

Full Length Research Paper

Access to and utilization of development information by rural women in Dire Dawa administrative council, Eastern Ethiopia

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Access to and utilization of information makes individuals to be more rational, increases decision-making abilities and help communities to identify sustainable opportunities and development solutions that are within their reach. Hence the purposes of this study were to assess rural women's access to and utilization of development information related to reproductive, productive and community roles performed by them in a case study conducted in Dire Dawa Administrative Council, Eastern Ethiopia. A two-stage sampling procedure was used to select 160 sample households. The data were obtained using quantitative survey and complimented with focus group discussion and field observations. Descriptive statistics were used to analyze the data. The results revealed that, almost none of them had frequent (four times and more per year) access to reproductive role information. On the other hand, the most accessible items on sometimes (once in a year) time interval were avoiding unexpected pregnancy (75.6%), vaccine for new born baby (67.5%) and hygiene of children (62.5%). However, 54.4% of them were not utilizing the information due to practical infeasibility of the information, lack of capital, shortage of water and cultural and religious influence. The same trend had been observed in access and utilization of productive and community role information. About 53.1% and 70% respondents did not have access at all to productive and community role information respectively. Only 20% and 5% of respondents were utilizing accessible productive and community role information respectively. Poor agro-ecological condition, lack of physical access to resources, low agricultural extension contact and capital to buy agricultural inputs are among the reasons given by those who are not utilizing the accessible information. Therefore, special attention should be paid in selecting communication channels that are most appropriate to reach and empower rural women. Moreover, communication programs and development information providers must deal with the various economic and social issues affecting women, including education, agriculture, health, nutrition, family planning, population growth, and the environment.

Key words: Access, utilization, development information, rural women.

INTRODUCTION

Communication in development has become a wide but specialized field in recent years, and may include: participatory mechanisms, service delivery, advocacy, civil society building, research dissemination, networking

initiatives and different uses of mass media (Burke, 1999). Communication is no longer seen as a one-way, top-down transfer of messages and information; instead, when applied to development, it is used to promote a

two-way process of sharing and participation. Communication of information and ideas has an important role to play in many arenas of social and economic development, which stand as a prerequisite for the improvement of individual and household well being. It facilitates individual and group innovation, the application of new knowledge, strengthens decision making abilities and can improve livelihood outcomes (Leeuwis, 2004). More importantly, communication promotes changes in attitude and social behavior and help communities to identify sustainable opportunities and development solutions that are within their reach. Accessing and using knowledge can be a process of self-empowerment. That is why communication and information flow is considered to be the main agenda in the development strategies of the third world in the present century.

Despite the massive changes to development communication which has seen a significant increase in the access of rural, peri-urban and urban communities to information technologies (DFID, 1999), there are many countries in Africa where rural areas have limited or no access to such channels and continue to be neglected even by more traditional forms of information dissemination. Moreover, variation in access to information is structured not only by poverty considerations but also those of social and cultural norms and importantly gender issues.

Ethiopia being a country with high degree of illiteracy and insufficient mass media channels faces problem of lack of access to information for the rural population. Especially for rural women who are in Ethiopia embedded with a lot of responsibilities and obliged to do longer hours than men, attention is not paid in awareness creation (Hedija and Bezabih, 2003) and dissemination of labour, time and drudgery reducing technologies (FAO, 1992). The chances to improve them from the traditional bound styles which are carried over from earlier generations seem to be less. To alleviate the problem one solution would be to increase women access and effective utilization of development information.

Even though, the grass root level network of development efforts by the governments and NGOs pave the way to access information at least to a limited scale, they would not be able to reach large majority of the rural poor particularly women. For instance, the current agricultural and health extension programs have been designed and implemented since 1995 and 2003 respectively in recognition of the fact that the major factor underlying poor agriculture and health services in Ethiopia is lack of access to information and empowerment of households and communities. The health extension service is a community based health service delivery program whose educational approach is based on

diffusion of information, which would change community behavior step by step. On the other hand the agricultural extension program in Ethiopia promote women's' participation in the agricultural extension activities and has adopted a family centered approach that deals primarily with households as a unit. However, it fails to capture the unique and important role of women in the household as a result it continues to marginalize them from the development process. Furthermore, the male-dominated extension system also often restrains from contacting and working with women due to the strong cultural taboos and value systems in rural areas (Frank, 1999; Dagnachew, 2002).

Generally despite the attempts made by government and NGOs to address gender issues, the level of empowering rural women in Ethiopia is very low. This is manifested by the suffering of women and girls from poverty, their low social status in the household and the community, low participation in decision making process, having less or no accesses to education and resources as well as domestic and farm workload. Therefore, the purpose of this study was to look into the extent of access to and utilization of development information by rural women from different agencies such as GOs and

NGOs and to know the extent of utilizing the available information. The study has explored access to and utilization of information by the respondents in respect of reproductive, productive and community roles (triple roles) performed by them, out of the development messages originated from different agencies. For the purpose of this study, 'Development information' was defined as all types of information flow pertaining to development aspects of rural life such as farming, family planning, home management, natural resource management generally considers any reproductive, productive and community role information. 'Access' is conceived as the access of rural women to development information related to their triple roles. 'Utilization' relates to the utilization of development information received by the rural women in performing their triple roles.

METHODOLOGY

Description of the study area

This study was conducted in Dire Dawa Administrative Council (DDAC) located in the Eastern part of Ethiopia, lying between 9° 49' N latitude and between 41° 38' and 42° 19' E longitude. In the West, North and East, it is bounded by the Somali National Regional States and in the South by the Oromia National Regional State (Agricultural Development Office of DDAC, 1998). After the reorganization of the older system of provinces in 1995, Dire Dawa becomes a chartered city (*Astedader Akabibi*), second largest city after Addis Ababa (Agricultural Development Office of DDAC, 2001).

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Table 1. Frequency distribution of access to development information related to reproductive role of rural women in DDAC (n= 160).

Reproductive roles	Frequency of getting information					
	Frequently		Sometimes		Never	
	Number	%	Number	%	Number	%
Cooking	-	-	68	42.5	92	57.5
How to feed the whole family	-	-	66	41.3	94	58.8
Vaccination for new born baby	2	1.3	108	67.5	50	31.3
Care of sick children	2	1.3	100	62.5	58	36.3
Hygiene of children	2	1.3	100	62.5	58	36.3
How to combine balanced food	-	-	68	42.5	92	57.5
Avoiding unexpected pregnancy	-	-	121	75.6	39	24.4
Hygiene of house and the surrounding	-	-	69	43.1	91	56.9
Home management	-	-	74	46.2	86	53.8

Source: Survey result.

Sampling techniques

The data used in this study were obtained from a household survey conducted in eight selected peasant associations (PAS) (the lowest administrative unit) of Dire Dawa administrative council in 2004. Site selection was based on accessibility, and homogeneity in socio-economic and physical characteristics including the presence of Government Organization (GOs), and Non-Governmental Organizations (NGOs). A two stage sampling procedure was employed. In the first stage, four PAs involved in programs run by the Ethiopian Catholic Church (ECC) and the Hararghe Catholic Secretariat (HCS) was selected purposively. It was assumed that these PAs covered by the NGOs would also have access to different government development programs. Another four PAs not involved with specific NGO projects but covered only by government services were selected randomly from the remaining PAs. In the second stage sampling a list of females in 'edir' in each village was used to select randomly a total of 160 sample households (117 females from male headed household and 43 from female headed households).

Data collection and analysis

The data were collected using structured and pre-tested questionnaire. Interviews and focus group discussions were used to compliment the data obtained through the field survey. A list of items reflecting reproductive, productive and community roles of women were used to collect the data. After pre-testing the data, reliability analysis was conducted to make sure the validity and reliability of items used to measure each concept (Appendix 1). Moreover to overcome some of the problems of recalling, maximum efforts were made to increase the reliability by further probing the response. Respondents were asked about their access and use of information limited to a time period of the last three years (2001 to 2003). The extent of information access were measured by using a three point continuum namely, 'frequently', 'sometimes' and 'never'. For those who gets information four times and more than per year could be classified as "frequent" access, and for those who gets information once per year or with unlimited time or if they were uncertain they could classified as "some times" access and those who do not have information access at all classified as "never". To analyze the collected data simple descriptive statistics were employed.

RESULTS AND DISCUSSION

Access to and utilization of reproductive role information by rural women

As indicated in Table 1, almost none of them had frequent information access, whereas, more than 50% of the respondents had access to information on 'some times' bases for few reproductive roles. The most accessible reproductive role information were, avoiding unexpected pregnancy (75.6%), vaccination for new born baby (67.5%), care of sick children (62.5%), and hygiene of children (62.5%). This result shows that there was somewhat better information access in health aspects while in relation to cooking, on how to combine balanced food, home management and on how to feed small livestock, the access trend was not encouraging. The items contribute more in improving reproductive role performed by women, if it were supported by development information. A study conducted in Eastern Hararghe by Karrippai and Hedija (2004), stated that rural women had access to information only meagerly in all the subject areas explored and among them child care, family planning, reproductive health and home management had better performance in that order; though inadequate.

Utilization of accessible reproductive role information was very low. As shown in Table 2, only 17.5% of them were utilizing the information while 54.4% were not. According to women's response practical infeasibility of the information, lack of capital, shortage of water and cultural and religious influence were among the reasons that limit them to utilize accessible information. The information provided for them are not considering their awareness level, educational level, where the majority of rural women are illiterate and live in remote areas. During the group discussion majority of group members said, 'let alone for cleaning of our children, we do not have

Table 2. Frequency distribution of utilization of reproductive role information and reason for non-utilization of accessible information (n= 160).

Extent of utilization	Number	Percent
Utilize the information	28	17.5
Not utilize the information	87	54.4
No access at all	45	28.1
Reasons for non-utilization		
Shortage of money alone	14	16.1
Shortage of water alone	30	34.5
Combination of practical infeasibility of information, lack of time, shortage of money, Shortage of water and influence of culture and religion	43	49.4

Source: Survey result.

even sufficient water for drinking'. This indicates how severe the problem is. A study conducted by Belay (2002) in DDAC stated that, in the DDAC, water is a limiting factor for both agricultural and domestic purposes. Another limiting factor to utilize accessible information is lack of capital. Almost all respondents were dependent on food aid provided by GOs and NGOs. The income they gained from different activities is not enough to fulfill their basic needs. In the study areas, the average income of the respondents was 677.40 birr/year with maximum income 10700 birr/year. Regarding cultural and religious influence, it's mainly related with family planning, attending advice during pregnancy etc. Most of them believed that children are gifts of God so that they do not want to use birth control. Furthermore, their spouses did not encourage and allow them to use contraceptives. Informal crosscheck was made with some of females' spouses' to know their stand about family planning methods, surprisingly, they were not willing to discuss the issue at all and even some of them were annoyed and said, 'why are you interfering with the work of God?'. Similar assessment by UNICEF (1993) observed that traditionally, conception/pregnancy is welcomed by the extended family system because children are regarded as God's blessing. Conception enhances the women's security because it ensures her continued married life. Where a woman does not conceive, within a year of marriage, neighbors begin to spread rumors of infertility. If she fails to conceive, the husband is liable to divorce her and to marry again.

Access and utilization of information related to productive role of rural women

The items used to measure the rural women's access to productive role information are indicated in Table 3. About more than half of the sample respondents (53.1%) did not have access at all to productive role information. The most inaccessible productive role information are how to harvest and thresh (85.6%), fodder preparation (78.8%), milking procedure (78.1%), care of

birth of animals (73.1%), application of pesticides and spray chemicals (73.1%), disease control measures of crop and livestock (72.5%), and cattle breeding (71.9%). About 41.9% and 41.3% of the respondents respectively had information access on 'some times' (once in a year) time interval for seed selection and sowing on line respectively. Only 1% and 0.6% of the respondents had frequent access to irrigation information and water harvesting technology respectively. This is insignificant compared to the overall contribution of women in agricultural activities. Even though gender division of labour in rural Ethiopia varies in terms of farming systems, cultural settings, location and the different wealth categories, women farmers perform up to 75% of farm labor, representing 70% of household food production in Ethiopia (USAID, 2013). The result is consistent with previous study conducted in Eastern Hararghe (Karrapai and Hedija, 2004) who observed that access to scientific information on crop production; environment and sanitation as well as livestock management were very insignificant for rural women.

As shown in Table 4, the utilization of productive role information was not encouraging. Among the respondents who had access, only 20% were utilizing the information while 26.9% were not. The main reason revealed by the respondents for non-utilization of the accessible productive role information was poor agro-ecological condition of the area. This issue was discussed in detail with group members as well as with key informants.

The agro-ecological condition of the area is dry, highly degraded, low rain fall pattern and most of the areas are not suitable to produce vegetables (mostly cultivated by women), fruits and cash crops due to the severity of land degradation and shortage of water as revealed by the respondents. In few of the study areas, they were using irrigation but it was not as such satisfactory because of the water level of rivers are decreasing and/or complete dryness from time to time. Moreover, limited physical access to resources, low agricultural extension contact and lack of capital to buy agricultural inputs are other

Table 3. Frequency distribution of access to development information related to productive role of rural women in DDAC (n = 160).

Items	Frequency of getting information					
	Frequently		Sometimes		Never	
	Number	%	Number	%	Number	%
Land preparation	-	-	52	32.5	108	67.5
Seed selection	-	-	66	41.3	94	58.8
Sowing on line	-	-	67	41.9	93	58.1
Fertilizer application	1	0.6	61	38.1	98	61.3
Harvesting and threshing	-	-	23	14.4	137	85.6
Storing	-	-	35	21.9	125	78.1
Application of pesticides and spray chemicals	-	-	43	26.9	117	73.1
Irrigation of farm land	2	1.3	48	30.0	110	68.8
Intercropping	-	-	54	33.8	106	66.2
Water harvesting technology	2	1.3	54	33.8	104	65.0
Cattle breeding	-	-	45	28.1	115	71.9
Care of birth animal	-	-	43	26.9	117	73.1
Disease control measures of crops and livestock	-	-	44	27.5	116	72.5
Cultivating vegetables	1	0.6	50	31.3	109	68.1
How to take garden products to market	1	0.6	50	31.3	109	68.1
Fodder preparation	-	-	34	21.3	126	78.8
Milking procedure	-	-	35	21.9	125	78.1

Source: Survey result.

factors for non-utilization of accessible information. About 51.9% of the respondents had no contact at all with extension workers. Only 5.6% of them had been visited by extension workers once in three months, whereas about 42.5% of them had been visited by extension workers only once in a year. Though the data used for this paper is relatively old (2004), its findings are in agreement with recent studies who observed that, the top-down approach, the perception that “women are not farmers” and the focus on getting model farmers to adopt fixed-technology packages (World Bank, 2010) has not changed significantly to increase women’s participation in extension programs. Moreover, a serious selection bias during placement of program participants is reported (Elias et al., 2013) as a result agricultural extension program tends to neglect poor farmers, particularly women (Ogato et al., 2009; Umeta, 2013). Furthermore, agricultural innovations rarely take gender-specific characteristics (Action Aid and CARE, 2012), particularly sufficient extension packages are not taken up for the dissemination of women friendly, labor and time saving and drudgery reducing technologies.

Access to and utilization of community role information by rural women

The survey results in Table 5 revealed that majority (70%) of the respondents were not aware of about involving in community activities. Only 0.8% and 29.5% of them had information access frequently and sometimes

respectively. According to those who are participated in our group discussion, “Community roles are often performed by men and women are being considered as incompetent to handle community issues and good decision making’. Even though the jobs are unpaid voluntary for both, but women are screened out from exposure, experience, status and power (FAO, 1998).

Those who had frequent information access were getting the chance because they were participating in GOs and NGOs group activities while others accepted the norm in which community activities are being given for men by the society and they did not realize themselves as half part the community.

As stated in previous section majority of rural women of DDAC did not have information access related to community role activities and even for those who had awareness about community participation, only 5% of them were actively participating in it. The respondents identified a certain number of constraints to women participation in community activities such as women are not eligible and not welcome by the society, men are not allow their wives and their workload causes poor time-keeping and prohibits their effective participation.

CONCLUSION AND RECOMMENDATIONS

This study clearly indicates that access to and utilization of different types of information by rural women was generally minimal. The survey results show that the most accessible information related to reproductive roles with

Table 4. Frequency distribution of utilizing accessible productive role information and reasons for non-utilization of accessible productive role information (n= 160).

Extent of utilization	Number	Percent
Utilizing the information	32	20.0
Not utilizing the information	43	26.9
No access to the information	85	53.1
Reasons for non-utilization of the accessible information		
Agro-ecological condition of the area	22	51.2
Limited physical access to resources and agricultural extension contact	13	30.2
Shortage of capital to buy inputs	8	18.6

Source: Survey result.

Table 5. Frequency distribution of access to development information related to community role of rural women in DDAC. (n = 160).

Items	Frequency of getting information					
	Frequently		Sometimes		Never	
	Number	%	Number	%	Number	%
Decision making in community issues	1	0.6	38	23.8	121	75.6
Participation in committees	3	1.9	37	23.1	120	75.0
Leadership position	1	0.6	31	19.4	128	80.0
Wedding ceremony with available economy	1	0.6	48	30.0	111	69.4
Informal institutions like <i>idir, ekub, mahiber</i>	3	1.9	62	38.8	106	66.3
Preventing environment pollution	-	-	54	33.8	106	66.3
Planting trees	-	-	60	37.5	100	62.5

Source: Survey result.

Table 6. Extent of utilization and reasons for non-utilization of community role information (n = 160).

Extent of utilization/ participation in community activities	Number (N= 160)	Percent
Yes I have been involving in community activities	8	5.0
No I did not involve in community activities	40	25.0
I did not have information at all	112	70.0
Reasons for non-utilization/ non-participation		
Women are not eligible and not welcomed by the society	17	42.5
Men are not allowed their wives	13	32.5
Workload	10	25.0

Source: Survey result.

'sometimes' time interval were, avoiding unexpected pregnancy (75.6%), vaccine for new born baby (67.5%), and care and hygiene of children (62.5%). But for other types of reproductive roles majority of the respondents did not have access to development information. Surprisingly, 54.4% of respondents were not utilizing the accessible reproductive role information due to practical

infeasibility of the information (not considering the existing situation for instance women's awareness and education level), lack of capital, shortage of water and cultural and religious influence.

The same trend had been observed in access to and utilization of productive and community role information. It was very minimal. About more than half of the sample

respondents (53.1 and 70%) did not have access at all to productive and community role information respectively. Only 20 and 5% of respondents were utilizing accessible productive and community role information respectively. Agro ecological condition of the area, shortage of water, limited agricultural extension contact and lack of capital to buy agricultural inputs are among the reasons given by those who are not utilizing the accessible productive information.

Though everyone accepts the fact that rural women constitute nearly half of the working population, having significant roles in reproductive and productive dimension and ought to have active roles in community affairs in the rural areas, the development information flow oriented to bring about desirable changes in their life is not even in the minimum required level. The results have proved that rural women here continue to be a neglected section of the population in terms of development communication efforts. Since large majority of them do not have any access to development information, and if at all they are constrained with many factors to utilize those information, and hence the translation of the change messages related to reproductive, productive and community roles remain to be skeptical.

Therefore, special attention should be paid in selecting communication channels that are most appropriate to reach rural women. Moreover, strategic changes should be taken in programs of GOs and NGOs working in the field to empower women which help to achieve an equitable development to all members of the community in general and for women in particular. Furthermore, women are involved in many aspects of rural life; their traditional knowledge systems are complex and holistic, thus, communication programs and development information must deal with the various economic and social issues affecting women, including education, agriculture, health, nutrition, family planning, population growth, and the environment.

Conflict of Interests

The author(s) have not declared any conflict of interests.

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Appendix 1. Results of reliability analysis of items that measures reproductive, productive and community roles of rural women.

Reliability analysis of items that measures reproductive roles of rural women

N of Cases = 43.0 N of Items = 9
Alpha = 0.9208

Reliability analysis of items that measures productive roles of rural women

N of Cases = 43.0 N of Items = 17
Alpha = 0.9535

Reliability analysis of items that measures community roles of rural women

N of Cases = 43.0 N of Items = 8
Alpha = 0.9242