participatory settings, the unavoidable impact that ICT will have on any community, irrespective of its locality in the rural environment, the model presents a basis for introducing new technologies to support community development projects.

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