

Gender Mainstreaming of ICT Projects: Lessons from Rural Southwest Nigeria

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Abstract: The paper examined how Information Communication Technologies (ICTs) can be used to strengthen and develop a people-centered, inclusive and development-oriented Information Society, where both male and female can create, access, utilise and share information and knowledge, to improve their quality of life and achieve their full potential. The bleak outlooks of development initiatives in most developing countries, particularly Nigeria temper this optimism. The study relied on data collected through focus group discussion (FGD), personal interview and as well physical observation. Data were analysed using descriptive statistics, gender equality index and scale ranking techniques. The results generally revealed that there were more men in the use of ICTs than women and this portends a great threat to the achievement of the much clamoured millennium development goals (MDGs) - attainment of gender equality by 2015.

Key words: Gender mainstreaming % ICT % MDGs % Rural Nigeria

INTRODUCTION

In rural Nigeria, majority of the people are poor. They are the disadvantaged and marginalised sections of society who often face impediments to use productivity enhancing resources in the same way they may face impediments to make good use of ICTs. Some of the constraints to ICTs in rural Nigeria are surmountable while others require a shift in both human and organizational communication and working patterns which may take longer to change. ICTs rely on physical infrastructures (electricity, telecommunications and good road network) and even when such infrastructures are in place, difficulties arise when they are poorly maintained or too costly to use. ICTs are dependent on national policy and regulation for telecommunications and broadcasting licenses which is now receiving commendable attention in Nigeria. They require initial capital investment for hardware and software. They are also dependent on the skills and capacity necessary to use, manage and maintain the technology effectively. Matching the most appropriate communications technology with people's needs and capabilities is a crucial task for ICT providers in Nigeria. These conditions are hardly met in the rural areas of Nigeria.

Aside from telephone facility, the majority of information exchanged via ICTs, whether in text format or broadcast orally, takes place in English. Steps need to be taken to address the needs of local languages and cultures through longer-term vision to make all ICTs accessible to all people in low literate society of Nigeria. This will involve significant investment and support for local content (in broadcasting and the internet) and software design. Further, in oral cultures, of Nigeria the collective memory and importance placed on the elders to store information creates a strong system for information flow. There is a need for mediation between the traditional and emerging information systems when considering the socio-cultural and economic leap that will be required for societies, accustomed to receiving information orally from a known and trusted source, to new digital, text based information from virtual and virtually anonymous, sources [1].

In Nigeria, the opportunities presented by new digital information systems are a long way from reaching the hands and eyes of the majority because of the aforementioned challenges. This is especially true for women farmers. In Nigeria, rural women are key actors in agriculture, biodiversity conservation and rural economic development, but investing in female farmers is an overlooked strategy for increasing agricultural

productivity. They do not have equal access and control over productivity enhancing resources in the same system. Many programs with good intentions overlook women's needs, mainly because researchers, policy-makers and planners lack adequate data, information awareness and methodologies to address them. Gender is an issue because access to and use of ICTs are influenced by the cultural and institutional contexts in which they are applied [2,3]. Like any other technology, they are socially constructed and impact men and women differently [4,5].

Women in particular face difficulties in using ICTs, as they tend to be poorer, face greater social constraints than men. The location of the telecenter sampled for this study is located near the Kings Palace where women do not have direct access. Moreover, they are likely to use ICTs in different ways and have different information requirements than men. Women are also less likely to be able to pay for access to ICTs, either because of an absolute lack of funds or because they lack control of household expenditure. Constraints on women's time or their movement outside of the home can also reduce their ability to access technologies [4]. The infrastructural deficit of the rural areas coincides with gender demographics- more women live in rural areas than men. Simply by being the majority of the population in rural areas, women have a smaller chance than men to access new technologies. Women, with their special responsibilities for children and the elderly, find it less easy than men to migrate to towns and cities. The urban bias in connectivity thus deprives women, more than men, of the universal right to communicate [6,7].

This digital-divide may continue to widen if the primary concerns of differential access and benefits are not addressed. So, strategies should be developed for ICTs that specifically target women and young girls, which is the focus of this study. The general objective of the study is to assess the gender differential implications of ICTs and to ascertain how opportunities, benefits needs and risks accrue to men and women are based on their socially constructed roles.

Against this background and within the context of Nigerian communities, this study is of the opinion that although, ICTs are usually understood to refer to computers and Internet, it adopts the broader view of ICTs which include the more traditional and usually more common technologies of radio, television, telephones, public address systems and even newspapers, which also carry information.

Methodology

Study Area and Sources of Data: The survey was carried out in the Southwestern part of Nigeria. Specifically the study focused on Oyo and Lagos states. Lagos State was purposively selected because of its long-time established radio stations and the Communication Support Component of the Extension Sub-programme of its Agricultural Development Programme (ADP) which has adopted radio broadcast of Agricultural Extension messages to farmers, fishermen and other rural dwellers through its radio programmes. Oyo State was considered for this study because recently, International Institute of Tropical Agriculture (IITA) in collaboration with the Commonwealth of Learning (COL), of Canada, the Oke-Ogun Community Development Network (OCDN) an NGO, World Reach International, The University of Ibadan and Atisbo Local Government opened a telecenter incorporating a cyber café mounted with V-SAT for Internet connectivity and a video viewing area at Ago-Are for the use of farmers in Atisbo Local Government Area of Oke-Ogun, Oyo State. The project is known as "Answering Farmers Needs in Nigeria". The project is aimed at providing crucial agricultural information and linkages to farmers to assist them in production, processing and marketing of agricultural commodities.

Besides Agricultural information, farmers will also benefit in education, health, governance and community development. The project uses both modern and traditional techniques, including open and distant learning methodologies, supported by information and communication technologies (ICT) to access information and send messages on the needs of farmers at Ago-Are to improve productivity and enhance their living standards. It is expected that the centers will be replicated until they cover the whole country. This is to say that the major beneficiaries of this project are the resource-poor rural people, particularly the silent producers-women, Oke-Ogun community and Nigeria at large.

Data were collected from both male and female respondents using focus group discussion (FGD) technique. There were two groups of 10 men and 10 women and each member was expected to:

- Ⓒ Be at least 18 years old.
- Ⓒ Be able to make independent decision.
- Ⓒ Be gainfully employed.

Additional questions were also asked through semi-structured interview of the key informants when necessary to shed light on some issues raised during the

discussions. Data on farm broadcast schedule and content were collected from the states' Radio Broadcasting Corporations.

Analytical Techniques: This study employed a number of analytical tools ranging from the simple descriptive statistics, gender equality index to analysis of variance and correlation analysis

Descriptive Statistics: Socioeconomic and demographic data collected from the survey were analysed using descriptive statistics like tables, means and frequencies.

Gender Equality Index: The Gender Equality Indexes used ratios of women to men to show the differences between the sexes for a given measure of equality. A ratio of 1.0 means women and men are equal. An index above or below 1.0 indicates inequality or imbalance for that measure: below 1.0, women have less than men; above 1.0, they have more. A gap that is closing over time, converging on 1.0, may result from changes in women's situation, or in men's situation, or both.

Scale-ranking Tool: The idea here is to explore male-female' perceptions of the relative participation of females in the decision making process in the use of the existing ICTs. As much as possible female were interviewed by female enumerators and male by male enumerators. The objective was to compare the results of both surveys and to measure the difference between the responses of male and female. For example, questions were asked about the participation of women in the decision-making process concerning key areas of ICTs. For example, respondents were asked to indicate the extent of encouragement given to them in the use of the new ICTs. Such responses include:

- C To a great extent
- C Somewhat
- C Not at all. Or

Who decides communication system the family should adopt- radio, television, newspaper etc., type of media source to use, who has access to the use of information channel? Who controls the use of the media? Using a decision scale of 1 female, 2 females and children, 3 males and females and 4 males.

As each successive answer was assumed to reflect less responsibility for women, 3, 2, 1 and 0 points were allocated, respectively. A total score of 27 points (i.e. 9x3) represented the maximum score and indicated the

respondent perceived women as having complete responsibility for decision-making for each of the nine ICTs. The scores of each sex group were reported in Tables.

Presentation of Results and Discussion

Socioeconomic Characteristics of Households:

Households' distribution by socioeconomic characteristics revealed that 55 percent of the respondents are youths indicating that most of them are still in their active working years and thus can cope with new developments (ICTs inclusive) in their environment. Respondents' distribution by gender showed that there are more males than females in the study area. Going by educational status, over two-third of the male respondents are educated (have formal education) while only one-third of the female respondents have formal education and this is expected to affect the use of ICTs by both gender differently. Female respondents who are not as educated as their male counterparts would not have adequate knowledge of the ICTs and would therefore refuse to use them even when they are available. Those educated among the female respondents have better knowledge of the benefits they could derive from the use of ICTs, including fostering an improvement in their agricultural (farming) practices and on their standard of living.

In short, male respondents use ICTs more than female respondents especially for the ICTs that are not easily within reach as is the case in the use of the Internet where 78 percent of male respondents make use of it as against 50 percent in the case of their female counterparts. Also, it was revealed that 82 percent of female respondents use e-mail. About 86 percent of male respondents read/use newspapers while 38 percent of female respondents use newspaper, which could be the result of the fact that more men are formally educated than women. Only in the case of telephone use that we observe 50 percent and 98 percent for the male and female respondents respectively and this could be attributed to the fact that the use of telephone do not require much competence and that telephone centers are now everywhere.

To further shed more light on the equality of men and women in the use of the different ICTs, the gender equality index revealed that of the 9 ICTs considered an index of less than 1.0 was obtained for 7 ICTs indicating that men (representing 77.8 percent) are more involved in the use of ICTs than women. As revealed in the Table 2 above, only in the case of telephone that we have more women taking the lead.

Table 1: Households' Distribution by Socioeconomic Characteristics

Household Characteristics	Frequency	Percentage of Respondents	
Age			
< 25	11	11.0	
25-34	31	31.0	
35-44	19	19.0	
45-54	24	24.0	
55-64	13	13.0	
> 64	2	2.0	
Gender			
Male	68	68.0	
Female	32	32.0	
Educational Status	Male	Female	
No formal	39	17	70.0
Have formal education	11	33	22.0
Household Size			
1-3	26		26.0
4-6	34		34.0
7-10	29		29.0
≥11	11		11.0
Primary Occupation			
Farming	54		54.0
Government Salaried Job	21		21.0
Trading	15		15.0
Artisans	07		7.0
Private Salaried Job	03		3.0

Source, Computed from Survey Data, 2007

Table 2: Gender Distribution of Respondents' Usage of ICTs

ICTs	Male		Female	
	Freq.	Percent	Freq.	Percent
Internet	39	78	25	50
E-Mail	41	82	17	34
Fax	22	44	16	32
Television	42	84	17	34
Radio	48	96	26	52
Newspaper	43	86	16	32
Telephone	50	50	49	98
Journals	32	64	30	60
Newsletter	12	24	23	46

Source: Computed from Field Survey, 2007.

Decision-making on the Use of ICTs: A number of questions were asked to ascertain the extent of decision made by male and female as regards the different kinds of ICTs in use and in doing this men were allowed to interview men while women interviewed women. This was done in order not to create free flow of information and to ensure that there is objectivity in the responses obtained.

Table 3: Relative Participation of Men and Women on ICTs' Usage

ICTs	Men	Women
Internet	3	2
E-Mail	3	2
Fax	2	1
Television	2	2
Radio	3	2
Newspaper	3	1
Telephone	2	3
Journals	1	1
Newsletter	1	1

Source: Computed from Field Survey, 2007.

Table 4: Frequency Distribution of Respondents Constraints to the Use of ICTs

CONSTRAINT	Male		Female	
	Freq.	%	Freq.	%
Affordability	25	50	41	82
Cannot access ICTs	20	40	43	86
Cannot Afford ICTs	19	38	39	78
It's too complex	35	70	40	80
Absence information of interest	3	6	10	20
Lack of credit/loan	44	88	48	96
Lack of technical Assistance	13	26	33	66
Erratic power supply	50	100	50	100
Inadequate information About ICTs	5	10	12	24
Don't just like ICTs	9	18	21	42

Source: Computed from Field Survey, 2007

The results obtained from the interview from both parties were rated on a three point scale- 3, 2, 1 indicating; to a great extent (3), somewhat (2)and not at all (1) and compared to ascertain the extent of use and indicate who has a better knowledge of ICTs and the benefits derivable from it. In the result, it was revealed that women were at a disadvantage in all the 9 different ICTs. For instance, a total score of 27 points if for all the 9 different ICTs the response is to a great extent (9*3=27). From the result obtained, the maximum score for women was 5 (i.e. 3+2+2+2+2+1+1+1+1 = 15) while the maximum score for men was 19 (3+3+3+3+2+2+2+1+1 = 20). The results generally revealed that men participated better in the use of ICTs than women and this is further depicted in Table 3.

Constraints to Use of ICTs: Table 4 showed that the constraints faced by respondents on the use of ICTs affects the female respondents more than it affects the male respondents. About 82 percent of the female

respondents indicated that they are constrained by the availability of the ICTs, 86 percent indicated accessibility as a constraint facing them while 78 percent of the female respondents indicated affordability as a constraint facing them, this is compared to the 50 percent, 40 percent and 38 percent of the male respondents respectively. It was observed on the field that equal proportion of both the male and female respondents complained about erratic power supply as a constraint facing them. About 88 percent of the male respondents indicated lack of credit/loans to obtain ICTs as a constraint facing them against 96 percent of the female respondents. This implies that the male respondents still have access to credit/loans to obtain ICTs better than the female respondents. This is further buttressed by the work of [2,8] in which it was said that the cost of connectivity is an impediment to the adoption of ICTs in developing countries. Because of women's overall lower economic status, the barrier of cost is more pronounced. The cost of connectivity likewise excludes women, as with limited access to finance and property, they are generally poorer than men are.

In terms of technical assistance, it is seen from Table 4 that 66 percent of the female respondents indicated this as a constraint facing them while only 26 percent of the male respondents did same. About 42 percent of the female respondents don't just like ICTs while 18 percent of the male respondents indicated same. This could probably be due to the anger and frustration experienced because of the poor quality of telecommunication infrastructures in the study area or the lack of appropriate and effective customer service.

Summary of Findings, Conclusion and Policy

Recommendations: The major findings of this study are that; majority of the respondents were between 25 and 54 years with a mean age of 45 years. A larger number of male respondents are formally educated compared to their female counterparts that are not educated. The results also revealed that male respondents had more access to information on improving their agricultural practices through the use of ICTs-they could also afford it more than their female counterparts. This disparity among the male and female respondents could be because the males are better advantaged in terms of education, roles and responsibilities generally. One of the striking findings of this study is that women barely use ICTs and when they do, women use these tools less than men, even when they are relatively literate. Knowing that women's involvement despite some resistance and constraints is a pre-requisite for their participation in agricultural development, there is therefore the need for gender mainstreaming and

encourage women in particular to embrace the use of ICTs so as to achieve the much desired growth and development. It is time to focus on girls and young women who, with education and exposure to new technologies, can quickly learn to operate enhanced information communication technologies and how to use them as tools for improving their lives. Without these interventions, women will remain information poor and will miss out in the opportunity to participate in improving their social and economic status and this will greatly affect the fortune of the country among the comity of nations.

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