

**Running Head: SOCIAL NETWORKS AND COMMUNICATION**

**Social Networks and Communication among Female Householders  
at 'Gedam Sefer' in Addis Ababa  
(Case Study)**

**Wassie Kebede Reda**

**Addis Ababa University, Graduate School of Social Work**

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**Approved by Examining Board**

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### **Abstract**

This research on social networks and communication, conducted among female householders living in Kebele houses at “Gedam Sefer” in Addis Ababa, is a pioneer study in Ethiopia. There is not previous research on this topic in Ethiopia, perhaps not in Africa that attempt to understand the use of social networks to improve poor women’s way of life. Yet, the importance of social networks is commonly understood and highly valued in Ethiopia and Ethiopian culture. However, no empirical data available that help to understand how social networks work in Ethiopian society to improve the lives of poor communities such as female-headed households. A social network is defined as a set of actors/nodes (persons, organizations, points, edges) linked by social relationships or ties of a specified type. Participants in this research were female householders. Ten cases were selected out of a random sample of 100 female-headed households living in Kebele houses who participated in a previous study in the Gedam Sefer community. Profiles of the cases indicate that majority of them are from poor households with meager income and poor housing conditions. This study identified five forms of social network: 1) neighborhood, 2) friendship, 3) kinship, 4) gender, and 5) ethnic-based. Most of the social networks are established within the geographic boundary where case informants are living. The results from this study further indicate that the roles and responsibilities of social network members within a given network system vary from one case to the other depending on the size, age and diverse purposes of the network systems they are engaged in. Physical communication among members of a given network is the best means of delivering information. For poor woman like those involved in this study, the role of social networks in responding to social and economic needs of network members is fundamental. Non-material values play important roles for individuals to choose their network types and members than material values. Case informants who have more members in their networks have strong interaction than those with few members.

## **Social Networks and Communication among Female Householders at ‘Gedam Sefer’ in Addis Ababa (Case Study)**

Kadushin (2004, p 4) notes that “social scientists have investigated three kinds of [social] networks: ego-centric, socio-centric, and open system networks.... Egocentric networks are those networks that are connected with a single node or individual. Socio-centric networks are networks in a box and are closed system networks, e.g. students in a classroom. Open system networks, are networks in which the boundaries are not necessarily clear; they are not in a box.” Unlike whole networks, egocentric networks are centered on a focal individual (McCarty, 2005). The focus of this research is, therefore, to study egocentric (personal) networks.

Different literatures define social networks in a number of ways. Charles (2004) and Robert and Mark (2005)) define social networks as a set of actors (persons, organizations, points, edges) linked by social relationships or ties of a specified type. Networks can have few or many actors and one or more kinds of relations between pairs of actors. A tie or a relation between two actors has both strength and content. The content might include information, advice or friendship, shared interest or membership, and typically some level of trust. The level of trust in a tie is crucial.

Other literature quoted by Sebsib Belay (2003) describes social network as the structure of linkages between individuals or groups of individuals. Such networks have two dimensions: structure and function. The former includes the type of individuals in the network, and the latter covers the qualitative and behavioral aspects of the social network “The structural properties of personal networks are potentially fruitful variables for explaining differences in attitudes, behaviors and conditions across individuals” (McCarty, 2005, p. 1). Social networks always consist of two variables, the nodes (actors) and the lines through which the nodes communicate.

The third variable which is added to the list is communication. When an actor interacts with another actor via a given mode of communication, the relationship is considered as active and deliberate.

To have adequate knowledge analyze of social networks is as equally important as having interest to understand the social network itself. Jackson, Kirkland, and Bimler (2005, pp. 1-2) defined social network analysis [social network theory] as ...”a social research tool that investigates both individuals and their relationships within a population. Personal network analysis examines the open ended groups of people known as ‘alters’ that an individual known as an ‘informant’ knows.” It is further explained by Skillicorn (2004) that social network analysis explores the structure of groups in human society by modeling individuals, places, and objects as nodes of a graph, and adding links between nodes to represent relations among them.

Communications or relationships between the actors are more relevant than the actor’s personalities or attributes in social network analysis. The person’s way of life in the community is determined by the freedom and degree of communication the person has developed and the associated resources they possess. The type and degree of communication exercised by individual members within the community or outside of that particular community is determined by or is a product of the existing social networks. Alan (1995) and Peter and Nan (1985) state that social networks impose both constraints that limit options and provide resources that enable individuals to act in various ways. “Communication can create a sense of connectedness or feeling of being in touch; in awareness systems this may be more important than the content of the communication” (Rettie, n.d. p. 3).

The characteristics of nodes (alters), the relationships (ties or edges) and means of communication (lines of ties) are measured using a number of parameters. Some of the

parameters to measure the nature and characteristics of social networks include the distance, density, measures of centrality, directionality and degree of closeness and between-ness.

Measures of centrality describe actors' positions in a network relative to others and in relation to the complete network. The measures of centrality are useful because it captures independence from the control of others in terms of accessing (the resources) of others in a network. Network density on the other hand illustrates the degree to which network members are tied to other network members. Theoretically, information can diffuse more rapidly in a dense network than in a sparse one. Directionality describes the possible paths an actor can be connected to any other actor or actors. Since networks can be directional, a node can be connected to many others by virtue of its own actions or preferences. All positions in networks are defined by their relationships with other positions or nodes (Charles, 2004; Cornwell, 2005; Kirsten & Thomas, 2003; & Ulrike, 2001).

Krebs (2004) defines the concepts of between-ness and closeness measures. Between-ness measures the control a node has over what flows in the network. How often is this node on the path between other nodes? Closeness measures how easily a node can access what is available via the network. How quickly can this node reach all others in the network?

Wosenu Yimam (2000, p. 12) state that "Social networks are part and parcel of culture which constitutes a fountain of ... values, aspirations, patterns of behavior, and relationships with all that make up the environment." Since they are embodied with community practices, institutions, relationships and rituals, social networks as [communal resources] provide problem solving strategies for local communities. Bandyopadhyay and Saha (1998, p. 24) argue that "incorporating ... social networks and communication into planning allows culture and belief systems to direct the ways in which information are collected and used."

The main focus of literatures described above is to understand social networks from a quantitative measurement perspective. The qualitative aspects of social networks such as the value and meaning of network and connectedness in the individual, group and community ways of life are the other aspects of social network elements social network analysts needs to pay attention to in research. Social networks are considered as part and parcel of social capital. The definition given for social capital is a close replica of the concepts related to social networks.

Social capital is defined in different ways. Rafaeil, Ravid and Soroka (2004) describe social capital as features of social organizations such as networks, norms and social trust. In more specific terms, social capital refers to resources such as information, ideas and support that individuals are able to procure by virtue of their relationships with other people. These resources-capital-are “social” in that they are only accessible in and through these relationships,

Unlike physical capital, (tools and technology) or human capital (education and skills), which is essentially the property of individuals social capital is the property of many in common. The structure of a given network that is who interacts with whom, how frequently, and on what terms has a major bearing on the flow of resources through that network. Those who occupy key strategic positions in the network, especially those whose ties span important groups, can be said to have more social capital than their peers, precisely because their network position gives them heightened access to more and better resources (Christiana, Deepa, Veronica & Michael, 2003). Social capital also refers to the network position of the object or node and consists of the ability to draw on the resources contained by members of the network (Lin, 1999) as cited in Kadushin (2004).

As part of social capital (social resources), the study of social networks should focus on understanding the connections between people. These connections are valuable, because they

identify the way in which people gather the different types of support that they need including emotional, economical, functional, etc. In most cases, individuals have great control over the structure of their social networks.

This research has developed an interest to apply social network theory (analysis) to understand social networks of female householders at Gedam Sefer by analyzing the nature and functions of social networks that exist among this group of women. It emphasizes the qualitative aspects of social networks and associated relationships. How social networks as social capital helps people to deal with their emotional, social and economic needs is another interest in this research. Specifically, the results of the research build knowledge on social networks and communication that exist among poor women in urban communities in Ethiopia. Moreover, it enriches previous research conducted on the same population and serves as an empirical basis for planners who may employ community assets and a capacity-based planning approach to initiate development-oriented projects.

The overall premise of this research is to justify the following statement. The more female householders have established different forms of social networks, become active players in such networks and develop better communication skills, the better their capacity to deal with social and economic issues compared to those who have fewer forms of social networks, are less active and who develop limited communication skills.

The specific focuses of the research are to:

- Assess the existing social networks and communication of female headed householders;
- Understand the roles and functions of existing forms of social networks and communication systems;

- Understand how existing social networks and communication are employed to deal with emotional, social and economic issues; and
- Understand the roles of social status in determining the individuals' places in their social network positions.

In order to organize the pieces of information required to explore the central questions in the study, specific research questions were formulated and employed. Specifically, the research questions include understanding the qualitative measures of the three main characteristics of social networks, namely; the degree of centrality, between-ness of centrality and closeness of centrality. Moreover, the following were areas of interest of this research.

- Does knowledge on social networks determine the nature of social networks that individuals develop interest to establish/join and communication they utilize?
- Do the degree and diversity of engagement in social networks determine problem solving capacities?
- Do social communication skills influence the skills and capacities to deal with social and economic problems? and
- Do the perceptions of individuals towards social networks and the benefit therein determine their ability to deal with emotional, social and economic needs?

## **Methods**

### ***Participants***

Participants in this research were female householders living in Kebele<sup>1</sup> houses and who were members of female headed population participated in a study entitled “*Slum Housing and Income Generation: Women's Role in Obtaining Public Housing in Ethiopia with Particular Emphasis of Arada Sub-City, Kebele 03 in Addis Ababa*” (Johnson, Wassie Kebede & Andom Gessese, 2005). Ten cases were selected out of 100 randomly selected female heads of households who participated in the previous study. The 10 cases were selected based on specific criteria which included: 1) old age woman (over 40 years), 2) young age woman (between 18-30 years), 3) woman with traditional skills, 4) woman from group income-generating enterprise, 5) woman with illiterate/primary education level, 6) employed woman, 7) single mothers, 8) widowed woman with children, 9) woman with secondary/tertiary education level, and 10) self-employed woman.

The 100 women who participated in the previous study were sub-grouped into ten clusters and a probability selection technique was used to identify one case from each subgroup. The purpose of sub-clustering was to get better representation of cases from the larger group of female householders who represent different social and economic factors. However, during random selection, unintended bias could have happened as women may likely fall into more than one group. Nonetheless, an attempt was made to randomly select the 10 women as to their fit within the sub-groups. Table 1 below illustrates how individuals were clustered into groups.

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<sup>1</sup> Kebele is the lowest body in government administrative structure

Table1: clusters of cases representing different groups

Case criteria of selection	No. of individuals in the cluster	Selected case	Probability for selection
Old age women (>40 years)	10	1	0.100
Young age women (between 18-30 years)	5	1	0.200
Women with traditional skills	7	1	0.142
Women engaged in group business <sup>2</sup>	8	1	0.063
Women with illiterate/primary education level	13	1	0.077
Government/agency employed women	9	1	0.111
Single mothers	11	1	0.091
Widowed women with children	5	1	0.200
Women with secondary/tertiary education	4	1	0.25
Self employed women	28	1	0.036
Total	100	10	

The clustering process was based on first hand information available from the 100 women to fulfill the criteria mentioned above. Otherwise, it does not mean that a woman grouped in one of the clusters does not have potentiality to fulfill other criteria. For instance, the woman with traditional skills was also a government employee, but first choice was to group her under women with traditional skills. Some women had high chance/probably for being selected from a specific cluster members compared to others in other cluster members due to small size of such clusters. For instance a woman from employed group had high probability of being selected compared to a woman from illiterate/primary education level group.

This research was conducted with the permission from the Office of the Protection of Research Subjects (OPRS) at Chicago on the basis of the amendment to previously approved research on Slum Housing and Income Generation: Women’s Role in Obtaining Public Housing in Ethiopia. The researcher had taken a CITI course available online from University of Illinois at Chicago (UIC) for research assistants (RA) before undertaking this research.

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<sup>2</sup> Women in a group form engage in more than one but related business.

Case informants agreed to undertake the research based on signed consent agreement and confidentiality procedures. The informed consent translated into Amharic was read out for each case representing different clusters of women. Completing all the questions were considered as agreement in the written consent. A payment arrangement was made to compensate time spent by the participants to provide information to the study (refer the Consent Form on Annex 2). Interviews were conducted in the homes of each case respondent. This was selected appropriate because most of the cases preferred this option since they perform their business around their compound.

### ***Apparatus***

Only standard pens and pencils were used to fill out the semi-structured questionnaires. To help illiterate women to be clear with questions related to interpersonal networks, pictorial presentations/aids which were copied from a clip art file available in a computer. Most of the pictures are with Western faces. Only one picture represents an Ethiopian face which was done based on the consent of the woman. The aim was to show lines of networks. The representation of pictures from Western faces did not bring any gap in communication with respondents during explanation provided about the meaning of networks (see Sample pictorial symbols in Annex 3)

### ***Procedures***

Detail semi-structured questionnaires, (developed by the researcher) (see Annex 1), were administered and data were collected emphasizing of four main components of social networks and communication. Before the questionnaire was administered, it was reviewed by the thesis advisor and used by approval. The questionnaires were pre-tested for cultural, social and political compatibility and adjusted accordingly. Pre-test was done by interviewing five female householders from 'Gedam Sefer' who were drawn from the population the case informants were

drawn. Based on the feedback from the pre-test interview, unclear, cultural sensitive and less relevant questions were revised. The researcher administered the questionnaires. Amharic language was used as media of communication between the respondents and the researcher. Translation and information was filled out in the questionnaires in English language at the time of the interview. Informants were instructed to feel free to provide all relevant information as their names and identities will be known only by the researcher and all the information they provide, they will not be liable to any legal or ethical penalty.

Interviews were made going door-to-door, first by making an appointment based on a personal visit by the researcher. Two sessions of interviews were conducted with each respondent to prevent possible fatigue and exhaustion, since the questions were too long to complete in a single session. In most of the cases, interviews were done on consecutive days, which was helpful for respondents to provide information with fresh memory. Kebele administrators, who were also helpful during the previous research, made tracing of houses of all identified cases and made all appointments. When time was not convenient for some of the cases other appointments were made in a same day or next.

The rule of selecting the focal person to collect information about other network members was applied. The ten cases were used as focal nodes (edges) and identified network members that each focal node is connected to. The focal nodes were asked to report which of the nodes that they are tied to and how they are tied to one another (Hanneman, 2005).

Analysis of social networks and communication was made using UCINET software version 6.0 (Borgatti, Everett & Freeman, 1999), which is the compatible software to analyze social networks.

The research was done with the following two limitations.

- a) The cases involved in the research are few in number and cannot represent all female householders in Gedam Sefer community.
- b) The cases cannot by any means remember all of the networks they have established/passed through in life. Prioritization of highest priority network members from all network members available in an individual's social network system was difficult and cannot be free of bias.

## **Results**

The result of the research is organized under two major headings, namely multiple and individual case analyses.

### ***Multiple case analysis***

The multiple case results are summarized based on the following six major categories.

#### ***1) Personal profiles of cases***

Personal profiles of the ten cases drawn from the women identified from 100 female householders indicate that four of them are single in marital status, two are separated, three widowed, and one divorced. Among the ten cases, four are illiterate in their education status, one at primary level, two at the secondary level and other three in tertiary level of education. Three cases have 2-4 family members, four have family members of 5-6 persons, and the rest three have 7-8 persons under their support. Table 2 summarizes the above description.

Table 2: Basic information of cases

Frequency of marital status		Frequency of education status		Family size of cases	
Single	4	Illiterate	4	Number of cases	Family size
Separated	2	Primary	1	3	2-4 persons
Widowed	3	Secondary	2	4	5-6 persons
Divorced	1	Tertiary	3	3	7-8 persons
Total	10		10	10	

Half of the cases earn their income through their own business (small trade), two cases are employees of government/non-government agencies, and other two persons earn their income through a combination of employment and their own business, and employment and support from others. One case lives on support obtained from other individuals. Three cases earn minimal monthly income of 100-150 Birr per month; four cases earn 151-400 Birr per month; and the remaining three cases earn over 400 Birr per month.

The question asked on the availability of basic information and communication equipments (radio, television and telephone) at home; show that nine of the ten cases have both radio and telephone, while only seven have television in addition to the radio and telephone.

A self-perception question was asked to ask the women to categorize themselves in terms of economic status. Half of them (5 cases) put themselves from the poorest economic group of people who are able only to fulfill household basic needs. Three cases identified themselves from the well-off economic group who save some money and assets beyond fulfilling basic needs. The remaining two assume that they are from the very poor economic group who cannot satisfy their households' basic needs.

As an indication for the quality of housing, access to the nearest road, condition of maintenance and attachment to other houses were asked. From the responses and observations

made, it was identified that the houses of seven cases were found to be far from the nearest road. Nine of the houses were attached with other houses in left and right sides. The houses of half of the respondents are old and without proper maintenance while the other five houses are still old but in a good condition with proper maintenance. A similar number of cases claimed that they own the Kebele houses by their own name while the rest explained they have owned the houses given as a gift either from relatives or from neighbors on conditions of death members of their family. The ultimate ownership of the houses remains with the Kebele.

**2) *Social network inventory: General information***

The direct social networks inventory of the case respondents indicate that those cases drawn from young and illiterate/primary education sub-groups of women have between 11-15 people in their direct social networks. Cases drawn from sub-groups of women with traditional skills, those engaged in-group business/enterprise, and single mothers have direct social network members of 16-30 people. Further inventory indicated that representatives of old, self-employed, and secondary/tertiary education level women have direct social network members ranging from 31-60 people. Cases of employed and widowed women have the highest number of people in their direct social networks. Both of them have over 150 people in their direct social networks. The so called “rule of 150”, states that the size of a genuine social network is limited to about 150 members (Wikipedia, 2006). The case representing widowed women has the highest number of people in her indirect social networks, which is estimated to 200 individuals.

Generally speaking, every case has a smaller number of people in the indirect social networks than in the direct social networks. Indirect social networks in this study are defined as relationships of people without physical acquaintance to each other but that still have some contribution in the overall life of an individual who potentially claims to have some kind of

interaction. For example, if someone has an Internet communication with somebody else and shares some ideas and information but do not necessarily knows each other by name, status, position or physical appearance, such kind of interaction is said to be an indirect social network.

Sex compositions of social network members associated to each case reveal that majority of them are females. However, all of the cases still have few male members in their social networks.

To have more and detailed information about social networks and communication that exist within each case, all ten cases were asked to list the ten priority persons from all the possible members in their direct social networks. Reports from old women and self-employed women have only five and six individuals respectively. The majority of the ten individuals listed as their priority persons were females. The cases specifically drawn from old and widowed women's groups have identified all female members in their priority social circles.

The age range of members within the priority social networks of each sub-group of women shows diverse categories. But, in general, the ages of the members in their priority social networks go along with the ages of the case respondents. For example, network members in priority persons of the case drawn from old women show that the minimum age is 40 years. However, the case represented from young group of women has network members ranging from the age of 20 years to 60+, and the case drawn from employed group of women has network members with the age range of 16 years to 80+.

Place of residence is assumed to be key criteria to establishing/joining a given social network. To test this assumption, case respondents were asked to identify the place of residence of persons in their priority social networks. Cases drawn from women with traditional skills, illiterate/primary level of education, single mothers, and widowed and secondary/tertiary

education level stated that their network members are living in Gedam Sefer or very close to Gedam Sefer. Other cases, however, stated that although majority of the members in their highest priority social networks live in Gedam Sefer while some other persons are still living outside of the neighborhood. Cases in this category include those drawn from old women, self-employed women, women with group enterprise, and women with government/agency employment.

Places of origin have an impact on social network establishment. A question was asked whether all network members of each case were born in Addis Ababa. Only two cases of women with traditional skills and group business stated that all of their network members in their highest priority social networks were born in Addis Ababa. The rest cases explained that majority of their network members are born outside of the city particularly in similar places where the case informants were born. For the case drawn from single mothers all ten individuals in her highest priority social networks were born outside of Addis Ababa. The case represented from self-employed women does not know the birthplaces of any of the members in her priority social networks.

All the cases explained that majority of the members in their highest priority social networks have similarity in religion with the informants themselves. Seven cases explained that all members in their highest priority social networks are Orthodox. On the other hand, three cases drawn from women with traditional skills, illiterate women and secondary/tertiary education level have members in their highest priority networks coming from Orthodox religion in majority of the cases as well as from Catholic, Protestant and Muslim religions.

In the same analysis, ethnic composition of network members in the highest priority social networks of majority of the cases show that there is no single ethnic based social network.

However, a majority of the members in the highest priority social networks of each case come from Amhara ethnic group. Three cases of from women of the young age, with traditional skills and with group business/enterprise stated that all members in the highest priority social networks are from the Amhara ethnic group. Although all members of the highest priority social networks for woman represented from group business come from Amhara ethnic group, the case herself is from the Oromo ethnic group.

The centrality theory [degree, closeness and between-ness] describes the location of individuals in the network in terms of how close they are to the centre of the action in the network (Kapucu, 2005). The degree of between-ness or level of influence can be understood by responding to the following question. Who initiated for the establishment of the social networks? On the other hand, the same issue can be made clear by asking who has first started the relationship. Cases represented from old women and from those with illiteracy/primary level education weak domination or influential power over the rest of the members in their priority social networks. These two cases are not centers of attraction to any social network relationships, In other words, they move towards others in the first establishment or contact. Others had more power or resource than they had at the time of establishing/joining their social networks. In contrast to this, the case from the group business/enterprise has such high influential power that the case made no first contact. This was followed by a woman represented from employed women's group who made a first contact with only one person.

For the case drawn from those women engaged in-group business, all the ten individuals in her highest priority social networks made the initial contact with her. Similarly, for the case from employed women, nine persons in her highest priority social networks had made first contact with her. The other two cases were centers of attraction compared to other cases. The rest

of the cases have power ranging from weak to strong depending on their capacity in leading or influencing other network members. However, a majority of the cases indicate that they had influential power in the process of establishing first social network contacts. Table 3 summarizes the above description.

Table 3: Number of members in most priority social networks with who the cases made the first contact

	Case representations of women from ten sub-groups									
	Old	Self employed	Young	With traditional skills	Group business	Illiterate/primary education	Employed	Single mother	Widowed	Secondary/tertiary education
Number of persons with whom the cases made initial direct social network contacts	10	6	7	7	0	10	1	6	9	5

Frequency of interaction among members of a given social network over a given period is one of the possible parameters used to understand patterns of interaction and centrality measures. The more frequency of interaction between or among network members is observed in a given period of time, the closeness and cohesiveness of the members in the network system.

Theoretically, “actors who have more [frequency of] interaction to other actors may have access to, and able to call on, more of the resources of the network as a whole” Kapucu (2005, p. 9). The same idea is well stated by Hanneman (2005, p. 102) in that “actors that receive information from many sources [through high frequency of interaction] may be prestigious (other actors want to be known by the actor, so they send information), Actors that receive information from many sources may also be more powerful - to the extent that ‘knowledge is power.’” The analysis of frequency of interaction of all the cases with their highest priority network members

shows that there are quite divergent levels of interaction. The high frequency of interaction of the cases with their social network members is observed among those cases represented from young group and women with traditional skills in which almost all of the network members interact over five times in a month.

A weak frequency of interaction is observed in the networks of the case represented from self-employed women where she has a maximum of contacts with members only three times a month. In majority of the cases, the average frequency of contacts made with members of the priority social networks is five times a month.

Position in social networks, among other things, is the reflection of status and power in relation to economic and social lives. Theoretically, individuals from relatively similar economic and social categories establish direct social networks. This research discloses that the theoretical assumption does not necessarily hold true at least to the members of the community involved in this study. It is only two cases drawn from old and group business/enterprise sub-groups of women claimed that all of the members in their priority social networks are coming from well-off economic groups. Further analysis of the case represented from old women's sub-group shows that, the case herself is coming from economically very poor group of women who cannot even afford basic household needs, such as food, clothing, medication and other related necessities. The rest of the cases explained that members in their highest priority social networks are from diversified economic groups ranging from well-to-do to very poor economic status.

In terms of social status, there are not many people who are subordinates to others in the social network relationships/interactions. A few members may play a dominating as well as an influential role in the interaction of members in a given social network. But, many of the cases believed that members in their highest priority social networks are influential, but not in a

position to dominate others. Mutual respect and reciprocity is the abiding rule in social network interaction as membership is based on free will and individual interest.

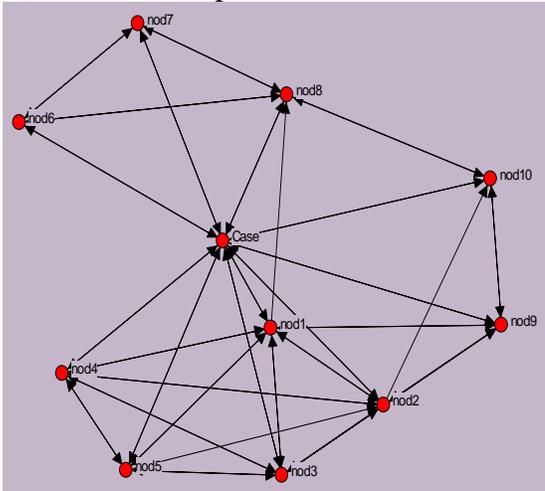
Like any other social system, social network systems can emerge, grow, get complex, or remain without structural or functional change for a certain period of time and can eventually die. For the question asked in relation to the possible changes/dynamism that could have been occurred during the last two years on the nature and complexity of a given social network, there was no similar answer from the case respondents. Seven cases stated that the social networks in which they are members did not show any structural or functional change for the last two years. Only three cases representing women with traditional skills, group business/enterprise and government/agency employee expressed that their direct social networks got more complex and diverse in structure and function during the last two years.

The interactions of case informants with members in their preferred social networks indicate both complete and partial relationships. Complete interaction is a form of relationship where every member in a given social network has a direct relationship with every other member without the presence of any broker in between or with no structural holes. Partial interaction is a form of relationship among members in a given social network in which every one of the members in the network may not necessarily directly interact with other members, in which case the presence of a broker in between is possible.

In this research a complete interaction among members in the priority social networks is observed among the cases drawn from women with traditional skills, group business/enterprise, illiterate/primary education group, widowed group, single mothers group, self employed group, and secondary/tertiary education group. The only cases that have no full interaction among members of the highest priority social networks are the women representing young and

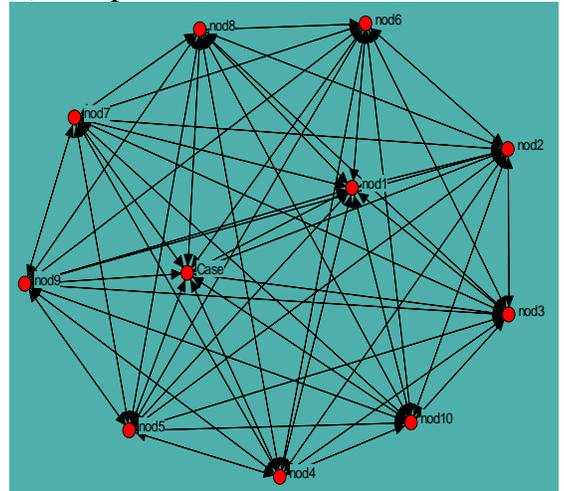
government/agency-employed groups. The following diagrams compare partial/incomplete versus complete interaction of social network members of the young and widowed women's group.

A) Partial/incomplete network



**Diagram1: Social networks established by young women.**

B) Complete network



**Diagram2: Social networks established by widowed women.**

The above two diagrams indicate different in degrees of closeness among network members. “Degree is simply the count of number of different persons each actor communicates with”, (Richards, 2005, p. 3). Diagram 1 describes a partial/incomplete network. Only one member (which is the case informant) has complete relationship with all other members, i.e., she has interaction with ten alters. The case informant who has a full level of interaction with the rest of other members has more opportunity for better information and consequently may have more power than others. The remaining nodes have a preferential interaction. Node 8, for instance, has five interactions; where as Node 6 has only three interactions.

Diagram 2, on the other hand, shows full level of interaction and much more closed networks. The interaction is non-preferential or is complete for each node. Looking closely at the relationship among members in Diagram 2, the influential power is equally shared (at least theoretically) among each member. Competition for power and centrality is stiff in this social network group. The evidence is that members of the network need to take the position for leadership and are eager to control movements of network members. The possibility of reaching a stage of stagnation is high due to low interest of members to bring additional information and limited dynamic thinking as the result of lack of a centre of attraction from any of the members.

To understand the possible degree of interaction (total size of web of interactions) in a full interaction where every one is connected to all other members, the mathematical formula denoted as  $K * k - 1$  where  $k$  is the possible number of times a node can make interaction with other network members (Hanneman, 2005). In Diagram 2 above, for instance, one network member can make interactions with ten possible other nodes. The total interaction for this social network groups is therefore,  $(11 * 11 - 1) = 11 * 10 = 110$ . each line is counted manually, it is exactly 110.

3) ***Forms of social networks and their functions***

This part of the research focuses on explaining the following issues in relation to social networks and major functions they play.

- The available forms of social networks;
- Reasons for individuals network members to choose one form of social network instead of another;
- General functions of the social networks;
- The specific functions each kind of social network plays;
- Priority form of social networks chosen by members of a given social network;
- Reasons for prioritizing one social network over another;
- Frequency of interactions of members among each other and with the case informant for a given three forms of social networks;
- The roles each network has to play for the benefit and wellbeing of members; and
- Ages of networks identified by each case informant.

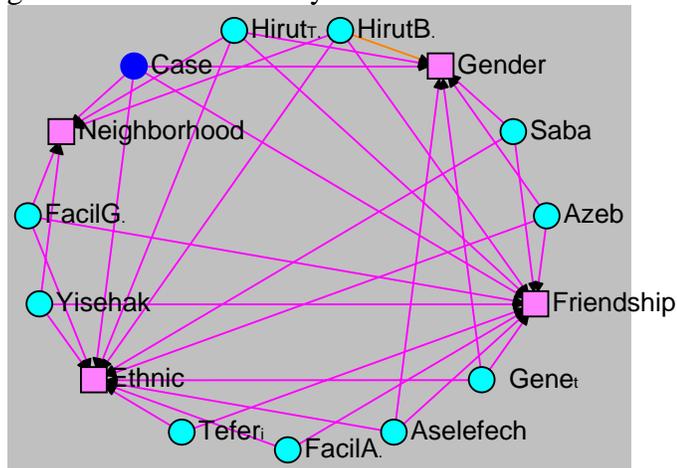
The findings of this study indicate that culture, tradition, social and economic factors are the main criteria for individuals to select members of their social network. Major categories of direct social networks established by the cases involved in this research along with other network members falls under the following five categories.

- Kinship based social networks;
- Neighborhood based social networks;
- Friendship based social networks;
- Gender based social networks; and
- Ethnic based social networks.

Information gathered on the forms of direct social networks that the cases have established with their respective network members indicate that the majority of the informants have founded/established more than one form of social network. The cases represented from old, self-employed, government/agency employed, and single mothers have established a neighborhood form of social networks with their respective closest network members. The explanation does not mean that these cases do not have any other form of social networks. It is only to explain that their closest ties are established with the nodes they identified as their neighbors. Otherwise they could have different forms of social networks as they do have many people in their overall direct social networks.

In contrast to the four cases mentioned above, the remaining six have more than one form of social networks simultaneously established with individuals in their priority social networks. The following diagram illustrates examples of the forms of social networks established by woman with traditional skills and other people in her closest social circle.

Diagram 3: Social networks established based on friendship, neighborhood, gender and ethnic ties by woman with traditional skills



Note: the names are hypothetical

The square boxes above indicate forms of social networks. The circle boxes on the other hand indicate nodes of the social networks. The lines with arrows connect members with their preferred form of network. The diagram indicates that two of the ties (ethnic and friendship) attract every one of the members in the network system. This is what is called a full membership or complete network. Other ties (gender and neighborhood) attract only members who can fulfill certain criteria by virtue of being ideal to fulfill those particular criteria. For instance to become part of a gender based social network members should be drawn from similar gender. In the same token, to become members of a neighborhood based social network, members should live in a similar neighborhood.

Depending on their own preferences, the cases involved in this study have chosen different forms of social networks. Some have similarities in their choices while others have differences. Summary of the forms of social networks chosen by each case is presented in table 4.

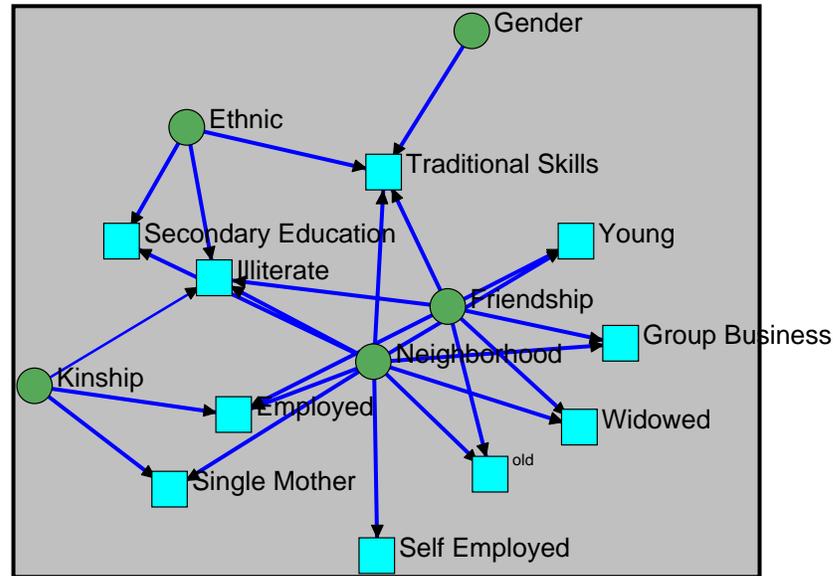
Table 4: Forms of social networks chosen by ten cases involved in the study

Forms of social networks chosen by each case	Case representations of women from different sub-groups									
	Old	Self employed	Young	With traditional skills	Group business	Illiterate/primary education	Employed	Single mother	Widowed	Secondary/tertiary education
Kinship social network	no	no	no	no	no	yes	yes	yes	no	no
Friendship social network	yes	no	yes	yes	yes	yes	yes	no	yes	no
Neighborhood social network	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Gender social network	no	no	no	yes	no	no	no	no	no	no
Ethnic social network	no	no	no	yes	no	yes	no	no	no	yes

Note: work based social network was not identified by any of the cases.

The above table can be diagrammatically expressed as follows.

Diagram 4: Forms of social networks established by each case involved in the study



When one looks at Diagram 4, there is one form of social network which becomes a denominator/common interest for every case respondent. Each case has established neighborhood-based networks. This result shows that these female householders are living with a traditional focus where the value of neighborhood is very high while at the same time these females are living in the big city of Addis Ababa. The other common feature for majority of the cases is observed through friendship forms of social network. Seven of the cases have established a friendship based social networks. A gender-based network is preferred by only one case represented from women's group with traditional skills. This is an indication that women do not develop interest to establish networks to deal with gender related issues.

Cases have multiples of reasons when they choose to join or establish one form of social network over other forms. The common denominator which the majority of the cases choose a kind of social network system depending on their trust in members who are already in the network or those who want to establish a new one. Mutual understanding among network members to make the functions of their networks more purposeful is another main reason. In addition to these reasons, two individuals based decisions to join or establish a given kind of

social network, there are other external factors, most of which are related to social, cultural, economic and religious obligations/requirements.

The cultural, social and religious settings and associated orders/obligations urge persons to join certain groups of people and not others. On top of these written and unwritten rules/obligations, the day-to-day economic interaction plays its own role in the individuals' state of mind in deciding which social network to chose and whom to prefer to be member of the network.

The five forms of social networks mentioned earlier are chosen based on all or part of the criteria mentioned here. The case representing women who are involved in the group business who choose, for instance, kinship social network based on trust, mutual understanding, and cultural, social, economic, and religious orders/obligations. For the same form of social network, the case representing single mothers uses only trust, mutual understanding and cultural order/obligation as criteria. However, in one-way or another, all the cases involved in this study use more than one criterion (reason) to establish or join one or another form of social network systems. This is summarized in Table 5.

Table 5: Reasons for choosing forms of social networks

Reasons for choosing forms of networks by the cases and members therein	Cases represented from sub-groups of women									
	Old	Self employed	Young	With traditional skills	Group business	Illiterate/pri mary education	Employed	Single mother	Widowed	Secondary/t ertiary education
Trust	yes	no	yes	yes	yes	no	yes	yes	yes	yes
Mutual understanding	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Social obligation	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Cultural obligation	yes	yes	yes	yes	yes	yes	yes	yes	yes	no
Economic obligation	yes	no	no	no	yes	yes	yes	no	yes	yes
Religious obligation	yes	yes	yes	yes	yes	no	yes	yes	yes	no
Political obligation	no	no	no	no	no	no	yes	no	no	no

The only case that uses all seven types of criteria is a woman representing government/agency employed women. Two unique cases claim trust is not a determinant reason for them to choose a given form of social network and members therein. They are cases from self-employed and illiterate women's group.

Economic obligation, on the other hand, is not a reason for cases from the self employed, young, with traditional skills and single mothers group to establish or join any of their social networks. Cultural obligation is not considered by the case from group of women with secondary/tertiary education level as criteria to establish her social network systems.

Social networks exist to play certain functions. Some of the major functions a social network has to play include social, symbolic/ritual, economic, spiritual/religious, political, and cultural/traditional function. Any given social network is also expected to serve as a center of information. One form of social network can play more than one function depending on the type of setting. The function of a given social network is the center of its existence. Cooperation and cohesiveness that exist among network members are measured by the actual function their network(s) play in serving members.

A given form of social network can render more than one function for cases involved in this research as well as to other social network members therein. Diagram 5 best explains how one form of social network plays more than one function for the case representing government/agency-employed group of women.

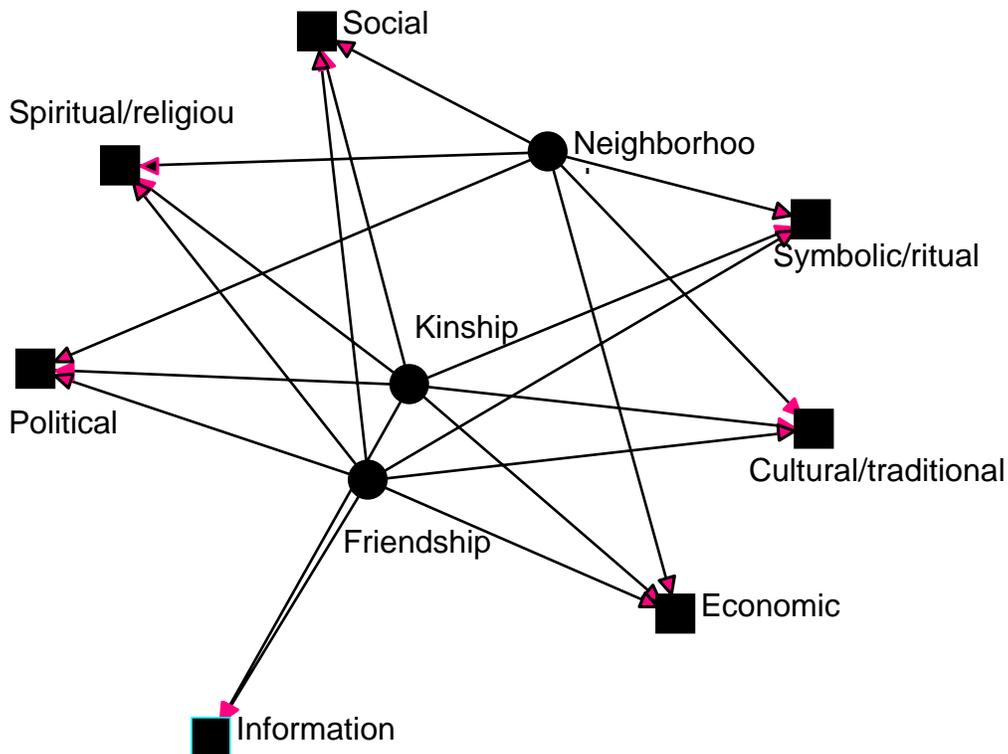


Diagram 5: the case of employed woman and forms of social networks and associated functions

In the above social network diagram, both the kinship and friendship form of networks have seven types functions to play whereas the neighborhood based social network plays six functions. For the case Diagram 5 illustrates the neighborhood based social network is not expected to serve as a center of information.

Beyond the general functions, the social network systems have specific functions to play for the benefit of each member within the given social network. The specific social functions each social network can play include the following.

- Counseling and advice;
- Moral support;
- Being a center of learning of positive behavior;
- Provide courage and strength;

- Source of social crises management ;
- Strengthening social bonds ;
- Sharing social concerns;
- Maintenance of social relationships at times of conflict.

The specific symbolic/ritual functions of social networks include; provision of moral satisfaction because of the presence of the invisible group power, feeling of confidence, feeling of goodness and trust, feeling of the presence of spiritual power and feeling of pride.

The specific economic function played by the social networks is very fundamental for the cases and other members in the social network circles. Social network members provide labor, financial and material support to each other. The social networks are also center of business for some cases such as is the case representing women with traditional skills. Network members borrow and lend money when there are urgent needs until the member in crises can get the money by their own efforts. Social networks are economic insurance and saving systems as well. Members of some social network group collect money on regular basis and save, which will later be invested for common purposes. For the cases representing old women, self business women and employed women their social networks have no important function/role than for their economic life.

People organize themselves around some settings to form social networks. Two examples of such settings include religious and cultural activities. This is the reason why many of the cases involved in this research establish their social networks with individuals, the majority of whom are members of similar religious affiliations and usually from a similar culture and traditions.

As centers of information, social networks help members to get access to better knowledge on the day-to-day dynamics that occur in the larger community. According to the

case informants, information available from the network members is more believed and trusted. Except the case representing employed woman, other cases do not use their social networks for political purposes. They believe that social networks should be free from any political activities and should not play any political functions/roles.

From all forms of social networks, the priority choice for a majority of the cases is given to neighborhood-based network, followed by friendship and kinship forms of networks as second and third choices respectively. For the three priority forms of social networks, the average frequency of contacts among members is high. For the neighborhood social network, the average monthly interaction among members is over 20 times. There is one extreme case in this regard (self employed woman) where frequency of contact is only 1 to 5 per month for the priority social network. For second and third priority forms of social networks, monthly interaction among network members in most of the cases is ranging from 16 to 20 and 11 to 15 times respectively.

The intensity of interaction among social network members is the sign of tie strength and strong bonds that exist among the members of given social network. The neighborhood based social network is, therefore, a well-established and strong social network for all the cases involved in this research. According to the views of case informants, neighbors are the best supporters for individuals in the neighborhood at times of special need. Therefore, to become a member of a neighborhood based social network and to strengthen the frequency and intensity of same network means to have more security and guarantee in the economic, social, cultural, traditional, religious and spiritual life. as this study reveals.

An important aspect of social network study is to understand the expected and actual roles played by members. Members in a given social network are expected to play either all or part of the following roles.

- **Being a member as the name implies;**
- **Become center of ties**-a member with this opportunity is also influential and powerful with great access to available resources such as information and knowledge;
- **Become a broker for the network**-a member with this capacity bridges two networks or members of a network that are not directly linked. This is also called filling social holes ;
- **Work as a centre of clique**-a clique is the maximum number of actors who have all possible ties present among themselves. It is a sub-set of a network in which the actors are more closely and intensely tied to one another than they are to other members of the network (Hanneman, 2005);
- **Bond creator**-a member with this skill enables maintenance of the togetherness of network members. Bond creator also facilitates relationships of sub-groups in a network or between two independent networks; and
- **Maintenance of ties/relationships**-a member with this capacity is a fixer where loosened ties are mended and treated.

This research, found that each case is involved in different forms of social networks and all other members belonging to the social networks were cases in which members play more than one role. Across all the cases, everyone plays a membership role in each form of social network. This is a grand criterion to establish or join a given form of social network. No case shares any form of social network with another case within the research sample.

Two cases represented from self-employed and illiterate women demonstrated that they are only members of their respective social networks. Other three cases represented from old women, with traditional skills and young age group explained that they do not have a role to play as clique leaders to their respective networks. The rest (five) cases demonstrated that they play all expected roles mentioned earlier.

According to the analysis of this research, the roles played by cases in their respective social networks are directly correlated with educational background, size of members in social networks established and the level of strength of such social networks. Those cases who are members of network systems with very few forms of social networks, having smaller number of members in their priority networks and are less frequently of interacting with the members over a given period of time, are found to be less active and play lesser roles. Two extreme cases in this regard are analyzed and presented in the following social network diagram.

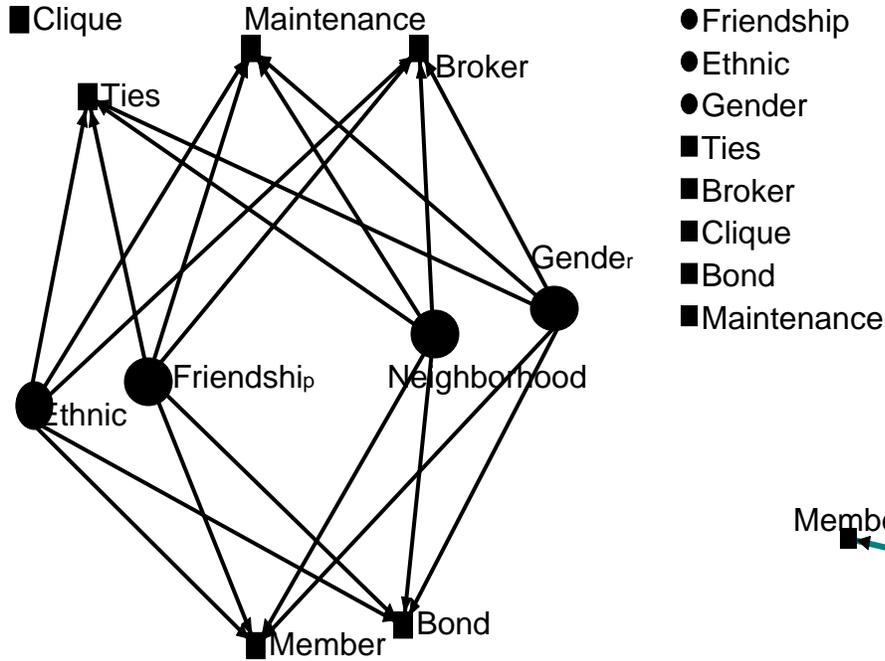


Diagram 6: Strong role-played by a member of social network ties among women with traditional skills. The member plays five of six expected roles. She is not playing a role of clique leadership in her network ties.



Diagram 7: Case from self-employed women who have only one form of network (neighborhood social network) and have only one role with in that network (a membership role). This is a sign of weak ties correlated with simple form of social network.

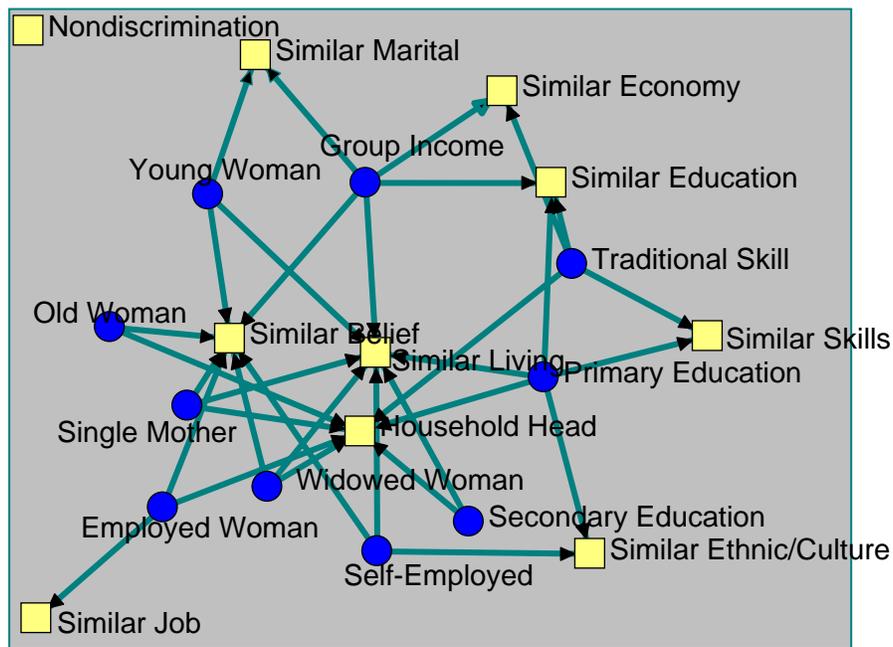
The kinship based social network for the case representing from single mothers is 40 years old, followed by the neighborhood social network, which is the most popular form of social network in all the cases. For many cases the neighborhood social network is 20 years old. The only exception is young women's group where the neighborhood based social network was established only 4 years ago. The findings further indicate that the ages of many of social networks established by cases involved in the study are positively correlated with the year age of the cases themselves. The older the ages of the informants means the older the ages of the social network connections they established and vice versa.

#### **4) *Social and physical boundaries of the social networks***

The possible social boundaries used by cases as criteria to recruit members to enlarge their networks, varies from one case to the other. The potential social boundaries identified by case informants used to determine membership to any form of social network include the following.

- Similarity in education status;
- Being head of a household;
- Similarity in economic status;
- Similarity in marital status;
- Similarity in skills and know-how;
- Similarity in living conditions;
- Similarity in belief systems;
- Having similar ethnic and/or cultural background; and
- Having similar job and/or occupational status.

The above result indicated that, for direct social networks each case has used more than one social boundary as criteria in the process to establish or to join a given form of social network. A two mode social network analysis as described in the following diagram, indicates that multiples of social boundaries were important for the cases to establish/join a given social network system.



**Diagram 8: types of social boundaries versus the cases who choose to use such social boundaries to establish/join a given social network(s)**

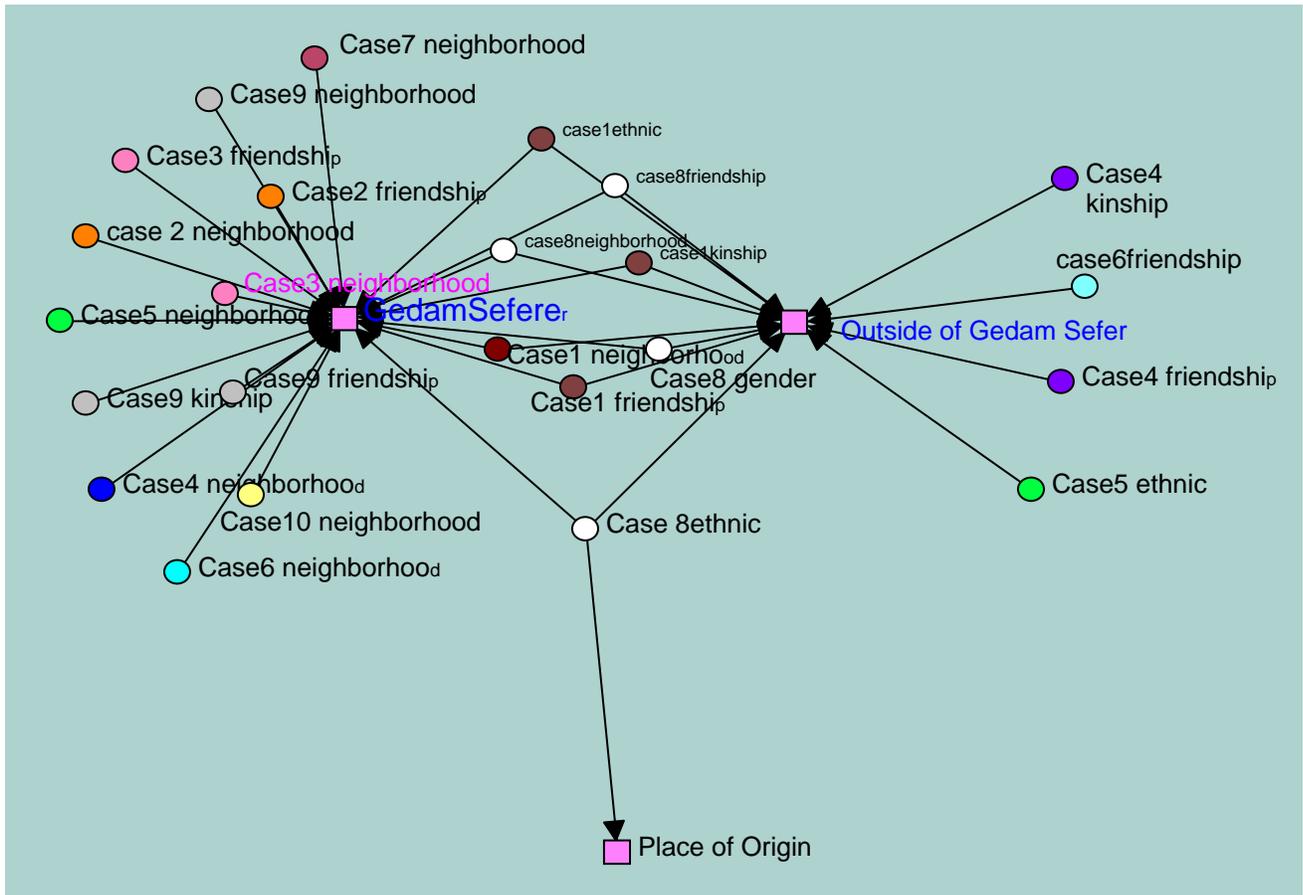
The circle dots indicate the cases involved in this study. The square boxes show possible social boundaries chosen by each case to establish a kind of social network. The arrows connect the cases with chosen social boundaries. Some social boundaries are selected by many cases as criteria for the establishment of their respective social networks. The three social boundaries equally chosen by seven cases include being head of a household, having similar belief system and having similar living condition. Similar living condition is used to describe the way of life such as housing ownership, family condition, marital status and other similarities.

The type of social boundary chosen by the least number of cases is having similar job and occupational status. This social boundary is chosen by only one case representing from employed women. Other social boundaries such as having similar skills and know-how, similar economic status and similar marital status are chosen by two cases each.

The options used by each case (as indicated in Diagram 8) to join a given form of social network, is always purposeful and calculated. Non-material values such as belief systems, status in the household and similarities in living condition are more important than material values like similarities in economic status and education. In some cases, there is a tendency to incline towards similarity in terms of skills and knowledge in choosing social network members. This is a normal attitude in the establishment of a professional type of social networks.

The physical boundaries to establish social networks are predominantly limited to the area where the cases involved in this research are living. However, there are some cases where some forms of social networks go beyond Gedam Sefer and even in one particular case outside of Addis Ababa.

Kinship, friendship and ethnic based social networks have more possibilities of establishment with individual members who are living outside Gedam Sefer. Neighborhood social networks, as the name implies, is a neighbors based social network which cannot be established with individuals living outside of the area of residences. The forms of social networks versus places of residence of members are illustrated in the following social network diagram.



**Key**

- Case1 = illiterate/primary-educated woman
- Case2 = widowed woman
- Case3 = young woman
- Case4 = woman from employed group
- Case5 = woman from secondary/tertiary-educated group
- Case6 = old woman
- Case7 = self-employed woman
- Case8 = woman with traditional skills
- Case9 = woman from group enterprise
- Case10 = single mother woman

The above social network diagram clearly indicates that all of the cases have established their social networks within physical boundary of Gedam Sefer. A few cases extended the physical boundaries of their social networks beyond Gedam Sefer both in Addis Ababa and to place of origin. The case representing traditional skills has network members both in Gedam Sefer, outside of Gedam Sefer within Addis Ababa and in her place of origin. Friendship and ethnic based social network systems are the dominant networks established in the territories of the three physical boundaries mentioned above.

### 5) *Modes of communication in social networks*

A network is a connection (ties) between nodes (individuals) through a communicator (tie nets). A social network is a network of individual persons connecting to their social systems. Modes of communication vary depending on the type of network, the purpose of that particular network, the physical closeness or diversity of the communicators' living area, and the knowledge and skills of the network members connecting a particular means of communication. In this research, the three means of communication predominantly used by a majority of the cases are physical (personal), telephone and messenger communications.

Physical communication is found to be the best means of communication for neighborhood-based networks and for other networks where area of residence of the members is within Gedam Sefer. Telephone communication is more appropriate for friendship, kinship and ethnic based networks where network members are living in Addis Ababa outside of Gedam Sefer. When the network members are living in place of origin, messenger communication is more appropriate. Messenger communication is also helpful for case informants to communicate with network members both in Gedam Sefer and outside of Gedam Sefer in Addis Ababa when the purpose is to send goods.

One means of communication could be more preferable than others to interact with network members in a particular situation and for specific form of social network. Across all the cases, physical communication is more purposeful in interacting with members of all forms of networks. This is because, physical means of communication is culturally acceptable, it increases intimacy and closeness among network members, and it delivers information/message properly and with less harm/distortion between the sender and the receiver. Different cases have given multiples of reasons for choosing their priority means of communication. The reasons given by each case for prioritizing their means of communication is illustrated in table 6.

Table 6: possible reasons to choose one means of communication than the other

Reasons for choosing their priority means of communication.	Case representations of women from different sub-groups									
	Old	Self employed	Young	With traditional skills	Group business	Illiterate/pri mary education	Employed	Single mother	Widowed	Secondary/t ertiary
Economical	no	no	no	no	no	no	no	no	no	no
Effectiveness	no	no	yes	yes	yes	no	yes	yes	yes	no
Efficiency	no	no	yes	yes	yes	no	yes	yes	yes	no
Accessible	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Mutual interest of the communicators	no	no	yes	yes	yes	yes	yes	yes	yes	
Easy to utilize based on levels of skill and knowledge	yes	no	yes	no	yes	yes	no	no	no	no
Culturally acceptable	yes	yes	yes	no	no	yes	yes	yes	no	no

From the above table, we can understand that there is no single case who gives economic factors as a reason to choose any given means of communication. Cases do not calculate the physical travel in terms of money when they travel to network members. The main reason given by all cases for choosing any priority means of communication is accessibility. The person is always available physically and accessible to make any communication at any time desired.

When network members physically meet each other they are fully accessible to the other. There are fewer barriers for their communication.

Next to accessibility, the effectiveness, efficiency and mutual interest of the communicators are the main reasons for majority of the cases to choose their best means of communication—which in most cases is physical communication. Physical communication has also a cultural significance. Individuals feel happy and confident when they are physically visited. It is not only the message that matters for social network interaction. What matters are also the physical presence, emotional closeness and convergence of ideas? This is a sign of tie strength.

6) *Linkages between social networks and coping strategies to deal with socio-economic problems*

“[A] person may attain his or her purpose alone, but it is normal to do so in the company of other people, in a variety of relationships” (Borruso, 1996, p95). Social networks do not exist only for the mere existence. Networks have something to deal with social, emotional, spiritual and economic issues. “Researchers in a number of academic fields have demonstrated that social networks operate on many levels. These include from, families up to the level of nations, and play a critical role in determining the way problems are solved...and degree to which individuals succeed in achieving their goals” (Wikipedia, 2006, p. 1). The purpose for the establishment and function of some networks has direct relationship with spiritual life of network members and the focus of relationship is to minimize religious related problems. Other networks deal with social and economic problems of the members. Members of female-headed households who are involved in this research have disclosed that they use their social networks to deal with the day-

to-day social and economic problems. Specific form of social network plays different roles in coping with the existing social and economic problems.

Generally speaking, every social network system has something to provide in relation to social, cultural and economic problems. The social problems could be expressed in terms of loneliness, frustration, disturbance, depression and sickness, each has emotional component. The research findings indicate that, neighborhood social networks, for instance, are the best insurance system for the poor households by which both economic and social supports are rendered for the family in crises situations where formal insurance/welfare system is absent. As a benefit related to economic and social services obtained from social networks, members of a given form of social network receive appropriate information through their networks. This helps them to deal with existing social and economic problems.

Network members are usually the center of information for business, marketing, job search and other relevant information for life. One case has explained that through her ethnic and kinship based social networks, she has received permanent in kind assistance (grains and cereals) from her relatives living in rural areas. For this woman the social networks are her pension agents. It is also through their social networks that majority of the members get adequate information and knowledge about the larger community's social and economic life.

Social networks are banks for members. Social network members borrow money with each other based on trust and mutual agreement. This usually follows written or unwritten network rules/social law. Where there is no access to formal banking systems for various reasons members of a given social network get access to money either from a member within the social network or out side of that particular social network through connection made by the network itself.

Possible crises, which could occur on cultural and traditional values, are protected through existing social network systems. Through the ethnic, kinship and gender based networks; individual members maintain and preserve their cultural and traditional values, which have lots of meaning to the life of the poor women. In the emergence of secular society where individualism outweighs communal/traditional life, women of the poor community use their social networks as a coping strategy to deal with such modern life complexities. The cases in this study revealed that without the support from their social networks, only through their individual efforts, they could not manage to survive the social and economic life complexities in Addis Ababa.

For many of the cases, the social networks and their individual life are inseparable. It is the expression of a majority of them that without their social networks, there would have occurred serious personal and family crises both in their social and economic lives.

### ***Individual case results***

Out of the ten cases involved in this research, the responses obtained from five cases representing women with old age, traditional skills, government/agency employed, with illiterate/primary education level and widowed are selected and the results are presented in detail. The five cases were selected with the purpose to represent, age, traditional skill, employment, marital status and educational factors that predominantly influence social networks.

#### ***1) Old woman***

##### ***a) General profile***

An old woman with the age of 68 was identified for the case study. The woman was found to be widowed and is illiterate. She lives with other family members, all of which are her grandchildren. The woman has no means of income. She lives on support from relatives.

Despite her poor economic status, the woman has the three basic means of information and communication equipment, (radio, television and telephone) at home. The house is located off the nearest road and is attached with other houses in left and right. The deceased daughter whose children are under the care of this old woman had the house from Kebele. However, the ultimate ownership of the house remains with the Kebele

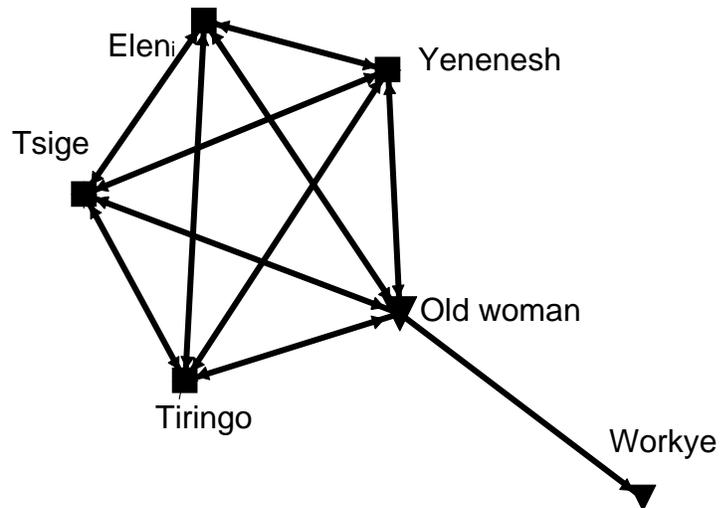
**b) *Inventory of existing social networks***

The general social networks inventory indicated that the woman has direct social networks with 41 individuals of whom only one lives in a similar neighborhood with the old woman. Among individuals in her direct social networks, 21 of them are females and the rest 20 are males. She estimated that there are at least 50 people in her indirect social networks.

To understand the closeness of social network members, the woman was asked to list ten individuals (nodes) who are in the inner circle of her social networks (ties) among the 41 people in the list. She was able to list names of five nodes all of them are females and are over 40 years of age. All of the nodes in her most priority social networks are illiterate. Moreover, they are Orthodox religion believers. There was no similarity in ethnic origin among the closet social network members. It was identified that the initial contacts with the members in her closet social networks share similar economic background. All of them are from well-off income group. Her relationship was found to be depending on free will to establish the first contacts.

In relation to the interaction among members in her closest social networks, some of the network members do not know each other. One of the five individuals in the old woman's closest social networks does not know other four individuals. On the other hand, other four members in her social networks know each other. The following diagram indicates the interaction of members within the old woman's social networks.

Diagram 9: interaction of members in the closest social networks of old woman: the names are arbitrary



One of the members, Workye, can reach the rest of social network members only through the old woman. Here we observe a structural hole between the alter Workye and the rest of network members, except the old woman where Workye has direct interaction. “A structural hole is [a disconnection] available anywhere in a network where two [or more] nodes could be connected, but [in actual sense] are not” (Krebs, 2004, p. 8). When the relationships among the rest of network members with the old woman are direct type, Workye has indirect contacts with the rest of social network members through the old woman.

While all other members are out of the old woman’s residence, the only member living in the neighborhood is Workye. She has a great role connecting the old woman to the rest of the neighbors. Although it seems that, Workye is loosely connected to the web of the old woman’s network, the role she can play for the old woman is high. This shows the strength of a weak tie. A strength of a weak tie is to mean that while the frequency of interaction and number of

connections is low, the roles played by the member is big enough to satisfy other network members.

**c) Forms of social networks**

The forms of social networks the old woman has with her most priority social network members are limited to friendship and neighborhood type. Except one member of the ties as indicated above, the rest of relationships are friendship types.

**d) *Reasons to establish social networks***

The bases for friendship form of social networks are trust, mutual understanding, and cultural, social and religious obligations. For the neighborhood based social networks, in addition to the factors mentioned here, economic benefit or obligation is added to the list as the reason to establish such a network.

**e) *Functions of social networks***

Friendship and neighborhood forms of social networks have many functions to play for the old woman. Both forms of social networks have social, symbolic, spiritual and cultural functions. The neighborhood social network has an economic function in addition to all other functions listed here. For the old woman, to become a member of a social network means to fulfill obligation of the Almighty God who demands love among people. Through love that comes as the result of being a member of a given social networks, members of the social ties can share common value and preserve long existed traditions, morals and ethics. Cultural legacies can pass from old generation to the new generation when a social network is strong and capable of helping members to share the common good. In the absence of properly documented cultural assets, the old woman believes that through a social network, it is possible to protect long existed

traditions from extinction and be able to help the young generation to learn all available traditional values.

*f) Priority of social networks*

The old woman chooses neighborhood based social network as her first priority. The reason given in this regard is the economic and social return she can get from her neighbors. Economic benefit is the main reason that makes neighborhood ties stronger than friendship based social network.

*g) Frequency of interaction*

Frequency of interaction is different for neighborhood and friendship forms of social networks for the old woman. With neighborhood social network members, the woman interacts more than 20 times per month compared to 6 to 10 times with friendship based social network.

*h) Roles and ages of social networks*

Members of a given social network have varieties of roles to play. Accordingly, the old woman involved in this research plays different roles for friendship and neighborhood based social networks. For friendship based social network, the woman plays only a membership role. In the neighborhood social network, the woman plays a role of membership center of ties, as a broker, bond creator and also plays maintenance role when there are network crises.

The age of each social network is related to the role such networks play to members. It is about 30 years since her neighborhood based social network is established. The age of friendship based social network is only about 5 years. What is observed here is that, the more a given social network has many things to play, the more members are concerned to maintain the social network for many years.

***i) Social and physical boundaries of social networks***

The social boundaries the old woman used to establish her social networks are associated to those factors such as similar household responsibilities (being heads of households), similar living conditions and similar believe systems. Neighborhood social network, as the name implies, is established among individuals living in geographic proximity. Friendship based social network to this particular woman is established with individuals living outside of her place of residence. Most of the members are those individuals who have similar belief system with the case herself.

***j) Means of communication***

The best means of communication chosen by the old woman to interact with members of her social networks is direct or physical communication. Physical form of communication is the priority choice for both friendship and neighborhood based social networks. Physical communication is preferred as the best means of communication for its accessibility, easy to utilize depending on skills and know-how of the communicator and is considered as culturally acceptable by network members.

***k) Linkages between social networks and coping strategies to deal with socio-economic problems***

Both social networks of the old woman play different roles to solve social and economic problems. Specific social and economic problems solved through each social network systems were described as follows. The woman deals with her religious matters through friendship social network. The day-to-day economic problems have to be solved through her neighborhood interaction. As an old woman who leads life without proper assistance from formal institutions such as government social welfare systems, the neighbors provide both economic and social

protection and security. Without existing social networks, the woman believed that her social and economic problems would have been aggravated to the level that she would not be able to manage the life of the household.

Social networks are not only the means to solve problems. Social networks are also means to communicate with the larger community. The woman under the case in point communicates with the larger community through her friendship networks. She prefers her friendship networks as a means to communicate with the larger community, because, members of the friendship network are coming from different areas in the city of Addis Ababa, and therefore, it is easy to use such network as a means to get access to information about the larger community.

### 2) *Woman with Traditional Skills*

#### a) *General profile*

A woman with knitting and embroidery skills was selected randomly and participated in this research. The profile of the woman indicated that she was separated from her spouse ten years back and has two children under her support and care one of the children is her own natural child. She has better educational status compared to the majority of women in Gedam Sefer. She is a high school complete. The woman runs her own business and she is also a government employee. She has all basic household equipment useful for information and communication including radio, television and telephone. Economically, she belongs to a group of women with subsistence income who can afford only basic household needs. The woman generates income out of the two traditional skills (knitting and embroidery) by setting up friendship-based business working on the production after office hours.

**b) *Inventory of existing social networks***

The woman has established direct social networks with 20 individuals and has indirect social networks with other 10 individuals. From the individuals within her direct social networks, half of them are females. Some 14 individuals within her direct social networks are living outside of Gedam Sefer. The closest persons of all the individuals within her direct social networks are at adult ages between 25 to 40 years. All of the ten persons identified as the closest members in the direct social networks have relatively similar education with completion of high school. All are drawn from Amhara ethnic group. Every one of the ten closest persons in the direct social network is born in the city of Addis Ababa. The frequency of interaction with each of the ten persons varies from three times interaction to over five times interaction per month. Half of the ten persons are coming from the well-to-do families where as the rest five are from the well-off groups in their economic classification. The case informant believed that all of the ten persons in her closest direct social networks have influential power. The interactions among members of the social networks depend on free will. In spite of the geographic disparity of their residence, eleven of them (including the case informant) know each other.

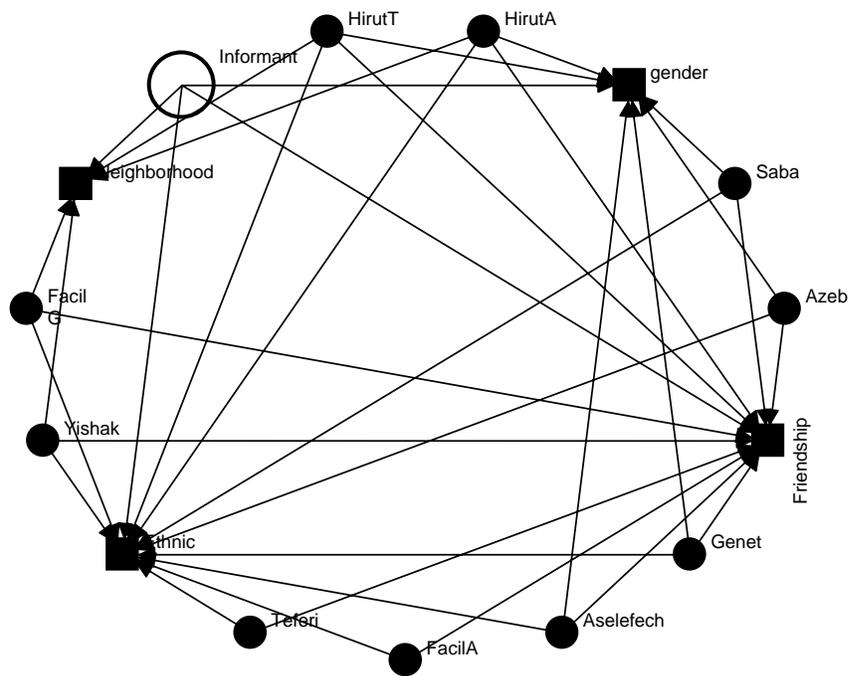
**c) *Forms of social networks***

The forms of ties depend on different conditions. Four forms of social relationships were identified in the woman's social network system. The forms of social networks established by the woman with other network members include; friendship, neighborhood, ethnic and gender based networks. The woman has established a friendship form of social network with ten of the nodes in her closest ties. From this same number, four are also her neighbors and they have established another form of networks, which is neighborhood based social network. On top of friendship and neighborhood based social networks, the other form of social network is

established based on similar ethnic background and is known as ethnic based social network.

The last form of social network is a gender based social network. Six out of the ten closest persons in the woman’s social networks are chosen because they are similar in gender. One can conclude from the above description that the strength of ties becomes more and more strong and dense when an individual relates with others because of the existence of more than one reason (variables) to establish a social network. Diagram 10 illustrates different forms of social networks established by a woman with traditional skills and her ten social network members.

Diagram 10: Forms of social networks and density of interaction among members of woman’s social networks with traditional skills



All the ten persons in the closest social networks of woman with traditional skills have direct interaction with out any interruption in between. Among these ten persons, four have a neighborhood relationship with the woman. This increases the strength of ties.

The inter-relational diagram above indicates the purpose of the relationships the nodes have created. The square boxes represent the forms of relationships and the circle boxes are

individuals in the woman's social networks. The diagram further indicates that every member in the network is connected to each other through friendship and ethnic forms of social networks. Gender and neighborhood based networks are selective to few members.

**d) *Reasons to establish social networks***

For the woman with traditional skills, the main reasons for choosing social network members include; trust, mutual understanding, cultural, and economic obligations. Friendship network is specifically established based on trust and mutual understanding and also to fulfill economic obligations. Friends in the networks have established a joint business to improve their economic life. Friendship, neighborhood, ethnic and gender based networks have three things in common. Both are established based on trust and mutual understanding and exist to fulfill economic obligation of the members.

**e) *Functions of social networks***

The four forms of social networks established by the woman with traditional skills have five functions to play. Such functions include; social, symbolic/spiritual, economic, and cultural/traditional and are also centers of information for each network members.

Under each component of the major functions, specific functions described by the case informant include the following. Through social networks, members support each other at times of social crises. They also use social networks to improve their social life. Social network membership is a sign of proud and courage. The network is also a symbol of belongingness. The members in the woman's network with traditional skill are bases for exchange of business skills and trade. When some of the members with certain skills produce goods, others transport the products for sale. Helping each other through their networks become a culture of mutual assistance and support.

***f) Priority of social networks***

Out of the four forms of social networks established by the woman's group with traditional skills, friendship network is chosen as the first priority followed by neighborhood, gender and ethnic based social networks as second, third and fourth priorities respectively. Friendship based social network is chosen as first priority because; almost all members in this network are coming from similar age and are with relatively similar economic interest.

***g) Frequency of interaction***

The frequency of interaction per month with member of each forms of network varies depending on their priority and importance. For friendship network, which is the first priority type of network, many members interact 11-15 times per month. The least frequency of interaction is observed among members of gender and ethnic networks, which is 1-5 times per month in both cases.

***h) Roles and ages of social networks***

The major roles played by the woman with traditional skills in her social networks include; being a member, play a role as center of ties, as a broker for the networks, bond creator and maintenance role. This woman has a central position in all forms of networks and is influential in the network systems. The social networks have long years since their establishment. All four types of social networks are about 15 years since they were established.

***i) Social and physical boundaries of social networks***

Social boundaries used to determine the form of social network to join/establish by the members of woman with traditional skills are associated with similar education status, similarity in household responsibilities, related economic status and similar skills and know-how. Many of

the network members have completed secondary level education. All of them are heads of households with related economic status. In addition, majority of the members of all social networks have traditional skills either to produce goods or make ready and transport produced goods to a profitable market.

Physical boundaries of social networks established by woman with traditional skills are not limited to Gedam Sefer. Majority of the network members are living outside of Gedam Sefer, but are within Addis Ababa.

***j) Means of communication***

In all forms of social networks, members prefer physical means of communication. For indirect ties of social networks, telephone and postage communication is the preferred means of communication by most network members. Physical form of communication is equally important for friendship including neighborhood, ethnic and gender based social networks. This form of communication is preferred by most network members for its effectiveness, efficiency, accessibility, and mutual interest of the communicator. The network members believe that physical form of communication able to convey full message. For the indirect social networks telephone communication helps to send messages to persons who do not have direct and physical access and is also economical and time saving.

***k) Linkages between social networks and coping strategies to deal with socio-economic problems***

Each form of social network mentioned above deals with specific social and economic needs/problems. Based on the informant's view, friendship social network provides emotional support. The friendship based social network has also economic benefit as members help each other to improve their mutual business as part of economic assistance among members.

Similarly, neighborhood network provides both physical support and emotional advice as a social value and facilitates cooperation among members to borrow money and materials to manage economic crises.

Through ethnic network, members keep their cultural and traditional identity and are a means for emotional stability within members. It is through gender-based network that women share their common issues such as gender discrimination, which they cannot share with opposite gender. It is basically a gender identity social network. Without the existence of a friendship network which focuses on economic activities, the case informant stated that her business would not be functional. It is through the friendship network that network members interact with the larger community and generates information relevant to the lives of network members.

### **3**     ***Woman from illiterate group***

#### **a)**     ***General profile***

An illiterate woman at the age of 50 was identified to participate in this research. The woman was found to be single in her marriage and is not able to read and write. She runs her own business and is caring for one of her own child. At home 1, she has radio, television and telephone, which have good contributions for the day-to-day communication and networking. The woman belongs to the poorest people who cannot afford to meet basic needs. The location of her house is far from the nearest road. The house where she is living is old and without proper maintenance. She got the house from her relatives although the ownership belongs to the Kebele.

#### **b)**     ***Inventory of the existing social networks***

The woman has more members in the indirect networks than the direct networks she has established. She remembers only 15 people in her direct social networks and 20 people in the

indirect social networks. Within the direct social networks, majority of the members are women who are living near to her residence-in Gedam Sefer.

The age range of 10 of the 15 people in her direct networks about whom she was asked to provide some information are found to be 35 years and above. Similar to the case informant, majority of them are illiterate and are Orthodox Christian believers. Nine of the ten respondents in her closest social network are born outside of Addis Ababa. The frequency of interaction per month varies from person to person. Similarly, the economic status of these ten people ranges from well to do to very poor, majority of them fall under a well-off economic group. Many of them are found to be influential in their social interaction and their interaction depends on free will. The strongest social networks for the woman under this category are neighborhood, friendship and kinship ties. Her social networks do not show significant change in complexity and diversity during the last two years.

### *c) Forms of social networks*

The forms of social networks the woman has established with the first ten individuals under the whole system of her direct social networks include kinship, friendship, neighborhood and ethnic based relationships.

### *d) Reasons to establish social networks*

The main reason for choosing members for each kind of social network include; trust developed by the case informant on each network members, the existence of mutual understanding among members, and cultural, social and economic obligations/reasons that could force/encourage member to join/establish the social networks.

***e) Functions of social networks***

All kinds of social networks play different functions. One of the general functions that all social networks play includes social function. Kinship, ethnic and neighborhood based networks have a symbolic/ritual functions; whereas, neighborhood based networks plays only an economic function. Moreover, every network serves as a center of information for network members.

Specific functions performed by each network were explained by the case informant as follows. The main social function of kinship, friendship, ethnic and neighborhood social networks is creation and maintenance of social bonds among members of the networks. Everybody in the network has a cemented interaction with other members and this provides them with social security and belongingness. Economically, network members support each other in a form of capacity building or free support. Cultural values and traditional skills are shared among members of the networks, which enable them to have adequate knowledge on local cultures.

***f) Priority of social networks***

The first priority from all forms of social networks for the illiterate woman is given to neighborhood network, which is followed by friendship network. Kinship and ethnic based networks stand at third and fourth rank in terms of priority. Prioritization of social networks for this woman is made based on social, spiritual and economic benefits the social networks would provide to members. The woman chooses a neighborhood based social network as her first priority because main economic benefit is obtained from neighborhood based social network members.

***g) Frequency of interaction***

Frequency of interaction per month with members of first priority social network is over 20 times. This frequency of interaction decreases by half for the second priority social network-

which is friendship network. The third and fourth level priorities have minimum frequency of interaction ranging from 1-5 times per month depending on the closeness of the person within the networks.

***h) Roles and ages of social networks***

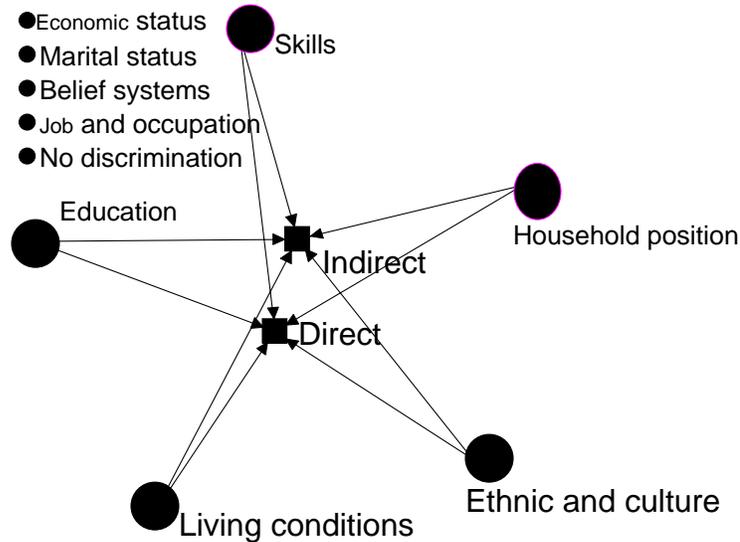
The advantages gained for the woman by the four kinds of social networks mentioned above are many. Despite the possible benefits the woman gets, the role the woman plays in each social network is limited only to a membership status. The woman explained that she is not interested to take a leadership role of any form in any of the social networks where she is engaged in. It seems only customary to her to be member of a given social network. She believes that although she is not playing any active role, her benefit from the networks will not cease as she is one of the members who founded some of the social networks before decades ago.

It is about 30 and 25 years since kinship and friendship-based social networks have been established respectively. The ethnic based social network is established since the last ten years and neighborhood network has only four years of age. She plausibly mentioned that in old days there was not any sentiment about ethnic feelings and that is why the establishment of the ethnic based network is somewhat recent.

***i) Social and physical boundaries of social networks***

Social boundaries of network members are related to education status, household position, similarities in skills and knowledge, similarity in living conditions and ethnic and cultural background. Diagram 11 sketches the relationship between social boundaries and criteria used to select social network members.

Diagram 11: Social boundaries preferred by illiterate woman to choose social network members



The isolated circles listed above are social boundaries which are not taken as criteria by the woman and her social network members to establish a given form of social network. The square signs in the diagram indicate kinds of networks. The circle signs indicate social boundaries preferred as criteria to establish/join social networks of kinship, friendship, neighborhood or ethnic form. Members living in the Gedam Sefer neighborhood and outside of the neighborhood established kinship, friendship and ethnic forms of networks.

**j) Means of communication**

For those social network members living in Gedam Sefer physical interaction is the main mode of communication. Telephone communication, on the other hand is the best way to interact with social network members living outside of Gedam Sefer. Both means of communications are preferred for their accessibility, mutual interest of the communicators, easiness to utilize and is due to cultural compatibility/acceptability.

***k) Linkages between social networks and coping strategies to deal with socio-economic problems***

For the woman under discussion who is illiterate, old and economically poor, her social networks have brought a number of social and economic advantages. It is through her ties that she has gotten food and material assistances. She also gets intermittent jobs through the help of social networks. Socially, the woman resolves misunderstanding with some of her kin through her networks. Some of her kinship members are not willing to help her; however, through other relatives with whom she has strong social interaction/network, the woman is able to reach those who are not willing to pay attention to her.

Many of the members in her social networks are drawn from the same ethnic background that gives relief and security to discuss all ethnic centered issues. It is her belief that if social networks do not exist, her personal life will be endangered. The woman has explained that friendship and ethnic based social networks enable her to communicate with the larger community as well.

***4) Woman from the employed group***

***a) General profile***

This woman is extremely with high social network members compared to other women involved in this research. Her personal profile indicated that, she is from the aged women who are 50 years old. She separated from her spouse 15 years ago. Her education status is in the secondary education level. She lives with five children and her monthly salary is high in Ethiopian salary standard. She has basic equipments for information and communication at her household, which include radio, television and telephone. Her house is located near to the

nearest road and is with proper maintenance. The house where she is living is registered by her own name.

***b) Inventory of the existing social networks***

In the direct social networks, the woman has about 200 people over which about 150 of them are females. Only 50 are living around Gedam Sefer where the woman is living. It was not easy to select few people with very closest relationship among the big list mentioned by the woman. The woman had managed to identify ten individuals out of the 200 people in her list about whom the next discussion will focus.

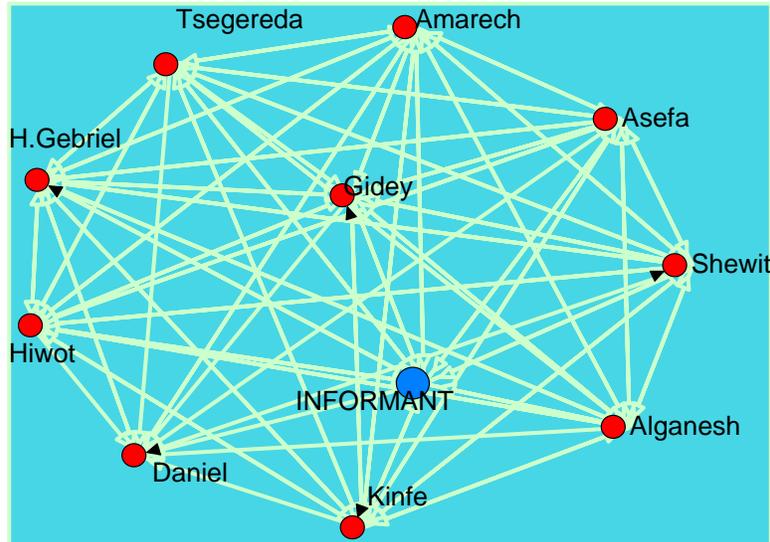
Only one of the ten persons in her closest list of social networks is living in Gedam Sefer. The remaining nine persons are living outside of the neighborhood but still in Addis Ababa. Their age compositions range from 16 years to 48 years old. All are found to be below the age of the case informant. Educational status of the ten persons indicates that one of them is illiterate, where as others are with secondary to diploma levels of education. All are unanimously Orthodox religion followers. Ethnic composition is diverse. There are six individuals from Amhara, three individuals from Tigre and one individual from Oromo ethnic groups.

Regarding the initiation of the first contacts with the closest social network members, nine persons initiated the first contacts with her, which means the case informant was the center of attraction for the social network establishment. While four of the ten individuals were born out of Addis Ababa, the remaining six were born in Addis Ababa. Majority of them interact over five times a month. Many of them fall under a well-off category in their economic status. She believed that everybody in her closest social network system has a power of social influence, which is competitive to be a member in such kind of social networks. Despite geographic

diversity, every one of the eleven individuals including the case under study interact each other.

Diagram 12 describes how interaction is dense.

Diagram12: web of interaction among eleven individuals in the employed woman's social networks



c) *Forms of social networks*

Similar to other cases in point, the case informant in this regard has three forms of social networks. These include friendship, neighborhood, and kinship type of social networks. When the woman evaluates the status of her social networks during the last two years, she believed that they become complex and diverse. The complexity and diversity of the social networks are resulted from the behavior and characteristics of network members. Everybody in the social networks is willing to bring new ideas and thoughts that help for addition of new information and build interest among network members to continue life together.

Among the ten individuals in the networks, majority of them are members of friendship network. Only three individuals are drawn from the kinship and neighborhood social networks (two from the former and one from the later respectively). For this woman friendship network attracts majority of the persons who has closer contacts with her compared to all other networks.

*d) Reasons to establish social networks*

The following are main reasons for the employed woman to establish/join social networks. Firstly, everybody in her network system is individuals whom she trusts very much. There is also a common understanding among the members in the networks. Moreover, cultural, social, and economic obligations are found to be the driving forces for the woman to choose her friendship and kinship network members among the ten closest people in her overall social networks. Politics is not considered as criteria to establish neighborhood based social networks.

*e) Functions of social networks*

All the three social networks have many things to play. The main functions include social, symbolic/ritual, economic, spiritual/religious, political, and cultural/traditional functions. The networks are also used as centers of information for all members in the networks.

Some of the specific functions the social networks play under the major categories include the following. Socially, the members in all social networks provide advice and counseling services for other members. As a social obligation, members advice each other and provide “counseling” to members who need the services. As a symbolic/ritual function, the networks provide to the members a mental satisfaction. When members think of the presence of their social networks, they believe that their togetherness and cohesiveness get strong. Members do everything for everybody in the social networks in terms of finance, material and any kind of support as required when they recognize that someone in their social networks requires such assistance.

Social networks are centers of religious activities for members. They establish religious related gatherings around their social networks. In some instances, religious gatherings become

the primary foundation for social networks themselves. It is not possible sometimes to isolate religious networks from that of other forms of social networks.

It was the woman's belief that the existence of friendship and kinship based social networks has strengthened her political participation. It is around the social networks gathering that members discuss political issues and decide which political affiliation they should to follow. The woman stated that, every member in her friendship and kinship social networks also participate in similar political party. Beyond the political, social and religious services the networks can provide to members cultural heritages from which individual members can share knowledge and learned each other. Therefore, social networks are said to have roles to play for diversification of culture and tradition.

*f) Priority of social networks*

For employed woman, friendship based network is the first priority followed by kinship based social network. The neighborhood based social network is her least preference. Friends are the best people to share concerns and secrets and that is why friendship based social network is considered as her priority choice.

*g) Frequency of interaction*

Frequency of interaction varies depending on the priority choices of each form of the social network. The woman has over 20 times interaction per month with members in her friendship network as this form of social network is her first choice. This is followed by kinship based social network, which has 16-20 times interaction per month. The least frequency of interaction is given to neighborhood social network, which is 11-15 times per month.

***h) Roles and ages of social networks***

In all the three forms of social networks (kinship, friendship, and neighborhood), the woman plays six roles. She is a member of all the networks as other members do. In addition to being a member, she plays a role as a centre of ties, broker, a clique leader, a role of bonding and plays a role of maintenance whenever there is a break among members of any of the three forms social networks.

The rank of choice and age of the social networks since establishment is contradictory. The first network chosen by the woman as described above is friendship based social network. But the age of this network is only three years. To the opposite, the least preferred network chosen by the woman is neighborhood based social network; although it was established some 35 years ago. One can argue here that, the functionality of a network is what is important than the age of its establishment.

***i) Social and physical boundaries of social networks***

There are only three social boundaries which are used as criteria to choose social networks members in the woman's group. These three social boundaries include, being head of a household, having similar belief system and similar job and occupation status. This is the only woman from all case informants who choose job and occupation as criteria to choose her social networks members. Friendship and kinship social networks are established outside of her area of residence but are still in Addis Ababa.

***j) Means of communication***

Physical contacts and telephone are the main means of communications in her social network. Unlike other cases, for the woman in this category, telephone communication is as important as physical contact for the fact that both friendship and kinship networks members are

living far from her neighborhood and is not possible to visit every body physically on repeated frequencies. For neighborhood-based communication, she prefers to use personal visit and messengers, both can be considered as physical means of communications.

The above-mentioned means of communications are chosen for the sake of effectiveness, efficiency, accessibility, mutual interest of the communicators and cultural acceptability. The woman puts physical (direct contact), telephone and messenger communications in the first, second and third priorities. Physical means of communication is chosen as first priority because, it conveys full message and is culturally acceptable. Telephone communication is more of economical and time saving. Messenger communication is helpful only if one wants to send goods to network members.

***k) Linkages between social networks and coping strategies to deal with socio-economic problems***

Without the presence of the social networks discussed above, the woman's socio-economic life would be in a difficult situation. She stated that, network members are her economic guarantees when there is no money at hand and when unexpected economic problem occurs. In some critical situations, social network members pay the money and make her to feel secure. Members in her social networks are also supporting the woman in behavioral adjustment and correction. Due to certain problems around her, the woman would enter into unwanted behavior and it is through her network members she usually able to resolve such emotional and behavioral problems.

Specific social networks, as friendship network is not only there to solve personal problems, it is also a means to interact to the larger community. The woman prefers her

friendship network as means to communicate with the larger community because members of her friendship network are many in number and are living in a dispersed area in the city.

**5) *Widowed Woman having Children***

**a) *General profile***

This woman is a 58 years old who lost her husband some 12 years ago. She completed primary level of education and has four children and one relative under her care and support. She leads her household from the income earned out of her own small business. She puts herself from an economic group with subsistence income who could afford only household basic needs. She has radio and telephone at home which can be used as means to get access for up-to-date information. Her house is located near to the nearest road and is with good maintenance status.

**b) *Inventory of the existing social networks***

The widowed woman has direct social networks with 150 people and indirect social networks with other 60 people. Of the total 150 people in the direct social networks, 60 of them are woman. Only 20 of 150 individuals in the direct social network are living in the area where the case informant is residing.

Out of 150 direct social network members, the woman was asked to list ten individuals who have very close relationship with her. It was difficult to identify such small number of people from a big list. Enough time was given to the woman to help her to look at seriously to her relationships and list out the ten individuals. She finally managed to identify the ten persons. Profiles of the ten persons are described as follows.

All the members in her closet social networks are females. Their ages range from 30 to 55 years old. Every one of them is living in Gedam Sefer. All of them are Orthodox Christian believers. Majority of them are born outside of Addis Ababa and are with different ethnic

backgrounds. Half of them originated from Amhara ethnic group and other three from Oromo ethnic background. The rest two are from Tigray and Gurage ethnic groups one each.

The first contacts with the closest social network members were made by the case informant, which indicate that she was not center of attraction. The frequency of interaction with each of the ten closest members is over five times a month. Greater numbers of them are from the poor and very poor economic groups of community. Only one of the members in the closest social network has high influencing power in the network members' social life while the rest nine have still able to influence but are not very dominating ones.

Like other case informants, the social networks of this woman are based on the good will of members. She was completely free to establish friendship and neighborhood networks. She believed that not all social networks established with every member in the social network systems have shown any change in complexity and diversity for the last two years. She has not any clear thought to why no change is observed for the last two years. In her social networks of the ten persons, everyone knows everybody.

**c) *Forms of the social networks***

All the ten members' interaction depends on friendship and neighborhood forms of social networks. Every member is a neighbor as well as a friend to everyone else.

**d) *Reasons to establish the social networks***

There are six major reasons for the widowed woman to choose the ten individuals to become her closest social network members within friendship and neighborhood networks. The reasons include; complete trust by the woman, mutual understanding among members, cultural, social, economic, and religious obligations.

*e) Functions of the social networks*

Both friendship and neighborhood ties play different functions. The functions the networks play includes social, symbolic, spiritual, cultural and are center of information for each member. The social function that both forms of social networks play is described by sharing of concerns. At times of social problems, a member encounters every other member in the network stay around the person both physically and emotionally until such casualty is resolved.

The social networks are symbols of good feeling and belongingness. As an economic support, everyone shares what he or she has with others in a form of free assistance or loan. Those with some extra financial and material savings, support others who have no enough to fulfill their basic needs. The social networks are main forums to promote religious denomination and teachings. Similarly, cultural diversities are learned through the social networks. Members are drawn from different cultural and ethnic backgrounds, which enable them to share individual cultural traits and values.

*f) Priority of social networks*

For the woman, neighborhood based social network is her first priority. She believes that neighbors are the ones who know everything in her household and a social network established with them is the most important social insurance system.

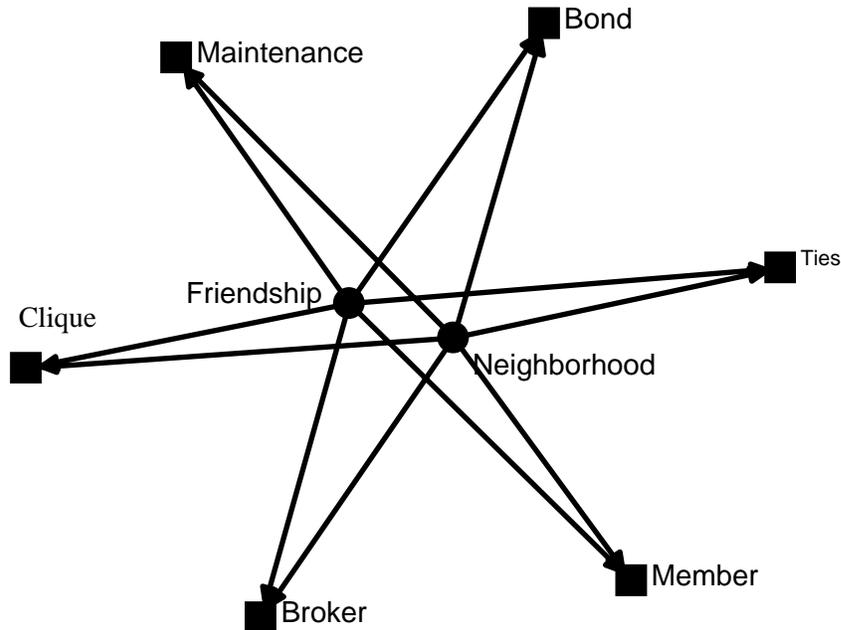
*g) Frequency of interaction*

For the neighborhood based social network, members' frequency of interaction range from 16-20 times per month and for the friendship network, members' interaction ranges from 11-15 times per month.

*h) Roles and ages of social networks*

Diagram 13 illustrates the roles played by friendship and neighborhood social networks.

Diagram13: Forms of social networks versus the roles the case informant plays in each network



One can infer from the above diagram that the woman is member of both friendship and neighborhood social networks. She is a center of ties for both networks. Moreover, she plays the roles as brokerage, a clique leader, bond creator and also maintenance of cracks which would occur among the network members. This indicates the power of the woman in both networks is high and most possibly she is influential woman in the social network system. Both networks have similar ages, which is 28 years since establishment

*i) Social and physical boundaries of social networks*

Three social boundaries are identified as criteria of selection of members to join both forms of social networks. These include being head of a household, similar living conditions and similar belief systems. This woman must be the one who uses a least set of social criteria to join or establish social networks compared to all other cases included in this research. In terms of geographic boundary, both networks are found in Gedam Sefer area.

***j) Means of communication***

Physical/personal interaction is the preferred means of communication for the woman both for direct and indirect social networks. In the absence of physical communication, telephone or information delivery through messengers are other options of communication. Both means of communications are preferred for their effectiveness, efficiency, accessibility, and mutual interest of the communicators.

***k) Linkages between social networks and coping strategies to deal with socio-economic problems***

The linkage between social networks and the ability to solve a given socio-economic problems was described as follows. Neighborhood and friendship forms of networks are able to solve social isolation and discrimination. A woman with widow-hood would be discriminated because of cultural taboos attached to their marital status. Social network members are trustful and have full engagement in the life of their mates to minimize loneliness and frustration. Without the existence of both social networks, it was the woman's belief that her social life would have been in a devastating situation.

Possible financial problems and other economic issues are also dealt in the day-to-day functions of both social networks. Beyond satisfying social and economic life of the network members, both social networks are means to interact with the larger community.

## Discussion

### 1) The research findings and theoretical perspectives

Differences among individuals in how they are connected can be extremely consequential for understanding their attributes and behavior. More connections often mean that individuals are exposed to more and more diverse information. Highly connected individuals may be more influential, and may be more influenced by others (Hanneman, 2005). The results of this research reveal that levels of connections of individuals with other members in the network systems of this research group can be grouped into four categories based on the size of members in a given social network. The first group includes those cases with a very small number network members under which are young and illiterate women. The second group is those with small network members under which are cases represented from women with traditional skills, those engaged in group business, and single mothers' group. The third group includes the cases with medium network members under which are women represented from old, self-employed, and those with secondary and tertiary education groups. And, finally are social networks with high members in which, cases are drawn from employed and widowed women.

“Size of a network is critical to...interaction, because of the...resources and capacities for...building and maintaining the networks” (Kapucu, 2005, p. 7). When the size of a network has small number of members, it would probably suffer from limited resources and lack of capacity to properly achieve network functions. Similarly, a network with large number of members beyond manageable size, encounters a problem of mistrust by members and many competitive clique leaders could emerge which ultimately may lead to conflict and disintegration of the network system. “The so-called rule of 150 states that the size of a genuine social network

is limited to about 150 members” (Wikipedia, 2006). This rule arises from cultural studies conducted in a modern village where the intimacy of people in the village is high.

The setting in which the rule of 150 was determined is different from the environment where this research was conducted. In a modern city like Addis Ababa where the current study was undertaken, the rule of 150 is not probably applicable. This is due to the fact that in modern cities, secular life and individualism outweigh spirituality and communality, which necessitates the emergence of very small but closer friendships than that of a village community. However, some elements of the rule of 150 still apply to the present research in terms of functionality of networks. The cases with very small number of network members were found to have a very narrow scope in terms of roles and functions of the networks they are established. The cases representing young and government/agency employed women, for instance, have no equal roles to play in their respective networks. The employed woman was found to play seven roles in her three social networks; while the young woman has only four roles in her two social networks. The differences in their roles arise from the total size of members in all the networks they have established, and the functions the networks are expected to play.

One of the most determinant factors for strength and proper functioning of social networks is geographic and physical proximity. Across entire cases, neighborhood based social networks are common phenomena and were identified as inseparable form of social network from the members’ lives. All cases, irrespective of size, function and roles of their social networks have established neighborhood based social networks. Geographic proximity of members of a given network also determines the means of communication that network members have to use to have interactions with each other. Because of the closeness of residence of most of the network members, all the case informants stated that their preferred means of

communication is physical interaction. This means of communication is also a compatible means of communication for its effectiveness and cultural acceptability. Available literatures on the importance of location for social networks also support the outcome of this research. Kreb (2004 p 1), states that “in real estate, location is determined by geography-[the] physical [proximity]. In social networks, location is determined by those around you-your virtual location.”

Non-material values play important roles for individuals to choose their network members. For all cases involved in this research, religion, trust, mutual understanding, cultural traits, and to some extent ethnic background have helped individuals to form their networks rather than economic similarity. In terms of income levels, social network members of all the cases represented for this study have come from different categories. This finding is against what is stated in a research article entitled ‘one mode network theory’ as stated by Flom, Friedman, Straus, and Neaigus (2004, p. 1) that “where all actors are of the same [income group, all may interact (at least in theory) with each other [in a more effective way].” Despite the fact that all the cases were from different income groups (ranging from the “well-to-do to very poor”)<sup>3</sup>, majority of network members in this research have strong interactions. The basis for effective interaction within network members is not purely economic similarity, but is related to other socio-cultural values common to each network member.

Case informants who have more members in their networks have stronger interaction than those with few members. This was justified by engagement of members in more than one form of social networks, through performance of more roles and members expectations from the networks to provide various functions for their benefits. Cases with diversified social networks in

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<sup>3</sup> Income category ranging from ‘well-to-do to poor’ is defined according to the perception of cases as who is rich and who is poor.

terms of form, function and geographic diversification, stated that their networks show diversification and complexity in the day-to-day operations.

The cases who reported that their social networks have shown dynamism in terms of complexity and diversification are those who were represented the following three clusters.

- Traditional women's group, whose networks have primarily a business orientation;
- A woman from employed group, who establishes the networks for different purposes including political benefits; and
- A woman from group enterprise/business who was identified as a center of attraction for the establishment of all the networks around her

These were the three cases where all their networks show complexity and diversification for the last two years. Complexity and diversification can be measured by change in number of members, addition of new forms, roles and function of networks. This result shows some similarities with previous researches conducted to understand the dynamic nature of social networks. Different literatures suggest that when there is the addition of new functions in the already existing functions a network is expected to play; such a network can be gauged as showing diversity and complexity both in form and structure.

A social network provides identity to members and serves as a sign of belongingness to a given social group. Sameness/similarity in family status, educational level, similar living conditions, and more importantly belief systems are what the cases and their network members use as criteria to join their respective networks and ensure their belongingness to a given social group. The choices of membership for a given social networks is determined by common understanding and belongingness which is specifically reflected by emotional, social and

psychological supports given to every member without bias or discrimination. Cohen and Wills (1985), as cited in Sherrod, Toro, McCaskill, Beshears, Cohen and Yapchai (2001, p. 4) clearly stated that “social networks serve important functions, in psychological, emotional, and tangible domains.”

In spite of the fact that the economic factor is not a reason for joining or establishing social networks for all the case informants under this research and majority of the members in their social networks, the roles played by all forms of networks in alleviating economic problems has significant importance. Many of the cases expressed their feelings about the advantage of social networks in addressing the probable economic problem which they could encounter in their course of life.

Some of the cases expressed that social networks are the traditional insurance that provides economic security in the absence of formal welfare systems. Other cases stated that their social networks are sources of investment from which they get financial help, technical support and also business cooperation. One specific example in terms of economic benefit is the old woman. She stated that the social network and her life are inseparable, i.e., one cannot live without the other. This statement tells us that social networks have invisible power in tying people relate to each other.

Social networks keep members informed of changes happening in the larger community. Most of the cases do not have access, via daily news papers or radio and television, to the day-to-day news and information which are important in the larger community. The majority of them have very low reading ability and they are not capable of getting information from daily newspapers. Although most of them have radio and television at home, due to the nature of work they are engaged in many of them have no opportunity to attend to the electronic media on

regular basis. But, the social network systems they have established help members to be informed of what is going on in the larger community. It is not enough here to say that social networks are not only means for economic, social or emotional support they are also a means of information access.

## **2) *Development implications of social networks***

Social networks are resources for a given community. From the three major capitals of community (physical, human and social), social capital is shared among every member. While physical and human capital can be properties of individuals, social capital is the property of the whole or major parts of a given community. A social network is one of the elements of social capital that is shared among a given community or segments of that particular community members depending upon the nature of the social network.

Community development planners need to think first of all about available social resources in the area of their development plan. Social resources are the main means through which a development plan can be implemented. Financial and human capital can be obtained from external sources when such resources are not available within the community. However, all the inputs obtained from the external or pulled from the community can be effectively used for the intended development plan when there is possibility to organize the community according to the will and interest of that community. The free will of people to come together is mainly determined by social network systems.

This research has demonstrated that individuals get networked for various purposes and functions. Most of the social network functions are to improve the overall life of its members. Improvements in life are not the merely economic. They also include social, emotional and spiritual wellbeing. Community development is not only focusing on the improvement of

income, but also on the overall, social, cultural and community moral wellbeing. The analogy here is that, if community development focuses on the overall improvement of community life and at the same time if social networks are established to support the overall life of members of a given network, by implication, social networks can be a springboard for community development works.

Social network means building of relationships among individuals in a community. The advantage of building relationships among community members to facilitate community development is explained by Kretzmann and McKnight (1993, p. 346) in their book “Building Communities from the Inside Out: A Path toward Finding and Mobilizing a Community’s Assets” as follows.

Building strong relationships among the community’s assets constitutes the [main] community building path. The community becomes stronger and more self reliant every time local residents...are linked with others for problem solving purposes.... ...as the web of ties among assets inside the community is rebuild, and as the demonstrations of local competence multiply, residents cease to look first toward the outside for help in addressing the most important local concerns.

As part of community development, personal economic wellbeing can be build through the connections and information obtained from strong ties that community members establish among each other and with other communities through their network connectors (brokers). The case representing women with traditional skills, for instance, explained that her business became successful through business networks she has established with her social network members. This

woman at the same time has secured her current job through the support from the social network members. Jackson (2003, p. 2) argues in a similar fashion that “the set of economic situations [as sub-component of an overall community development] where [social] network structures play an important role is wide and varied.”

The functions of social networks to the members and the contribution of such networks for community development program can be critically examined from the following community development perspectives.

- How social networks can be used as tools to setup group business among poor communities?
- Can network members' interest helpful to identify useful development schemes such as income generating activities?
- How can development planners use social networks as strength and local resource input for development planning?

In the due course of considering social networks as tools for community capacity building and development process, the following key questions are suggested by Krebs & Holley (2004, p. 2) in their research article “Building smart communities through network weaving”:

- “Are the right connections in place? Are any key connections missing?”
- “Who are playing leadership roles in the community? Who is not, but should be?”
- “Who are the experts in process, planning and practice?”
- “Who are the mentors that others seek out for advice?”
- ”Who are the innovators? Are ideas shared and acted upon?”

The eco-city development study of Arada Sub-City, in Addis Ababa is cognizant of the importance of social capital for community development. A socio-economic and physical

feasibility study (Arada Sub-city Eco-city Development Study Team, 2004) for development in Arada Sub-City, Kebele 03 where this research was conducted, has identified social institutions (that have similar meanings to social networks) as strengths for the initiation of community based development plan. The social resources survey of the eco-city study suggested that networks of people through their local and community-based institutions (Iddir and Equib)<sup>4</sup> should be examined in the due course of community based planning. Another skill inventory survey conducted by Johnson, Wassie Kebede and Andom Gessese (2005) has identified the importance of social networks in helping community groups in terms of their communal development and economic wellbeing.

Community, which has no access to modern economic market and development activities, tries to challenge the socio-economic impoverishment through their networks. The case in point could be the Gedam Sefer community of Addis Ababa. This community, for instances, tries to help its members in a number of ways to protect members from business and social bankruptcy. One of the findings in Johnson, Wassie Kebede and Andom Gessese (2005, pp. 35-36) skills inventory survey supports this statement.

In ‘Gedam Sefer’, neighbors are found to be supportive. Because of poor and congested nature of the village, economic activities of most residents, specially the poorest section of the community are self contend. This means members of the community mostly consume their products since communities of other areas of the city are not much interested to visit the area for a number of reasons. To prevent their neighbors from bankruptcy, members of the

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<sup>4</sup> Iddir and Equib are traditional associations established by community members on voluntary basis and the main functions are to render social, emotional and financial supports to members.

villages are willing to buy the products although they have the choice to get better [quality] products in other areas of the city

The above statement highlights that social networks are strengths (social capital) available among neglected segments of communities; and in the planning process intended to develop such communities, using social networks as entry point has paramount importance.

Many of the cases involved in this research explained that their sources of information in all aspects of life are their social networks. Friendship and kinship networks were found to be major sources of information about all the dynamics that exist in the larger community. This is so because, friendship and kinship network members live in a dispersed geographic area and have wider spectrum of interaction with many people outside of the social network that exist within their specific group. This provides them more opportunity to get access for information about other communities' overall development plans. According to some theories, individuals with communication ties outside their networks are the first to bring new ideas into their network system. These "bridges" then prompt discussion within the community, and thus spreading information about innovations and developments (Valente, 2003)

### **3) *Social work implications of social networks***

Social work is all about helping people to strengthen their potentialities to help themselves. Social network surveys demonstrated that individuals establish social networks based on their full consent and interest. The current research has revealed that all the ten cases have established their networks based on free will. For social work practice both at individual, group and community levels, the understanding of existing social networks would help to identify both the strength and gaps, which in turn are helpful for action design.

Two of the basic tools which social work practitioners use to make an assessment on individual, family and group dynamics are eco-mapping and genograms. Both tools are all about tracing links of individuals, family and groups to other individuals, families or groups. One of the important links that social workers can be interested about their clients is the existing social networks.

It is the researcher's educative guess that knowledge on social network survey and analysis is equally important as having knowledge on other social work centered fields of study for social work practitioners. No social problem can be solved without tracing and analyzing the whole or majority of existing social webs/ties of the client and the possible problem links that hamper the 'normal' functioning of the individual at the concern of the social work practitioner. For a social network practitioner, the understanding of social network system means knowing well the main actor(s) of a given social issue of concern.

### Conclusions

This research has identified that social network provides meaning to life for poor community members such as female householders who shoulder household responsibilities. The central research hypothesis or research question, which is, the more female householders have established different forms of social networks, become active players in such networks and develop better communication skills, the better they have capacities to deal with social and economic issues compared to those who have specific forms of social networks, less active and develop limited communication skills, is supported by this research. From the case informants those women with many forms of social networks, who have more roles and whose networks play multiples of functions have got advantages of access to better information and have got

strengths to deal with their economic and social needs compared to those who joined limited forms of social network, who have played little role, and whose networks play specific functions.

A comparison can be made between woman representing government/agency employed group in one hand, and woman represented from self employed group on the other. The woman who was representing employed group has joined more forms of social networks. This enables her to play multiples of roles in the networks system. The functions of the networks to the members are many. This woman was confident enough that all social and economic problems are solved through the social network system she is engaged in. She has also more information about the external world that exists beyond her social network territory. On the other hand, woman representing self employed group who has joined only two forms of social networks and who plays only a membership role does not know exactly the function of the social networks she is engaged in and also has very little help from her social networks in terms of solving social and economic problems.

In specific cases, the degree of centrality, closeness and between-ness of members in a given social network are directly related to their interest, knowledge on the advantages of social networks to their economic and social life; and the potentialities they can play in leadership roles in the network system. Those cases that were the center of attraction during the first establishment of their social networks are still playing the leading and influential roles in all functions of the networks they are in now. The case representing women from group enterprise and who had complete influence during the establishment of her neighborhood social network, for instance, still has a leadership role there. Although she has business activities with other woman with whom she joined through the Kebele, her day-to-day interaction remains with her social network member not with the business network members. The perception in this particular

case and across all the cases is that their social networks are the capacity builders to address their economic and social needs.

As concluding remarks, this research suggests the following:

- To develop Gedam Sefer community, particularly that of female householders, the development planning process should consider the existing social networks as strengths to initiate any community based activities;
- A cross-community social network analysis research is suggested to confirm the validity of findings of this research; and
- Local development policy makers and planners of the Sub-City are recommended to incorporate social network knowledge in their planning process.

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## Appendixes

### Annex A: Questionnaires

**Addis Ababa University**  
**School of Graduate Studies**  
**School of Social Work**

**Master's Thesis Project**  
**Topic of Study – Social Networks and Communication**  
**Questionnaire developed by Wassie Kebede Reda (Author of this research)**

#### Case Study Questionnaire

- A. Case name/Code** \_\_ Age \_\_ House N \_\_, telephone (if available and permitted to register) \_\_ specific location (area identification) \_\_\_\_\_
- B. Case drawn from:**  
Old woman \_\_young woman \_\_woman with traditional skill \_\_woman from group income enterprise \_\_woman from illiterate/primary education \_\_woman from employed group \_\_single mother woman \_\_widowed woman with a child/children \_\_woman from secondary/tertiary education \_\_self employed woman \_\_
- C. Introduction:** Brief discussion on social networks and communication. This will help to understand informant's overall knowledge of social networks and communication. Knowing such knowledge will facilitate the overall process of interview.

#### Part I: Social network inventory general information

- 1.1 With how many people you have direct and regular social networks? \_\_ (estimate the number)
- 1.2 With how many people you have indirect social networks?\_\_ (estimate the number)
- 1.3 From those with whom you have direct social networks, how many of them are women? \_\_\_\_, and how many of them are men? \_\_\_\_\_
- 1.4 From those you have direct social networks how many of them are living in Gedam Sefer? and how many of them are living outside of Gedam Sefer \_\_\_\_\_







2.2 Can you explain the main functions of your social networks/ties as described in the following table?

Forms of social networks	Main functions							
	Social function	Symbolic/ritual function	Economic function	Spiritual/religious function	Political function	Cultural/tradition function	Centre of information	Any other function
Kinship ties								
Friendship ties								
Ethnic ties								
Neighborhood ties								
Gender ties								
Work centre ties								
Other ties (explain)								

2.3 What specific functions do your social networks play under each category mentioned above

a) Social function: \_\_\_\_\_  
 \_\_\_\_\_

b) Symbolic/ritual function: \_\_\_\_\_  
 \_\_\_\_\_

c) Economic function: \_\_\_\_\_  
 \_\_\_\_\_

d) Spiritual/religious function: \_\_\_\_\_  
 \_\_\_\_\_

e) Political function: \_\_\_\_\_  
 \_\_\_\_\_

f) Cultural/tradition function: \_\_\_\_\_  
 \_\_\_\_\_

2.4 For which direct social networks do you give priority in terms of the benefit you get for the overall social, economic and cultural situation of your life?

Social network type	Priority level							
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
Kinship ties								
Friendship ties								
Neighborhood ties								
Ethnic ties								
Gender ties								
Work centre ties								
Other ties (explain)								

2.5 What reasons can you give for your 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> priority type of social networks?

a) Reasons for 1<sup>st</sup> priority: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

b) Reasons for 2<sup>nd</sup> Priority: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

c) Reasons for 3<sup>rd</sup> priority: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

2.6 Can you rate the frequency of interaction per month to each priority types of networks?

Type of networks/priority type	Frequency of interaction in interval order					
	0	1-5	6-10	11-15	16-20	Over 20
1 <sup>st</sup> priority						
2 <sup>nd</sup> priority						
3 <sup>rd</sup> priority						
4 <sup>th</sup> priority						
5 <sup>th</sup> priority						
6 <sup>th</sup> priority						
7 <sup>th</sup> priority						
8 <sup>th</sup> priority						

2.7 What roles do you play in each form of direct social network?

Form of network	Roles in the social network					
	As a member only	As a centre of ties	A role of brokerage for the network	As clique leader	Creating bonding	Playing maintenance role
Kinship ties						
Friendship ties						
Neighborhood ties						
Ethnic ties						
Gender ties						
Work centre ties						
Other ties (explain)						

2.8 How long is since each type of direct social network initiated/established?

Form of social network	Age of social network		
	In days	In months	In years
Kinship social network			
Friendship social network			
Neighborhood social network			
Ethnic social network			
Gender social network			
Work centre social network			
Other forms of social network			

**Part III. Boundaries existing in the direct and indirect social networks**

3.1 Social boundaries: With whom do you have direct and indirect social networks/?

	Direct	Indirect	Both
a) With those having similar education status	_____	_____	_____
b) With those who are head of a household	_____	_____	_____
b) With those having similar economic status	_____	_____	_____
c) With those having similar marital status	_____	_____	_____
d) With those having similar skills and know-how	_____	_____	_____
e) With those having similar living conditions	_____	_____	_____
f) With those having similar belief systems	_____	_____	_____
g) With those having similar ethnic and cultural background	_____	_____	_____
h) With those with similar job and occupation status	_____	_____	_____
i) No status discrimination for interaction	_____	_____	_____

3.2 Physical boundaries: Where do you have direct and indirect social networks?

Forms of Networks	In Gedam Sefer	Outside Gedam Sefer in AA	Place of Network		Network is indirect	Network is both
			origin	is direct		
Kinship	_____	_____	_____	_____	_____	_____
Friendship	_____	_____	_____	_____	_____	_____
Ethnic	_____	_____	_____	_____	_____	_____
Neighbour	_____	_____	_____	_____	_____	_____
Gender	_____	_____	_____	_____	_____	_____
Work	_____	_____	_____	_____	_____	_____
Other ties (explain)	_____	_____	_____	_____	_____	_____

**Part IV: Modes of communication in social networks**

4.1 What are the possible means of your communication that serve for specific type of social networks?

<u>Means of communication</u>	Serving for Direct NW	Serving for indirect NW	Serving for both networks
Communication through physical contact (face-to-face)	_____	_____	_____
Communication through telephone and postage	_____	_____	_____
Communication through messengers (person)	_____	_____	_____
Symbolic/ritual communication	_____	_____	_____
Electronic communication such as telephone, email)	_____	_____	_____
Any other form of communication (Explain)	_____	_____	_____

4.2 Which means of communication is more purposeful for which forms of social networks?

Forms of social network	Means of communication					
	Physical	Telephone/postage	messenger	Symbolic/ritual	Electronic	Others-explain
Kinship ties						
Friendship ties						
Neighborhood ties						
Ethnic ties						
Gender ties						
Work centre ties						
Other ties (explain)						

4.3: Reasons for first choice communication means

- a) Economical \_\_\_\_\_
- b) Effectiveness \_\_\_\_\_
- c) Efficiency \_\_\_\_\_
- d) Accessible \_\_\_\_\_
- e) Mutual interest of the communicator/receiver \_\_\_\_\_
- f) Easy to utilize (based on level of skill and knowledge) \_\_\_\_\_
- g) Culturally acceptable \_\_\_\_\_

4.4 Which form of communications do you prefer most (state your preference in order of priority from 1 to 3)

1<sup>st</sup> preference \_\_\_\_\_  
2<sup>nd</sup> preference \_\_\_\_\_  
3<sup>rd</sup> preference \_\_\_\_\_

4.5 Why do you prefer the above means of communication in their order of priorities?

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Part V Linkages between social network functions and strategies to cope up with socio-economic problems and to interact with the larger community

5.1 What specific economic and socio-cultural problems do you have to solve due to your engagement in each type of social network?

a) Kinship social network

Socio-cultural problems to solve

---

---

Economic problems to solve

---

---

b) Friendship social network

Socio-cultural problems to solve

---

---

Economic problems to solve

---

---

c) **Neighborhood social network**

Socio-cultural problems to solve

---

---

Economic problems to solve

---

---

d) Ethnic network

Socio-cultural problems to solve

---

---

Economic problems to solve

---

---

e) Gender social network

Socio-cultural problems to solve

---

---

Economic problems to solve

---

---

f) Work centre social network

Socio-cultural problems to solve

---

---

Economic problems to solve

---

---

f) Other network (specify)

Socio-cultural problems to solve

---

---

Economic problems to solve

---

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5.2 What would happen to your social and economic problems if you were not participated in any of the social networks you are currently engaged in?

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5.3 Through which social networks do you interact with the larger community?

- a. Kinship social network \_\_\_\_\_
- b) Friendship social network \_\_\_\_\_
- c) Neighborhood social networks \_\_\_\_\_
- d) Ethnic social networks \_\_\_\_\_
- e) Gender social networks \_\_\_\_\_
- f) Work centre social networks \_\_\_\_\_
- g) Other from of social networks (specify) \_\_\_\_\_

5.4 Why do you prefer the above type of social networks as entry for your interaction with the larger community? (Provide at least three reasons)

a) 1<sup>st</sup> reason:

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b) 2<sup>nd</sup> reason:

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c) 3<sup>rd</sup> reasons:

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**Part VI. Personal information**

6.1 Marital status: single \_\_\_ separated \_\_\_ widowed \_\_\_ divorced \_\_\_

6.2 Education level: illiterate \_\_\_ primary level \_\_\_ secondary level \_\_\_ higher level \_\_\_

6.3 Number of families including the case \_\_\_\_\_ (own children \_\_, relatives, \_\_\_ non relatives\_\_\_)

6.4 Means of income: employment \_\_\_\_, own business, \_\_\_ support from others \_\_\_\_, combination of any of the three \_\_\_\_\_

6.5 Amount of monthly income from both sources in Birr \_\_\_\_\_

6.6 Available resources/facilities at home level

Radio            yes \_\_\_            no \_\_\_

TV                yes \_\_\_            no \_\_\_

Telephone      yes \_\_\_            no \_\_\_

6.7 Where do you think you can categorize yourself in terms of economic status?

From the well to do group \_\_\_\_\_

From the well off group \_\_\_\_\_

From the group with income satisfactory for basic needs \_\_\_\_\_

From the group with income not satisfactory for basic needs \_\_\_\_\_

6.8 Housing information

Near to the road \_\_\_\_\_

Off the road \_\_\_\_\_

Attached with others \_\_\_\_\_

New house \_\_\_\_\_

Old and without proper maintenance \_\_\_\_\_

Obtained from Kebele by own name \_\_\_\_\_

Is transferred from parents/relatives/friends \_\_\_\_\_

**Appendix B: Informed consent**

Good morning/afternoon

We are talking to local people about their social networks, skills, abilities, and talents.

The information you provide will help us understand how people who use their homes in ways that help them generate income to support their families. With this information, we hope to help people contribute to improving their neighborhood, finding jobs or starting small businesses. This information may also help design community development projects that will benefit the local community.

This study includes 100 poor households in Kebele 03 who are eligible for the slum upgrade and relocation program. Taking part in this study is voluntary. You may choose not to take part or you may stop answering these questions at any time. There are no negative consequences from the University of Illinois at Chicago, Addis Ababa University, or from the Arada sub-city government administration (Kebele)) for not responding to this interview.

**To obtain a full picture of the skills and capacities of female-headed households living in Gedam Sefer community, you are one of 10 people selected to participate in a follow-up interview. The respondents will be interviewed regarding their existing social networks and communication patterns.**

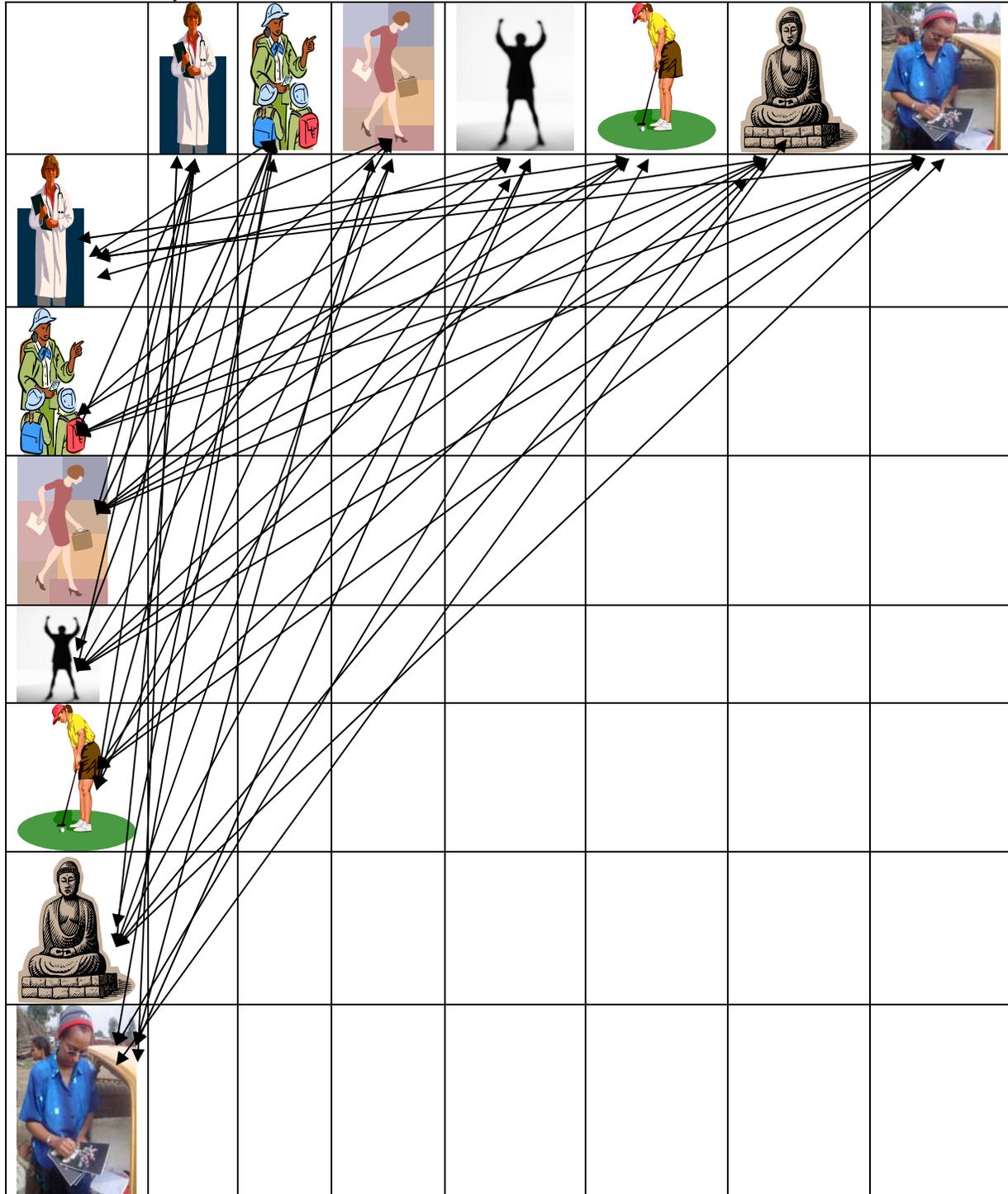
This study will keep your name and your household confidential. Only the researcher will know your name and household. For the purposes of our research analysis, individual responses to the interview questions will be either separately analyzed or added together, and all information from the study will be presented in summary.

The information that we learn from this study will be available in a written report submitted to Addis Ababa University and Arada sub-city Kebele 03 administration. We may also use the information for academic purposes such as conference presentations, journal articles and book chapters. You will receive a payment of 50 birr (approximately \$6.00 USD) for taking part in this study. If you agree to take part in this study, your responses will be written directly on the blank spaces of the interview form in English language. If you have any questions about your rights as a research subject, you may call the Office for Protection of Research Subjects at the University of Illinois at Chicago, at 011-312-996-1711.

For questions about this study, contact the researcher: Alice K. Johnson Butterfield, Principal Investigator University of Illinois at Chicago, Jane Addams College of Social Work, 1040 West Harrison Street (M/C 309), Chicago, Illinois USA 60607, Phone: 312-996-0036. Email: [akj@uic.edu](mailto:akj@uic.edu). In Ethiopia, contact Wassie Kebede, Research Assistant, Graduate School of Social Work, Box 1176, Addis Ababa University, Addis Ababa, Ethiopia, Email: [wassiek@ethionet.et](mailto:wassiek@ethionet.et) Telephone 251-0114-190-572:

Completion of the interview implies your consent to participate in the study.

**Appendix C: Pictorial interview aids** (the pictures were taken from a computer clip art file and do not represent any one person). The exception is one picture taken from Ethiopia where photo was scanned based on the consent of the lady.



**ALL POSSIBLE CONNECTIONS OF SEVEN INDIVIDUALS IN A NETWORK**

This thesis is my original work and has not been presented for a degree in any other university, and that all sources of material used for the thesis have been duly acknowledged.

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**Candidate's Name**

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**Signature**