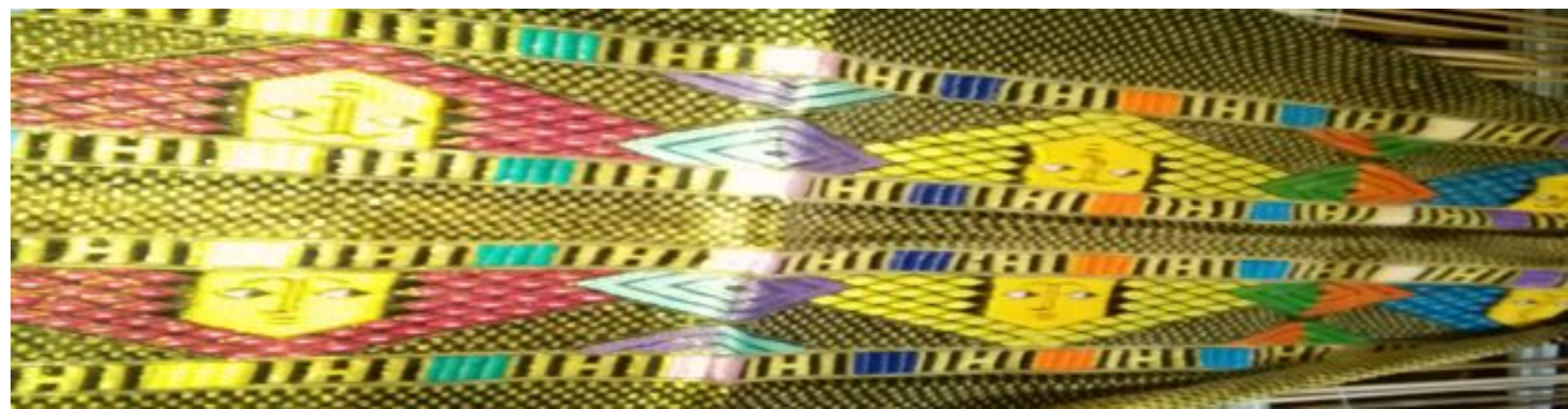




**INDIGENOUS KNOWLEDGE TRANSFER  
METHODS OF SHERO MEDA WEAVERS COMMUNITY:  
IMPLICATIONS FOR ADULT EDUCATION AND  
COMMUNITY DEVELOPMENT**

**By: Rahel Zelalem**

**June, 2017**



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DEVELOPMENT**

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Community Development

Advisor: Dr. Woube Kassaye

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June, 2017

**DEDICATION**

**I dedicate this Thesis to my mother Almaze  
Zenaw, my Fatherly instructor, Wondimu  
Gaga and to all the indigenous people of  
Gamo Gofa whose traditions are threatened  
with extinction**

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**ACRONYMS**

AAU	Addis Ababa University
CSA	Central Statistical Agency
EFA	Education for All
ESD	Education for Sustainable Development
ESDP	Education Sector Development Program
ESSP	Ethiopia Strategy Support Program
FGD	Focus Group Discussion
IDI	In-depth Interview
IK	Indigenous Knowledge
IKS	Indigenous Knowledge Systems
IFAL	Integrated Functional Adult Literacy
KII	Key-informant Interview
KSA	Knowledge, Skill and Attitude
MOE	Ministry of Education
MOCT	Ministry of Culture and Tourism
NCPHP	Northwest Center for Public Health Practice
OJT	On-the-Job Training
Ph.D.	Philosophy of Doctorate
SNNPR	Southern Nations Nationalities and Peoples Region
TKS	Traditional Knowledge System
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization

## ABSTRACT

*The overall objective of the study was to examine Indigenous Knowledge (IK) transfer methods connected with adult education and community development practices. The study has captured the weaving processes, intention, method, duration of training, problem solving strategies, challenges to transfer IK and the outcome of learning weaving. In addition, the study aimed to identify indigenous practices and the interaction (link) with adult education and community development to proposed IK as a system and model to become sustainable through education. To this end, a qualitative case study was used as a design. Secondary and primary data were gathered to inform the study. Primary data were gathered through focus group discussions and in-depth interviews conducted with Shero Meda weavers community in Addis Ababa. Key informant interviews conducted with professionals. Secondary data were collected from relevant policy documents. The collected data were transcribed; analyzed after categorizing them into themes. Then, they were described by using narrative statements. The major strengths of weavers IK transfer methods are active and effective as opposed to the high cost of modern training or education. The study also identified that the IK transfer method was effective because it was more a vocation rather than a theory. Based on the findings, it is recommended that when IK combined with adult education, community development will be effective and fruitful in order to assure community wellbeing and contribute to the country's economic development. To this end the concerned organizations such as Ministry of Education and Ministry of Culture and Tourism should play their roles in sustaining such knowledge system and bring about cultural and economic transformation.*

**Key words:** Indigenous knowledge, Transfer method, Adult education, Community development, Weaver's community

## CHAPTER ONE

### INTRODUCTION

#### 1.1. Background of the Study

Nowadays, there is a global shift towards recognizing and understanding indigenous knowledge (IK). According to Lalonde (1991), many scientific and social researchers associated with the formulation of development assistance policies are now beginning to recognize the positive role that indigenous peoples' and their knowledge of the ecosystem, can play in the success of development projects and policies. Eyong (2007) further noted that selecting into the intellectual resources and increasing the economic value of indigenous knowledge system (IKS) is a practical tool for sustainable development. Hence, it is at the level of economic sustainability, self-reliance and cost-effectiveness that IKS continue to prove their practicality and strength.

Ethiopia, which has a long history and ancient civilizations, consists of rich indigenous knowledge systems which are deeply embedded in local culture and social politics. Regarding to society's cultural knowledge system, weaving; pottery and basketry can be mentioned as examples. According to Dubois (2008), weaving, pottery and basketry are ancient crafts developed in Ethiopia as in many countries of the world. It could be taken that Ethiopia is unusual in that ancient crafts are still essential items in every household.

Sabahar (2016) stated that hand weaving has been a means of life for centuries in Ethiopia. Even today, almost all the beautiful traditional Ethiopian clothing is made on hand looms. The city of Addis Ababa provides consideration with enormous choice of design pattern textile products with the woven *tibeb* for customers. The cloth produced depends on the choice of quality threads used, color of threads and choice of pattern. Today one can find cloth with the woven *tibeb* in most markets of Addis Ababa.

The art of weaving is passed from generation to generation. Gibson (2013) reported that one of the famous ethnic groups well-known in weaving is the Dorze community. The origin land of Dorze community is Gamo Gofa Zone. Gamo Gofa Zone is one of the highlands of Southwestern Ethiopia and a sub- unit of regional state (see Figure 1.1). The Dorze community, who migrated from Gamo Gofa Zone, settled in *Shiro Meda* area of Addis Ababa. According to Sabahar (2016) now, there are about 200,000 hand loom weavers in Ethiopia. Dubois (2008)

stated there are about 100,000 weavers in Addis Ababa alone. This number shows Ethiopia has a lot of skillful weavers who can manifest and promote Ethiopian indigenous knowledge in production of textiles. As can be observed, this community has the reputation of being the most “skilled” weavers who produce beautiful, quality and colorful textiles, known as *tibeb*. How this indigenous Knowledge transferred from generation to generation? What are the training methods employed by weavers to impart their knowledge and skill? These were the main questions that required me to get answers.

The Ethiopian Education and Training Policy (1994) emphasizes the need to promote the development of practical skills and competencies among graduates at all levels of education system (MOE, 2002). This can be seen from two angles: expansion of formal and non-formal TVET system. But, does the Shero Meda weavers’ community indigenous knowledge get consideration in Ethiopian adult education programme? What is the contribution of this indigenous knowledge to community development? How can this indigenous knowledge maintained as a mechanism to adult education and community development? These were the subsequent issues that need to be investigated in order to endorse the importance of indigenous knowledge transfer methods for adult education and community development practice.

### ***Weaving in Ethiopia***

Weaving is done traditionally to make all types of Ethiopian traditional fabrics, such as, *Anguet libs, Bulluko, Gabi, Jano, Kutta, Nettela and Yehabesha libs*. In Ethiopia, hand weaving is an important traditional knowledge and skill which has been transferred from generations to generation. Hand loom weaving is a demanding trade traditionally done by men whereas the spinning of cotton in preparation of weaving is often done by women. Mathiszig (2014) mentioned that whether in the capital city, Addis Ababa, or walking in the remote *Semein* Mountains, simple textiles made with the most basic equipment are worn and used everywhere. Hand loom weaving is practicing in some of Ethiopian regions, including Amhara, Oromia and the Southern Nations Nationalities and Peoples Region, referred to hereafter as SNNPR. In Addis Ababa, most of the producers and traders of traditional clothing in Shiro Meda came from the Arba Minch, Gamo Gofa (Gezahegn, Chamberlin, Moorman, Kassu & Zhang, 2009).

### ***Background of Shiro Meda Weavers Community***

According to Dubois (2008), the origin of the Shiro Meda weavers community goes back to the time of the imperial couple Menelik II and Taitu who were fond of the *Tibeb*, the complicated woven work with vivid silk or cotton threads. He also stated that the first Minister of Defense in modern Ethiopia brought a group of weavers specialized in this weaving style from Gamo Gofa in southern Ethiopia. The weavers, who settled in the Shiro Meda area in Addis Ababa, were then selected to provide textiles to the imperial court. The *Tibeb* lends richness and dignity to the humblest costume (Dubois, 2008). Shiro Meda weavers community is well known by the customary name of Dorze. The ethnic groups of Dorze inhabiting in Gamo Gofa Zone are residing in villages near the cities of Chenchu and Arba Minch. Weaving is a primary profession for most members of Dorze community. For the reason that, the name of weaving associated with name of Dorze.



Yishak (2013) noted Gamo Gofa consist of 15 Woredas (administrative sub-unit of a zone). Chenchu is one of the Woreda in Gamo Gofa which is a province recognized at a zone level in SNNPR. It is named after two of the ethnic groups living within its boundaries, the Gamo and the Gofa peoples, whose homelands lie in this Zone.

**Figure 1.1. Administrative Map of Gamo Gofa Zone (Source: <https://openi.nlm.nih.gov/detailedresult>)**

The administrative center of Gamo Gofa is Arba Minch. It is located at 505km south of Addis Ababa. Based on the 2007 census conducted by the Central Statistical Agency of Ethiopia (CSA), this Zone has a total population estimated about 1,593,104 with an area of 18,010,99 square kilometers. The largest ethnic groups reported in this Zone included the Gamo (64.61%), the Gofa (22.08%) and all other ethnic groups made up of 13.31% of the population. Gamo is spoken as a first language by 63.75% of the inhabitants, 22.01% Gofa, 3.47% Amharic and the remaining 10.77% spoke all other primary languages. About 53.41% of the populations were Protestants, 31.54% Orthodox and 11.13% traditional religion believers.

## 1.2. Statement of the Problem

Ethiopia is a multi-ethnic nation with diverse cultural and traditional practices. Education is an important tool in addressing issues pertaining to its diversity and in alleviating poverty. Commonly, the country has embarked on the expansion of its education system to bring about national development and sociocultural transformation. Among these, one can mention the efforts made over the last two decades to bring about changes of attitudes towards traditional and indigenous skills like weaving. According to the Ministry of Information (2010), the textile and apparel industry has been identified as the key engine for economic growth since it has a potential to provide employment and can contribute to gross domestic production as well as poverty reduction scheme of the country.

As some of the study recognized that in the case of handcraft like weaving was the undervalued task, even if, which has high contribution for development. Dubois (2008) identified traditional handcraft was highly neglected activity until recognizing the value of the traditional craftsmen by Emperor Menelik II proclaimed a decree on January 25, 1908. Likewise, Hofverberg (2010) asserted that positive attitude towards weaving learning process, for people have observed the fact that those adults who have engaged in this activity have enhanced skill which can help them to improve their living conditions through income generation.

Concerning IK, the research published by UNESCO shows IK may be integrated into education and thereby, bring the benefits of helping to 'sustain' indigenous knowledge and societies at all. It also encourages teachers and students to gain enhanced respect for local culture, its wisdom and its ethics, and provides ways of teaching and learning locally relevant knowledge and skills (Fien, 2010). However, Dubois (2008) in his study report stated that scholars have not been seriously concerned with documenting and preserving for posterity this fabulous expression of Ethiopian cultural knowledge.

Regarding adult education program, Ethiopia is facing challenges in expanding quality literacy/education to its citizens (MOE, 2008). One of the factors that can be raised as a problem is less consideration of indigenous education within formal and non-formal adult education. According to Nafukho, Amutabi & Otunga (2005), there is a lack of awareness about such indigenous knowledge among policy planners, educationists and members of civil society at large in Africa. The absence of effective linkage between indigenous knowledge system and

conventional ones can be identified as one of the major problems that hinder the quality of education and effectiveness of community development.

Indigenous people cultures and their respective knowledge systems have been largely misunderstood by development planning experts in the past. As mentioned by Hoppers (2004), for the most part, globalization has greatly influenced institutions of tertiary education all over the world, bringing with it global instructions and problems. Fien (2010) stated that indigenous people have a broad knowledge of how to live sustainably. However, formal education systems have interrupted the practical everyday life aspects of indigenous people and ways of learning, substituting with abstract knowledge and academic ways of learning.

As far as my knowledge is concerned, even if those problems do exist, there is no study made on IK transfer methods of weavers community particularly connected with adult education and community development. In fact, Hofverberg (2010) investigate Dorze community's weaving learning process in connection with Education for Sustainable Development (ESD). She identified that Dorze education is holistic, practical, individualized and contains some problem solving. Her study report explains Dorze education is highly interrelated in the daily life of the weaving community and it is significant to the surrounding local community. Finally, she concludes that Dorze weaving learning is a model of education for sustainable development. However, her research did not reflect on the specific methods of training. Thus, the main focus of my investigation is on weavers IK transfer methods, specifically, weaving traditional training methods and on the ways of preservation. Furthermore, any study conducted on IK transfer methods of weavers on the topic of adult education and community development by local researchers was not found. Hence, this study would contribute to closing the existing research gap by investigating IK transfer methods in Shero Meda weavers community with the aim to propose ways of maintaining their IK transfer mechanism for non-formal adult training and community development practice.

### **1.3. Research Questions**

The study attempted to answer the following research questions:

1. How do the weavers transfer their indigenous knowledge for other adults?
2. In what way does weavers' indigenous knowledge get consideration in adult education program?

3. Is there a link between indigenous knowledge and community development?
4. What can be proposed to better maintaining the existing indigenous knowledge of Shiro Meda weavers Community?

#### **1.4. Objectives of the Study**

The overall objective of this study is to examine IK transfer methods of Shero Meda weavers community in Addis Ababa and its implication for adult training program and community development practices. The specific objectives of the study are:

- To identify the methodologies employed in weaving training.
- To ascertain the consideration given for indigenous knowledge of weavers in adult training program.
- To explore the link that exists between indigenous knowledge and community development.
- To propose ways of maintaining weavers indigenous Knowledge and skill transfer in non-formal adult training programme for community development practices.

#### **1.5. Significance of the Study**

The study will have practical significance for the community, adult educators, adults themselves, policymakers and researchers in different ways. The following can be taken as specific significances of the study:

- The importance of the study lies in documenting and protecting IK from extinction. Thus, it may help the MOE and MOCT to properly document and protect IK transfer methods.
- The study could identify cost-effective and sustainable mechanisms that are locally manageable and locally meaningful skill training methods. Therefore, it may help higher education institutions offering adult education and community development programs rethink their provisions so as to incorporate IK methods in to their curricula.
- In essence, the study will contribute to the utilization of IK to meet community development goals through education. So that, it may help Addis Ababa TVET Agency reflect on ways of linking IK transfer to modern methods of training in certain practical fields.
- Curriculum work is a dynamic process that requires continuous change and improvement. Hence, the study may help to modify the curriculum of the Integrated Functional Adult

Literacy (IFAL) based on the data generated on IK of the study group. Then, it may help Shero Meda weavers association maintain and expand their IK by opening itself more to the research community.

- Finally, along with other existing literature, by providing baseline information in the Ethiopian context, the study can serve as a stepping-stone for researchers who are interested to conduct further studies in the area and also it serves as input for adult education policy planners and other related experts.

### **1.6. Scope of the Study**

The main concern of this study is to examine IK transfer methods which can be an approach for adult training program and community development practices based on weavers' training. It would have been more comprehensive, if more areas were included in this study. However, to make it manageable and cost-effective, this study was mainly delimited to Gulele sub city, at Shero Meda weavers community. Moreover, only selected community members who were adults (15 years and above) were involved in the study.

### **1.7. Limitations of the Study**

Various shortcomings has encountered in conducting the study. Time constraint was one of the most outstanding factors. The researcher would have preferred to include more constituencies from other ethnic group of weaver around Shero Meda, but due to limited time frame, the study concentrated on one community. Lack of willingness by some respondents to take part as research participants was a real challenge that forced the researcher to extend data collection plan. Few adults identified for the interview had the feeling that they will be exposed to authorities since they have children as employees and refused to participate in the interviews. Another problem the researcher had encountered during the interview was language barrier. New migrants and who were identified for interview in the trainees group were unable to speak in Amharic, which the researcher was speaking. To address this challenge, the researcher recruited translators, which brought unintended financial and time implications.

### **1.8. Organization of the Study**

The paper is organized and presented in five chapters. The first chapter presents introduction of the study. Chapter two is dedicated to present the review of related literature. Chapter three deals with the research design and methodology. Chapter four presents results and

discussion of the study. The final chapter presents the study summary, conclusion and suggestion for future work.

### 1.9. Definition of Key Terms

- **Adult:** a person who is 15 years and above (MOE, 2008).
- **Adult education:** is multidisciplinary process oriented to approve lifelong education for all, as well as efficient learning throughout life to provide the knowledge that improves professional qualifications and to achieve civic, social, moral and cultural attitudes and skills for performing responsibilities and for progress in all scopes of life (Feith, 2006).
- **Community development:** is a group of people in a locality initiating a social action process, i.e., a planned intervention, to change their economic, social, cultural, and or environmental situation (Robinson and Green, 2011).
- **Development:** the process of economic and social transformation that is based on complex cultural and environmental factors and their interactions (Business Dictionary, 2017).
- **IK transfer methods:** refers in this study, the combination of techniques and activities in teaching specific useful competencies in weavers' community.
- **Indigenous knowledge:** is the collective body of strategies, practices, techniques, tools, intellectual resources, explanations, beliefs, and value sac cumulated over time in a particular locality, without the interference and loads of external hegemonic forces (Gloria & George, 2014).

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

In this chapter, relevant literature to the theme of the study has been reviewed. When the contents of literature review established, three general sections are considered. These are theories, global literatures, and local Knowledge (Ethiopian context). The remaining sections deal with conceptual frame work and a review of empirical studies related to the main concern of this thesis. In the empirical studies, researches which are studied globally, in Africa and in Ethiopia are included. Finally, a chapter summary reviewed the main points and showed the gap that research intends to fill.

#### 2.2. The Concept of Indigenous Knowledge

Indigenous knowledge termed in different words such as ‘local knowledge’, ‘folk knowledge’, ‘traditional knowledge’, ‘people’s knowledge’, ‘traditional wisdom’ and/or ‘traditional science’ (Fien, 2010). Different scholars define the concepts of IK in various expressions. Gloria & George (2014) defined IK is the collective body of strategies, practices, techniques, tools, intellectual resources, explanations, beliefs, and value sac cumulated over time in a particular locality, without the interference and loads of external hegemonic forces. Melchias (2001) states IK refers to what indigenous people know and do and what they have known and done for generations practices that evolved through trial and error and proved flexible enough to cope with change. IK refers to traditional and local knowledge which is the whole of knowledge and practices, whether explicit or implicit, used in the management of socioeconomic, spiritual and ecological aspects of life (Hoppers, 2004). Furthermore, according to World Bank (2004), IK is local knowledge; unique to every culture or society; the basis for local- level decision-making in agriculture, health care, food preparation, education, natural resource management and a mass of other activities in communities. Providing problem-solving strategies for communities; commonly detained by communities rather than individuals (World Bank, 2004).

### **2.2.1. Indigenous Knowledge Transfer Mechanisms**

IK is transfer from generation to generation, usually by word of mouth and cultural ceremonies (Fien, 2010). According to Battiste (2002), IK is supposed to have been gathered a long time ago by a process of trial and error and is now reduced to an unwritten standard that can be provoked from any capable local informant. Absolona (2010) stated in IKS, there is no distinction between living and working; IK is ways of life and it is lived knowledge meaning that needed practice what you know and be what you do to transfer. “Different IKS can be described as ‘disciplines’ which embody ethical standards, standards of responsibility, standards for transmission, and a system of rules and practices” (Hoppers, 2004). She mentioned also IKS include different practices of learning and sacrificing to gain knowledge. To become a knowledgeable person, it requires more practice (Hoppers, 2004). Correspondingly, J-T & Theresa (2015) recognized IK were passed from elders to children, by means of oral instructions, practical activities and the young adult learned by watching, participating and executing what they learnt (J-T & Theresa, 2015).

### **2.2.2 Relevance of Indigenous Knowledge**

The use of IK has been seen by many as an alternative way of promoting development in poor rural communities in many parts of the world (Briggs, 2005). The IKS process is seen as helping to facilitate and produce mind-set change in all public institutions with regards to IKS in particular, and knowledge and people-centered development in general (Hoppers, 2004). Fien (2010) describes that all the other people around the world who can learn lessons for living sustainably from indigenous knowledgeable people. He illustrates four ways in which indigenous people in different parts of the world use their knowledge to live sustainably. These are a spiritual relationship with the land; natural remedies and medicines; sustainable resource management; and sustainable social relationships. Hoppers (2004) recognized the protection, development and promotion of IKS will help to improve the livelihoods and economic well-being of local communities by ensuring equitable and fair benefit sharing in the utilization of the nation's resources. In general, the basic component of any country's knowledge system is its indigenous knowledge. It encompasses the skills, experiences and insights of people, which can be applied to maintain or improve their livelihood (J-T & Theresa, 2015).

### **2.2.2. Preservation of Indigenous Knowledge**

IK, which has generally been passed from generation to generation by word of mouth, is in danger of being lost unless it is officially documented and preserved (Amare, 2009). The context in which traditional knowledge are generated and preserved is extremely significant, because, traditional knowledge reflects the internal cultural cognitive categories of the particular community (Hoppers, 2004). According to Nafukho, Amutabi & Otunga (2005), to display IK in the way it has demonstrate how vital role society has played, particularly in relation to its preservation ascending through continual usage. They also suggested that to maintain, control, protect, and develop traditional knowledge, first, recognition of the adaptive nature of IK will be essential to understand where resides the capacity of traditional knowledge systems to evolve and adapt in the face of change. Moreover, as an important component of the world's bicultural heritage, IKS should increasingly acknowledge for their contribution to sustaining biodiversity and ecosystem service (Nafukho, Amutabi & Otunga, 2005).

### **2.2.3. Challenges of Indigenous Knowledge**

Eyong (2007) described colonialism, economic challenge, the effect of globalization, and modernization are some challenges of IK. He also explained colonialism largely inhibited the development of indigenous technology in Africa and de-stabilized some of the existing processes of technical growth and the indigenous manufacturing capability was deliberately undermined. Likewise, Grenier (2009) describes though IK is lost naturally as techniques and tools are modified or fall out of use, the recent and current rate of loss is accelerating because of rapid population growth, growth of international markets, educational systems, environmental degradation, and development processes pressures related to rapid modernization and cultural homogenization.

## **2.3. Concepts and Theories of Adult Education**

Education has a fundamental role to play in personal and social development. According to Delors, et al., (1996), education is one of the principal means obtainable to foster a deeper and more harmonious form of human development and thereby to reduce poverty, exclusion, ignorance, oppression and war. One form of provision of education is adult education. The UNESCO General Conference in Nairobi (1976) provided the following definition of adult

education: The term ‘adult education’ denotes “the entire body of organized educational processes, whatever the content, level and method, whether formal or otherwise. whereby persons regarded as adult in the society to which they belong develop their abilities, enrich their knowledge, improve their technical or professional qualifications, or turn them in new directions and bring about changes in their attitudes or behavior ”(as cited in Nafukho, Amutabi & Otunga, 2005).

The concrete goal of adult education is development. As elaborated by the Fifth International Conference on Adult Education which took place in Hamburg, Germany, adult education is stated as follows: “Adult education is a powerful concept for fostering ecologically sustainable development, for promoting democracy, justice, gender equity, and scientific, social and economic development, and for building a world in which violent conflict is replaced by dialogue and a culture based on justice”. Thus, the purpose of adult education are economic productivity and competitiveness; enabling personal development and enhancing social inclusion and cohesion, (as cited in Nafukho, Amutabi & Otunga, 2005).

Adult learning in the context of the 21 century focuses on four pillars of education, learning to live together; learning to be; learning to do; and learning to know (Delors et al., 1996). Adult learning aimed as multidisciplinary process oriented to approve lifelong education for all, as well as efficient learning throughout life to provide the knowledge that improves professional qualifications and to achieve civic, social, moral and cultural attitudes and skills for performing responsibilities and for progress in all scopes of life (Feith, 2006).

There are various forms of adult education: Agricultural extension; University extension programs; In-service training; Literacy/functional adult literacy/Integrated functional adult literacy; Out-of-school education; Audio-visual education for adults; Mass media education; Vocational education; Community development; Cooperative education; and University adult education programs (Nafukho, Amutabi & Otunga, 2005). Adult education also classified as formal, informal and non-formal. Formal adult education is structured learning that typically takes place in a school or training institution, usually with a set curriculum and carries credentials (Anis, 2007). Informal adult education refers to learning which take place in community, where individuals have opportunities to observe and participate in social activities and tasks (YICDOL, 2006). Non formal adult education is a learning activity organized outside the established framework of the formal school system (MOE, 2008).

### **2.3.1. Training**

As stated before, according to Nafukho, Amutabi & Otunga (2005) there are various forms of adult education; the one among them is training. “Training is the systematic approach to affecting individuals’ knowledge, skills, and attitudes in order to improve individual, team, and organizational effectiveness” (Aguinis& Kraiger, 2009, p1). Buckley & Caple (2009) described the difference between training and education.

Training refers to a planned and systematic effort to modify or develop knowledge/skill/ attitude through learning experience, to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to enable an individual to acquire abilities in order that he or she can perform adequately a given task or job and realize their potential. Education refers to a process and a series of activities which aim at enabling an individual to assimilate and develop knowledge, skills, values and understanding that are not simply related to a narrow field of activity but allow a broad range of problems to be defined, analysed and solved. (p. 9)

Buckley & Caple (2009, p.9) also emphasized the similarity between education and training. “While considerable emphasis has been placed on the way in which training and education differ, it must be appreciated that they are closely interrelated processes. The ability of an individual to acquire knowledge, skills and attitudes in a training context may depend directly or indirectly on the quality of previous educational experiences.” To evaluate training effectiveness one needs to consider that most important training activities and adult learning theories towards training.

### **2.3.2. Andragogy**

Andragogy is defined as “ the art and science of helping adults learn in contrast to pedagogy as the art and science of teaching children” (Knowles 1980, p.43). Knowles discovered through his work with adults that instructors needed to care about the actual interests of learners instead of focusing on what instructors believed were learner’s interests. In Knowles opinion (1980; 1984), the best educational experiences were cooperative, guided interactions between the teacher and learner with many available resources. During these experiences, the teacher helps guide the learner to develop his or her own potential.

Knowles developed a set of five assumptions that in his concept of andragogy. The five assumptions of andragogy are that adults are self-directed learners, adult learners bring a wealth of experience to the educational setting, adults enter educational settings ready to learn, adults are problem centered in their learning, and adults are best motivated by internal factors (Knowles, 1980). As the sixth principle motivation added later; as a person matures, he or she receives their motivation to learn from internal factors.

Knowles (1984) suggests that adult educators set a cooperative climate for learning in the classroom; assess the learner's specific needs and interests; develop learning objectives based on the learner's needs, interests, and skill levels; design sequential activities to achieve the objectives; work collaboratively with the learner to select methods, materials, and resources for instruction; and evaluate the quality of the learning experience and make adjustments, as needed, while assessing need for further learning. Corley (2011) said that because adults need to know why they are learning something, effective teachers explain their reasons for teaching specific skills. He also stated because adults learn by doing, effective instruction focuses on tasks that adults can perform, rather than on memorization of content. Because adults are problem-solvers and learn best when the subject is of immediate use, effective instruction involves the learner in solving real-life problems (Corley, 2011).

Andragogy has been adopted in many fields and by educators in different countries (Chan, 2010). Andragogical methods are best when they can be applied in community situation and industry/corporate situations that are supportive of a self-directed learner (Crawford, n.d). Forrest and Peterson (2006) claim that the andragogical approach is essential in management education to help prepare students for their working environment. According to Chan (2010),

Andragogy is applicable in multiple contexts. The andragogical approach has changed the teaching philosophy of educators around the world. Given the current educational needs, the pedagogical approach has become less effective in teaching adult learners. Adult learners need more than passive transfer of knowledge from one person. Instead, they need to be involved actively in the learning process to construct their own knowledge, to make sense of the learning, and to apply what is learned. Educators as well as the educational systems world-wide should provide all learners, both children and adults, with the opportunities to be actively engaged in learner-centered educational experiences. (p.33)

Chan (2010) also suggested that it would be in the best adopting and applying andragogical principles, learner-centered approaches, and constructivist principles in the classroom. The use of these strategies will create a more engaging and practical learning environment, which can lead to creativity and innovation in the classroom and, ultimately, competent individuals prepared to compete in the 21st century workforce (Chan, 2010).

### **2.3.3. Adult Education Methods**

In 2014, Northwest Center for Public Health Practice (NCPHP) stated that effective teaching require that the teacher takes into account: the appropriateness of the teaching methods; the three domains of learning; behaviors to effective teaching; learning resources; evaluation tools and methods.

#### ***Teaching Methods***

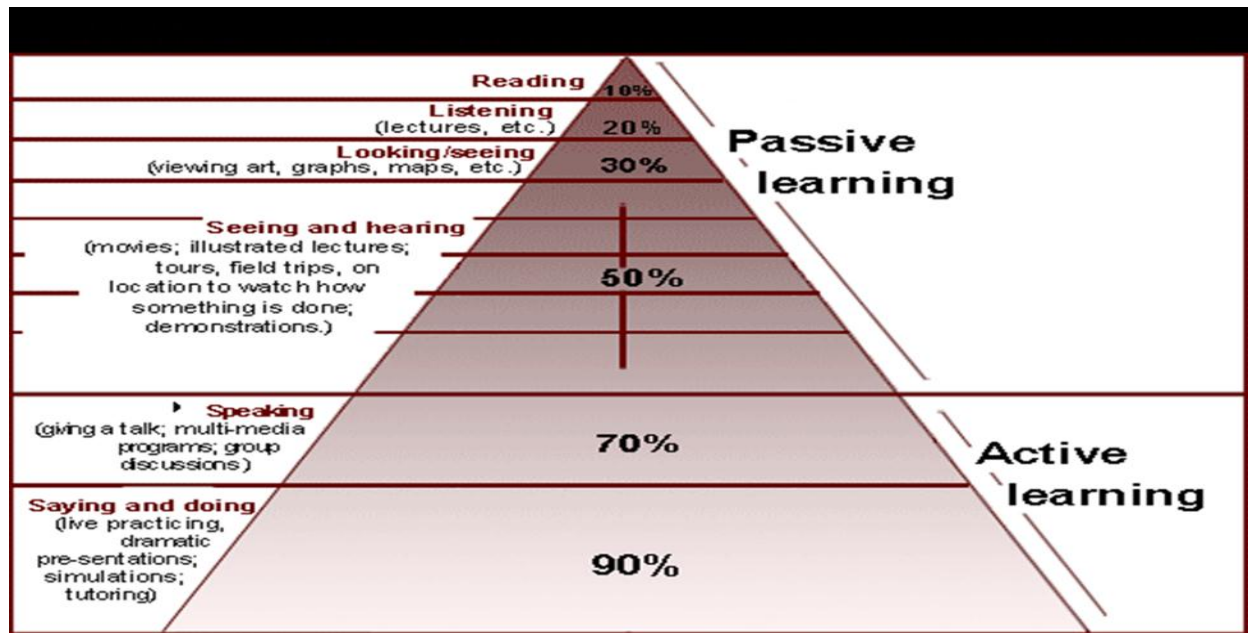
At the beginning, teachers should be aware that not only must they know what to teach (i.e., content) they must know how to teach, providing opportunities for their students to process information to assist in their learning (Hill, 2014). There are numbers of Methods of teaching in adult education. Schwartz (n.d) mentioned several teaching methodologies have been determined to be effective when teaching adult learners. These methods can be divided into five categories: self-directed, active, experiential, collaborative, and narrative.

Self-directed learning is independent—it provides the learner with the ability to make choices, to take responsibility for their own learning, and the capability to articulate the norms and limits of learned society, and personal values and beliefs (Goddu, 2012). Active learning provides students with opportunities to enhance skills, improve their critical thinking, and gain knowledge in an efficient way (Karge, Phillips, Jessee, McCabe, 2011). Goddu (2012) experiential learning allows adult learners to make practical use of their knowledge and apply it in a context similar to the way that knowledge would be used in real life. Davis (2013) stated that collaborative learning is effective for adult learners because it allows them to use their shared connections and experiences to explain and build upon concepts from class in ways instructors cannot. According to Clark & Rossiter (2006), in narrative learning, adults are given the opportunity to form a link between lived experience and curricular content. Because adult

learning has to do with meaning making, these autobiographical connections are integral to the process (Clark & Rossiter, 2006).

Karge et al., (2011) has provided two examples of specific activities that are effective for adult learners: Tell-Help-Check and Problem Based Learning. He said that Tell-Help-Check is excellent strategy that provides adult students opportunities to review and confirm their understanding of critical information and maintain interest in the course content, as well offering them the opportunity to influence their existing knowledge or experience. Problem Based Learning makes students provided with a real life situation or problem and some guidelines on how to solve the problem (Karge et al., 2011). In addition to this, Silberman (1996) stated 101 active teaching- learning strategies which are useful to any level of training and/or teaching. He described that practical strategies are best ways to make students active participant. Silberman, analyzed active and passive learning as the following:

**Figure 2.1. Active and passive learning**



Source: (Silberman, 1996)

Gapped lecture, discussion, role play, and visual methods are very common methods that most scholars mentioned. According to Bruner (1966), methods should effectively respond to diverse learning styles so, he suggests that adult learners have different ways of learning and

cognitive styles. Some are symbolic learners and primarily learn by abstracting and conceptualizing. Others are visual learners and learn primarily by visualizing and organizing perceptions into patterns and images. Still others are active learners and learn primarily by active participation. To be responsive to diverse learning styles, instructors should use various teaching methods (Gitterman, 2004).

**Traditional Training Method:** trainings will vary depending on target population. As stated before, a variety of teaching strategies are needed to be effective. McGraw-Hill Companies (2005) classified traditional training method in to three categories. These are presentation methods, hands-On methods and group building methods. Presentation Methods are in which trainees are passive recipients of information, this information may include: facts or information processes, problem –solving methods. Presentation methods include: lectures and Audio-visual techniques. Hands-on Methods requires the trainee to be actively involved in learning. These methods include: On-the-job training (OJT), simulations, case studies, business games, role plays and behavior modeling. Such methods are a powerful method for turning knowledge into action (Gitterman, 2004). He specified that OJT can be useful for training newly hired employees upgrading experienced employees’ skills when new technology is introduced cross-training employees within a department or work unit orienting transferred or promoted employees to their new jobs. OJT includes: Apprenticeships and Self-directed learning programs. See detail on Table 2.1.

**Table 2.1. Apprenticeships and Self-directed learning**

Method	Advantages	Disadvantages
Self-directed Learning	<ul style="list-style-type: none"> <li>-Learn at own pace</li> <li>-Feedback about learning performance</li> <li>-Fewer trainers needed</li> <li>-Consistent materials</li> <li>-Multiple sites easier</li> <li>-Fits employee shifts and schedules</li> </ul>	<ul style="list-style-type: none"> <li>-Trainees must be motivated to learn on their own</li> <li>-Higher development costs</li> <li>- Higher development time</li> </ul>
Apprenticeship	<ul style="list-style-type: none"> <li>-Earn pay while learning</li> <li>-Effective learning about “why and how”</li> <li>-Full-time employment at completion</li> </ul>	<ul style="list-style-type: none"> <li>-Limited access for minorities and women</li> <li>-No guarantee of full-time employment</li> <li>-Training results in narrow focus expertise</li> </ul>

Source: my own summary, 2017

According to McGraw-Hill Companies (2005), the other traditional training method is group building methods-training. Group building methods involve trainees: sharing ideas and experiences building group identity understanding interpersonal dynamics learning their strengths and weaknesses and of their co-workers. Group techniques focus on helping teams increase their skills for effective teamwork group building methods often involve experiential learning group building methods include: adventure learning, team training and action learning (McGraw-Hill, 2005).

### ***Learning Domains***

IK encompasses the wisdom, knowledge, teachings of communities, skills, experiences and attitude of people that applied to maintain or improve livelihood (J-T & Theresa, 2015). They also stated Africa indigenous education consisted of the basic skills, knowledge and attitudes that enabled individuals to live and function effectively in their tribe. According to Gagné's instructional theory, any knowledge transfer systems or learning, contains three primary domains, these are cognitive, psychomotor and affective. Thomas (2004) explained the three learning domain out come as KSA, this means, knowledge, skill and attitude based on Gagné's instructional theory.

**Figure 2.2. Learning Domains**

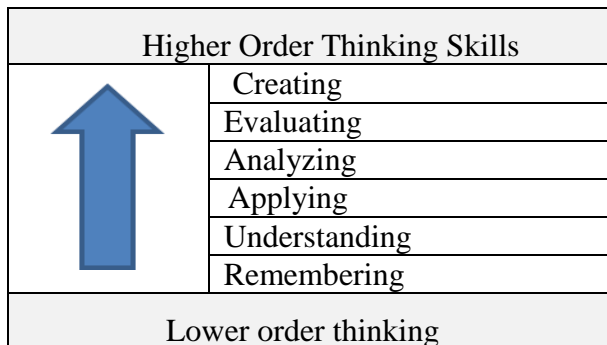


### ***Cognitive Domain***

Cognitive domain refers to learning related to knowledge (i.e., from simple recognition and memory to complex problem solving and evaluation) which is developed by education psychologist Benjamin Bloom in 1956 to categorize intellectual skills and behavior important to learning. Bloom identified six cognitive levels: knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom, 1956). Later on, revised Bloom taxonomy has recognized as remembering, understanding, applying, analyzing, evaluating and creating (Krathwohl, 2002). Instruction focuses on tasks that adults can perform, rather than on memorization of content.

Because adults are problem-solvers and learn best when the subject is of immediate use, effective instruction involves the learner in solving real-life problems (Corley, 2011). Higher order thinking skills tend to be learned most effectively by creating, evaluating, and analyzing content. Keep in mind that the more complex your material, the more time and activities you may need to provide your students, so they have plenty of opportunities to grasp the complexities (NCPHP, 2014).

**Figure 2.3. Steps of Cognitive Domain**



Source: NCPHP, 2014

***Psychomotor Domain***

This domain is characterized by progressive levels of behaviors from observation to mastery of a physical skill. Dave (1975) represents observing and patterning behavior after someone as imitation; being able to perform certain actions by memory or following instructions as manipulation; referring becoming more exact performing a skill within a high degree of care as precision; coordinating and adopting a series of action to achieve harmony and internal consistency as articulation; and mastering a high level performance until it become second nature or natural without needing to think much about it as naturalization. He also ordered as the following.

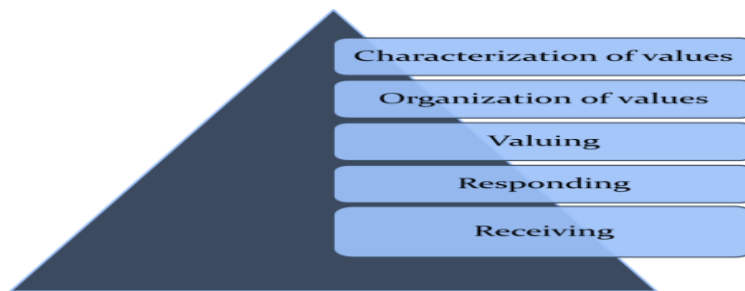
**Figure 2.4. Step of Psychomotor Domain**



### *Affective Domain*

The Affective Domain addresses interests, attitudes, opinions, appreciations, values, and emotional sets. If the teaching purpose is to change attitudes/behavior rather than to transmit/process information, then the instruction should be structured to progress through level of affective domain.(Krathwohl, Bloom& Masia, 1965). See Figure 2.5

**Figure 2.5. Step of Affective Domain**



In this regard, Garvin (1993) distinguishes between cognitive learning, related to the understanding and use of new concepts, and behavioural learning, related in the physical ability to act, and identifies three stages in the learning process. During the initial stage, cognitive learning leads to the alteration and improvement of thought patterns and knowledgebase. These are translated into new work practices, in the subsequent behavioural learning stage. During the third stage, the actions which follow cognitive and behavioural learning lead to visible performance improvements for the organisation. Klieme *et al* (2004: 70), higher competency levels are characterised by the increasing ‘proceduralisation’ of knowledge, so ‘at higher levels’, knowledge is converted to skills. Thus, KSA are related one to another.

### *Behavior of Effective Teaching*

A number of researchers and educators dealt with issues of behaviors to effective teaching. A model developed by Perrott (1982), set induction, closure, clarity of explanation, stimulus variation (teacher’s movement, changing interaction patterns, changing speech patterns) and giving examples in both deductive and inductive ways are major behaviors to effective teaching. Hill (2014) has defined three specific effective teacher traits. These three areas are teaching competencies, relationships with students, and teacher attitudes. As she explained that

first teacher competencies included having relevant practice knowledge. Adult learners were appreciative of instructors who were able to structure classroom learning, implement a variety of teaching techniques, and stimulate discussion. Second, in forming relationships with their instructors, adult learners valued instructors who were approachable and available. Third, with regard to teacher attitude, adult learners appreciated instructors who were “fun and enthusiastic” and who listened to students, viewed “students as having knowledge” and didn’t “treat them like blank slates” (Hill, 2014).

### ***Learning Resources***

According to Edward (2008), in selecting learning resources, professional personnel should evaluate available resources and curriculum needs and consult reputable, professionally prepared selection tools/aids and other appropriate sources. He stated also learning resources should be activity-based rather than lecture-based; draw students into group and co-operative learning, as well as provide for individual growth; promote hands-on activities and an applied approach to learning; encourage students to question, think, react, reflect, and decide in ways that develop critical-thinking and decision-making skills; offer choice and flexibility, as appropriate, to meet needs related to individual aptitudes, abilities, learning styles, multiple intelligences, and interests.

### ***Method for Evaluation of Adult Learner***

Andrea, Antonis & Rita (2011) described that the whole educational procedure is actually drawn by the processes of assessment and evaluation. They stated that formative and summative assessment should be related to the objectives and principles of the learning processes and should be used as feedback for both the learner and the educator. Formative assessment techniques monitor the learning process and can be used to collecting data from learner opinions, attitudes, behaviors or confidence in understanding can be gathered either during class; Comprehension Checks; using a set of reflective questions; in-class activities; Quizzes; etc. Summative assessment techniques evaluate learners’ learning and measure the extent to which learners have achieved the desired learning outcomes. Some examples are exams, papers, projects, presentations, and portfolios (Andrea, Antonis & Rita, 2011).

#### **2.3.4. Adult Education in Ethiopia**

The FDRE government has made a lot of endeavors to expand adult education in Ethiopia during the last two decades. The government addresses adult education in multi-sectorial approach. But still, the adult literacy rate is high in Ethiopia. According to UNESCO (2009/2010), report 64% (23.2 million) illiterate adults found in Ethiopia. The Ethiopian government also recognizes the potential of education in bringing about citizens who can be actively involved in the overall development of a nation (MOE, 2011). Integrated Functional Adult Literacy (IFAL) program is the one form of adult education in order to fight illiteracy in Ethiopia. The goals of IFAL are to solve individual and community problems, as well as improve individual and community life; strength national development; developing in writing, reading and numeracy skills; strength the rational use of time and value enrich their social, economic and political participation (MOE, 2011).

The education and training policy which was launched in 1994 focused on: expanding equitable access to primary and vocational education to meet the demands of the country and the economy; restructuring the education system; changing the curriculum to increase relevance of education to the communities; and improving the quality of education throughout the system. Under ESPD IV, the Ministry of Education strives to fully implement the national adult education strategy through the development and implementation of the strategic plan in adult education (MOE, 2010).

The Basics of strategy given in the document for adult education include how IFAL programmes shall be expanded: each region shall organize adult literacy programme which would involve developing materials in the mother tongues of learners covering various areas of life skills. The concept of IFAL programme seeks to link writing, reading and numeracy skills to livelihood and skill training in the area such as agriculture, civic, cultural education and health education, marketing; banking; gender issues, like family planning and HIV/ADS education etc. Such approach requires delivery by various governmental and nongovernmental service providers in multiple setting and also ensures the literacy skills development is meaningful to the learners (MOE, 2010).

On teaching arrangements, ESDP provides that teaching will be a voluntary activity organized at school and Kebele (administrative sub-unit of a Wereda) levels. The voluntary

groups are teachers, facilitators, literate adults, secondary and tertiary level students (MOE, 2008). Learning-teaching of IFAL makes participants read and write agreed and planed sentences reflecting their daily life and activities. In this approach, adults learn how to read, write and compute about their individuals, community and national agendas (Asnakech, 2014).

According to the annual report (2008) towards the achievements of IFAL, policies, strategies and programs helpful to guide the IFAL program implementation have been in place. Memorandum of Understanding has been signed among concerned stakeholders so as to make the program more integrated with the day-to-day lives of the participants. In the other hands, there are also challenges. Genet (2014) mentioned though there is political will and there are strategies and programs which are conducive to the provision of adult literacy, they are not being implemented accordingly. Also, based on the memorandum of understanding signed among stakeholder ministries where the Ministry of Education is presumed to play a facilitating role, other ministries are not considering adult education as their role (Genet, 2014).

### ***Traditional Ways of Teaching in Ethiopia***

In Ethiopia, as is the case throughout Africa, the Western education system stands distinctly apart from indigenous education (Elleni 1992). She stated that although the indigenous education of various ethnic groups of Ethiopia rose out of thousands of years of their cultural, religious, and historical experiences, it is not recognized as education by the Western system. As Elleni said if modern education examine in Ethiopia, there is no room for teaching *moya* (skills), *gibre gebinnet* (virtues), and *sine siraat* (right conduct). *Moya* encompasses a great deal of what is taught at home, ranging from housework, repairing farm equipment, preparing food and food ingredients, to crafts. The method of teaching and learning *moya* involves demonstration, observation, explanation, and repetition. Learning by doing plays an essential role. The materials used are often made or grown locally (Elleni, 1992).

### **2.4. Indigenous Knowledge in the Context of Adult Education**

IK is a growing field of inquiry, both national and internationally, particularly for those interested on educational innovation (Battiste, 2002). Fien (2010) specified that the growing recognition of the value of IK for sustainable development. He says it would be wise to sustain IK in traditional communities and integrate it into the school curriculum where culturally and

educationally appropriate. Similarly, he suggested that the five ways to enhance the curriculum through IK; learning attitudes and values for a sustainable future; Learning through Culture; Learning across generations; Starting locally, (from the 'Known' to the 'Unknown') and learning outside the classroom. Likewise, J-T & Theresa (2015) emphasized that the inclusion of IK transfer methods into schools often enhances educational effectiveness by providing an education that follows to an indigenous person's own inherent perspectives, experiences, language, and customs, thereby making it easier for children to transition into the realm of adulthood. In terms of educational content, the inclusion of indigenous knowledge within curricula, instructional materials, and textbooks has largely the same effect on preparing students for the greater world as other educational systems, such as the Western model (J-T & Theresa, 2015). Nafukho, Amutabi & Otunga (2005) affirmed regarding to preservation IKS, adult education in Africa operates on eight principles: learning through seeing, observing and doing; joint and communal custody of knowledge and information; passing on of information from one generation to another and across cultural borders; equity, mutuality and respect among members of society in the use of knowledge; development and improvement of intellectual skills based on need; sparing and joint use of all types of resources; importance of oral means of transmission, especially through metaphors and riddles; and understanding, appreciating and promoting the culture of communities.

### **2.5. The Concept of Indigenous Knowledge in Community Development Perspective**

Robinson and Green (2011) "community development is a group of people in a locality initiating a social action process, i.e., a planned intervention, to change their economic, social, cultural, and or environmental situation" (p.13). According to J-T & Theresa (2015), IK is part of the lives of indigenous people; their livelihood depends almost entirely on specific skills and knowledge essential for their survival. Accordingly, for the development process, IK is particular relevance for community development and poverty alleviation (J-T & Theresa, 2015). But, today, IK is marginalized, even denigrated, but it lives and sustains millions of people economically, socially and spiritually as a living framework for enduring creativity and innovation in most fields of technology (Hoppers, 2004). She said that IK is a source of wealth, both as an economic asset and as cultural patrimony; IKS promotion is at once a restoration of dignity to communities, and part of a development strategy for enterprises and capacity building inside communities.

*The Perspective of Change from Below*

It is vital point to start working towards change. Ife (2002) quoted “At the heart of community development is the idea of change from below” (p.101). This will be undertaken initially around the idea of valuing local knowledge, valuing local culture, valuing local resource, valuing local skills and valuing local processes. As stated by Ife, there are numbers of principles of community development. Among those principles are Ecological principles, Social Justices principle, Valuing the local process principle and Global and local principles.

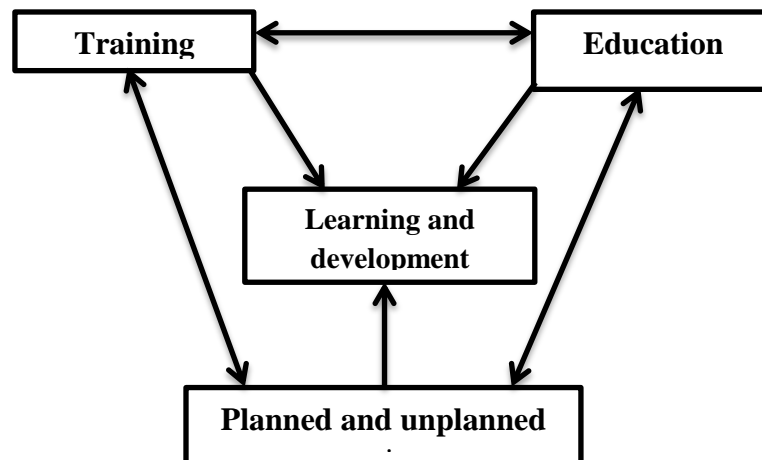
Ife claimed IK is vitally important for any process of community development. Community development must relay much more on local knowledge, and correspondingly less on universal Knowledge. It is not only local knowledge that must be valued local culture also should be valued. It is essential for community development worker to seek, to understand and accept local culture, and where possible to validate it and to work with it. To achieve self-reliance community workers and community groups need to explore the possibilities of creatively developing and using their own local resource, rather than those obtained externally. ‘Resources’ involve verity of things- including skills, personnel, expertise, land buildings, and financial resource. The other important point in changing from below is valuing local skills. Local skills can often be more appropriate because they are grounded in local experience. And finally, it is important for community worker to seek to understand local community processes to know where to start (Ife, 2002).

Ife stated the basic principles. Ecological principle focuses on ecological sustainability, to address the major ecological issues facing the contemporary world. This principle includes holism, sustainability, diversity, organic development, and balanced development. Social Justices principle refers to addressing structural disadvantage; addressing discourse of dis advantage; empowerment; and human right. Valuing the local principle includes, valuing local knowledge, culture, resources, local skills and local processes. Process principle focuses on community development is essentially about process rather than an outcome. Hence, this principle includes process, outcome and vision; the integrity of process; consciousness raising; participation; cooperation; the step of development; peace and non-violence; inclusiveness; and community building. Global and local principles, appreciates the relation of the global and the local which is now a significant part of all community development practice (Ife, 2002).

## 2.6. The Relationship of Adult Education and Community Development

Community development is basically an educative process. Phillips and Pittman (2009) described “Community development is an educational process to enable citizens to address problems by group decision making” (p.6). Similarly, O’Cinneide (1987) mentioned that the acquisition of multi-situational skills are significance in community development process to the attainment of the educational goal than to the accomplishment of specific tasks which are best regarded as a means to the ultimate end. Lovett (1972), the role of adult education can play in the community development process can be clarified and related to each other in some overall pattern. He stated that adult education offers the opportunity to participate in community development projects as an important additional resource, to meet specific community needs and interests. Furthermore, Buckley & Caple (2009), development may be influenced by education and training. The skills which an individual has acquired through training and can bring to exploit new learning situations. Thus, concentrating on training and education, a third element which contributes to learning and development, namely planned and unplanned experience must not be minimized or overlooked (Buckley & Caple, 2009). The elements that contribute to learning and development are described below in Figure 2.6.

**Figure 2.6. Elements that Contribute to Learning and development**



Source: Buckley & Caple, 2009.

They explained that training, education, planned and unplanned experience are interdependent and equal partners with regard to their potential contribution to learning and development.

## 2.7. Empirical Evidences

There is inadequate amount of literature concerning IK transfer methods as well as weaving training system in Ethiopia. Among the fewest one is, Hofverberg (2010) conducted her study in qualitative method. She explained in her research reports Dorze traditional knowledge system (TKS) is holistic, practical, individualized, encompasses problem solving learning; the sense that the education provides knowledge of the entire chain of the textile production and has an essential part and can be model to education for sustainable development. On the other hand, Elleni (1992) intensify the advantage of indigenous system of education in order to build a new future that shapes on the positive aspects of past and carefully selected to imported ideas and methods.

Regarding to IK and adult education Richardson & Cohen (2000), identify the role of adult education in the context of indigenous peoples has become developing. Correspondingly, Battiste (2002) reported in research paper, the advantage of integration IK in to school is to balance the educational system to make it a transforming and capacity-building place for first nation students. In addition to this, Fien (2010) indicated on the finding the growing recognition of the value of IK for sustainable development. He recommended it would be wise to sustain IK in traditional communities and integrate it into the school curriculum where culturally and educationally appropriate.

Lots of researchers explained about the advantages of IK in relation to development. Briggs (2005) in his research report stated that the use of IK has been seen by many as an alternative way of promoting development in poor rural communities in many parts of the world. The paper suggests that a number of problems and tensions have resulted in IK not being as useful as hoped for or supposed. Likewise, Eyong (2007), his research explained indigenous practices that are rapidly being abandoned by the elite in the country. Also emphasize, social re-engineering to make traditional institutions of governance participatory, revolving on community-based knowledge management schemes with more equitable access to and control over knowledge production, sharing and application.

## 2.8. Conceptual Framework

IK transfer methods can be influenced by, demographic, socio-cultural and psychological as well as communication aspects. It can also be subjective by the system in which the whole process has been carried out, such as local knowledge, techniques, practices, tools, intellectual resources, explanations, beliefs and value. The combination of adult education and IK transfer methods might have significance for community development. Hence, this conceptual framework presented in the figure below shows the given factors that are expected to influence the IK transfer methods in the study area and its implication to education and development.

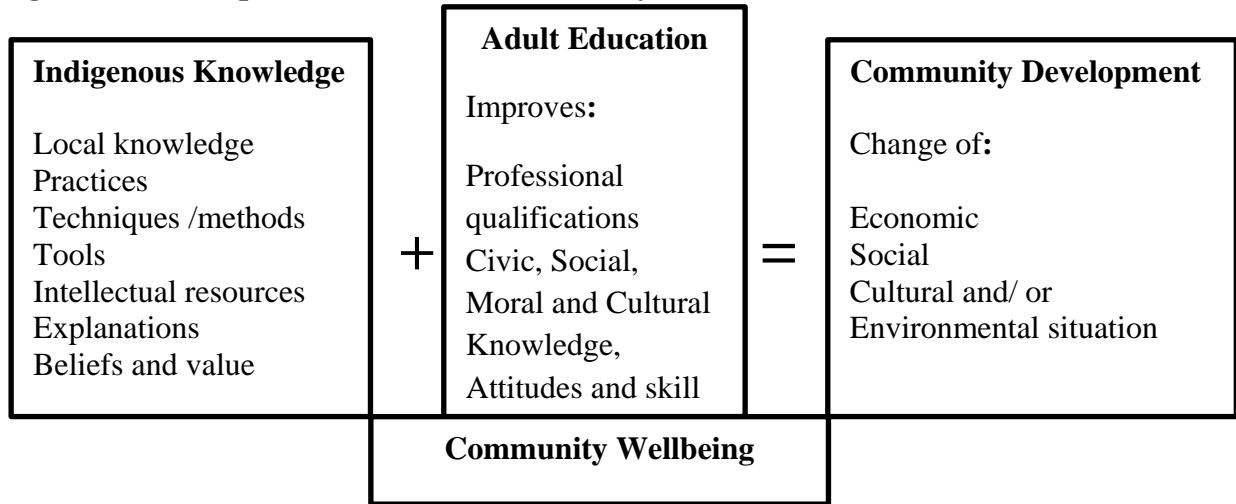
*IKS is a set of local knowledge and systems.* As Gloria & George (2014) differentiated IK is the collective body of strategies, practices, techniques, tools, intellectual resources, explanations, beliefs, and value. The links between IKS and education, development, improvement of existing skills, grassroots innovations, job creation, and enhancement of the entrepreneurial spirit, and human resources development in general need to be strengthened Hoppers (2004). She also recognized towards the protection, development and promotion of IKS will help to improve the livelihoods and economic well-being of local communities.

*IKS has important elements for adult education as well as education is needed for development of indigenous people with their respective knowledge.* Feith (2006) quoted “Adult education is a multidisciplinary process oriented to favour lifelong education for all, as well as efficient learning throughout life; It aims to provide the knowledge that improves professional qualifications and to achieve civic, social, moral and cultural attitudes and skills for performing responsibilities and for progress in all spheres of life” (p.119). Absolona (2010) for indigenous people to continue to develop their knowledge and understanding into practice they must be provided with opportunities to learn. Elleni (1992) initiated the advantage of IKS in order to build a new future that shapes on the positive aspects of past and carefully selected and imported ideas and methods.

*If IK supported by adult education the result might be community development and can assure community wellbeing.* As pointed out by Robinson and Green (2002) community development is “a group of people in a locality initiating a social action process, i.e., a planned intervention, to change their economic, social, cultural, and or environmental situation” (p. 13). Ife (2002) confirmed that IK is vitally important for any process of community development. Community development must relay much more on local knowledge, local culture, local

resource, local skills and local processes. In the other hands, Phillips and Pittman (2009) described community development is an educational process to enable citizens to address problems by group decision making. The suggestion of Fien (2010) is the growing recognition of the value of IK for sustainable development, so that, it would be wise to sustain IK in traditional communities and integrate it into the school curriculum where culturally and educationally appropriate. See the summary on Figure 2.7.

**Figure 2.7. Conceptual Framework of the Study**



Source: own presentation, 2017

## 2.9. Chapter Summary

Thus far the literature reviewed revealed that the significant part of IKS for education as well as development and that due to its broad and complex nature, IKS was studied through a different method by several researchers. Traditional training and modern teaching method is elaborated. It is argued that traditional training method has more to offer to active learning and confusion is shown towards modern and traditional method among some authors. The chapter also reviews literature on the perspective of starting from below, andragogy, adult education in Ethiopia and the concept of IK in adult education and community development. A number of literatures explore about the critical advantages of IKS for development and few of literature discover the benefit of IKS to education, however, there are no literatures which stated about IKS with education for community development practice. Thus, this study has identified the combination of IKS and adult education for community development; as a result, it may fill this gap.

## CHAPTER THREE

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1. Research Design

The study employed a qualitative research method. In the qualitative method, case study was used as a design. A qualitative research helps the researcher to undertake in depth analysis of data collected from a small number of respondents by using observation, interview, focus group discussion and document analysis (Creswell, 2009). A case study was used because it helps the researchers to focus on a selected case, event, activity or process and to make deep investigation (Best & Kahn, 2005). Description and narration was used to analyze, interpret and summarize the findings. Merriam (1998) states that qualitative case studies in education are often framed with concepts, models and theories. Thus, an inductive method is used to support or challenge theoretical assumptions. Furthermore, in order to ensure trustworthiness of the research, appropriate criteria for qualitative research were discussed, and methods that include recheck the data with community members, and triangulation was employed. Finally, all the data were organized and incorporated in the final research report.

#### 3.2. Sources of Data

In this study, two sources of data were used. The primary sources include weavers (two sub groups), master and apprentice weavers, academics/researchers in the areas of adult education and community development from Addis Ababa University, experts in the areas of adult education from Ministry of Education, Addis Ababa Education Bureau and Woreda, Gulele sub-city, and experts in the areas of indigenous knowledge and culture from Ministry of Culture and Tourism and from Addis Ababa Bureau of Culture and Tourism. In addition, secondary sources of data were considered from relevant policy documents, journals, curriculum framework of adult education and reports.

To identify the methodologies employed in Shero Meda weavers community towards transferring IK, observation, FGD and in depth-interview were conducted. Interview were conducted with key-informants in order to determine the consideration given for IK of weavers in adult education program; to understand the link that exists between IK and community

development; and to propose ways of maintaining weaver's method of IK & skill transfer in non-formal adult training programme for community development practices. Attempt was made to substantiate the primary data with the facts from the reviewed documents as part of methodological triangulation.

### 3.3. Sample Size and Sampling Techniques

Shiro Meda area was selected because the majority of Gamo Gofa weaver's community and handloom traders are settled in this place. Geographic and other practical considerations such as accessibility also played significant role in the final selection of constituencies and choice of setting in qualitative field research (Nachmias & Nachmias, 1996). Even though the use of samples and sampling techniques is more prevalent in quantitative research design, it is also possible to use sampling in qualitative research such as purposive, quota and snowball sampling techniques (Mack, et.al, 2005). Hence, purposive and snowball sampling techniques were preferred for this study because they contributed to adequately select respondents who are best to meet the study objectives. For the details, see Table 3.1.

**Table 3.1. Participants**

Target group	Interview Technique	Participants number	Sampling technique
Master Weavers	In-depth interview (IDI)	7	Snowball
Novice Weavers (apprentices)	In-depth interview (IDI)	7	Snowball
Master Weavers	Focus group discussion (FGD)	5	Purposive
Novice Weavers (apprentices)	FGD	5	Purposive
Academics from Curriculum and Instruction Department-AAU	Key-informant interview (KII)	1	Purposive
Academics from School of Social Work-AAU	Key-informant interview (KII)	1	Purposive
Expert-Ministry of Education	Key-informant interview (KII)	1	Purposive
Expert-Addis Ababa Bureau of Education	Key-informant interview (KII)	1	Purposive
Adult education facilitator in Woreda, Gulele sub-city	Key-informant interview (KII)	1	Purposive
Expert-Ministry of Culture and Tourism	Key-informant interview (KII)	1	Purposive
Expert- Addis Ababa Bureau of Culture and Tourism	Key-informant interview (KII)	1	Purposive
	Total	31	

Snowball technique was used to identify the participants in Shero Meda weavers community. An elder and Woreda administration officer representative who know the area in detail were requested to recommend individuals who were well knowledgeable on traditional weaving and on giving training for adults. The process was repeated until the required knowledgeable research participants were identified. Then, participants were interviewed and were requested to recommend elderly people (master weaver) and novice weaver (apprentices) who could participate in FGD. Purposive technique was used to rich the exact concerned person on the issue in order to meet the study objectives. Thus, all officers and academician were selected purposefully.

### **3.4. Data Collection Instruments**

The study used different data collection instruments: These include observation, interviews, focus group discussion and document analysis. The applicability of some of these instruments is highlighted below.

#### ***Observations***

The data concerning non-participatory observations were taken by check-lists (See Appendix D). It took place and the necessary notes on the conduct together with taking field notes on the behaviors and activities of individual weaver on their interest for the application of different indigenous knowledge transfer mechanisms and its associated factors was documented. These observed facts was strengthened and validated through individual interviews and focus group discussions.

#### ***Interviews***

There were two types of interviews (in-depth and key-informant interviews). Both for in-depth and key-informant interviews, semi-structured questions/checklists were prepared (See Appendix E, F, I, J, K). Both type of interview were conducted face to face with the researcher and facilitated by researcher assistant. Amharic language was used for both type of interview. Almost all interviews were recorded by audio recording except one participant who was not unwilling for audio recording. Thus, the researcher was obligated to take note during interview. The specific time of each interview is stated on sample record sheet (see Appendix M). In-depth interviews were conducted with those master weavers and apprentices. Participants of the key

informant interviews had drawn from, Scholars from Addis Ababa University, experts from Ministry of Education, Addis Ababa Education Bureau, Adult education Bureau in Woreda Gulele, sub-city, Ministry of Culture and Tourism, and Addis Ababa Culture and Tourism Bureau.

### ***Focus Group Discussions (FGD)***

FGD was carried out with selected weavers. The first FGD took place among the trainer weavers (5-7 in numbers) to discuss with them the techniques/approaches they use for knowledge and skill transfer to their trainee adults. On the other hand, another FGD took place with trainees (5-7 in numbers), in order to learn the factors that motivated them to participate in such training of IK of weaving. In both cases the concept of community development has discussed to document their level of consciousness of the link between IK transfer and community development. Focus group discussions and note taking was conducted in the local language (Amharic). For both FGD guidelines and ground rules were prepared (See Appendix C, G & H). The place and time of meeting were challenged issue during FGD; however, it was fixed based on participants' opinion. The place of both FGD was provided by participants willingly. The facilitator (assistant of researcher) obtained permission from the FGD participants to take an audio recording of the discussions before the discussion started. There was no objection from participants to record the discussions since the topic was not a sensitive one. The time of meeting specified on sample record sheet (see Appendix M).

### ***Document Review***

In order to substantiate the primary data with the facts in available documents, policy documents, journals, curriculum framework of adult education and reports were considered for document review. (See the guideline questions on Appendix L)

### **3.5. Method of Data Analysis**

In order to analyze the data, the first stage was data transcriptions which were gathered through tape recorded interviews; focus group discussion and hand written field notes. The transcription was made verbatim and translated from Amharic to English and read in detail. After transcription, the data were organized into retrievable sections and were categorized into meaningful themes. The main themes are processes of weaving, intention of IK transference, IK

transfer methods, duration of training, problem solving strategies, challenges to transfer IK, the outcome of learning weaving, the consideration of IK in adult education, and implication of IK to adult education and community development. Some of the major themes were broken down further into sub-themes where it was deemed necessary to enhance understanding of the concepts. Then, data were analyzed, triangulated, interpreted using descriptive and narrative method. Furthermore, induction method is applied to interpret the results. Finally, the findings were summarized by using simple, more readable narrative explanation, and illustration as a research report.

### **3.6. Ethical Considerations**

In conducting the study, I was considering different ethical issues. First, I requested permission from the community's Sub city Administration Office (Gulele sub-city, Woreda 01). A letter from Addis Ababa University indicating the purpose of the research and specifying the kind of cooperation requested from participants (respondents) was communicated and submitted to Shero Meda weavers community. Moreover, I had prepared consent/introductory letter (see Appendix) to serve as an introductory tool to Shero Meda weavers community before data collection resumed. Then, all weavers' participants expressed their willingness by their sign (see Appendix). I did not force the respondents to participate in the research. I did not put participants in a situation where they might be at a risk of harm because of their participation, either physically or psychologically; all people involved were informed about their rights as participants, their rights to determine their degree of involvement that their names was not to be published and that all data was used only for research purposes.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1. Background of the Study Area and Participants

In Addis Ababa, Gulele Sub-city, Shero Meda is a well-known market place for local and foreigner customer. Weaving community who produce cultural fabrics is living in this area. Members of this weaving community are known as in their customary name “*Dorzewochu Shemanewoch*” (The Dorze weavers). Dorze is a small ethnic group inhabiting in Gamo Gofa Zone and weaving is a primary vocation for many of them. Because of their practice the name of Dorze people is associated with weaving. Conversely, the Dorze weavers live in Shero Meda. Apart from the Dorze people, there are other groups who came from Gamo Gofa zone and settled in Shero Meda to practice weaving. Due to that reason, to make the study inclusive the name of Shero Meda Weavers Community is used as topic of this study.

The study concentrated on IK transfer methods in particular focusing on the knowledge of weaving and its implications to adult education and community development. The weaving is mainly operated by male craftsmen while the cleaning and spinning is done by all class of women in Shero Meda community. Because of that, the study participants were all males. But, this doesn't mean completely there are no women weavers in Ethiopia. As far as I know, now a day, in some area of Addis Ababa, women begin the work of weaving in modern setting.

As part of this study, I conducted seven days non- participant observation in different settings for three hours per day. I also conducted two focus group discussions, one in each constituency with master weavers and apprentice weavers. Seven individuals were invited to participate in the each focus group discussion. The actual participants were five individuals in each session. In-depth interviews were also conducted with a total of fourteen weavers (seven master weavers and seven apprentices). Altogether, twenty four individuals participated both in the focus group and in-depth interviews. Master Weaver participants were traditional weavers and they subsist on traditional weaving practice. Apprentice weavers participated in this study were those novices who were at different stage of traditional weaving “training”. Since the

majority of participants were above 15 years of age (See detail in Table 4.1.) and were indigenous people of Gamo Gofa and most had been practicing traditional weaving for years.

#### 4.2.Characteristics of Study Participants

**Table 4.1. Socio-demographic status of study participants**

Participants category	Age category							Total	
	15 - 25	26- 35	36- 45	46- 55	56- 65	66-75	76- 85		
Master weavers	1	4	1	1	3	1	1	12	
Apprentices	12	0	0	0	0	0	0	12	
Total	13	4	1	1	3	1	1	24	
Participants category	Educational Status				Total				
	Less literate	Primary	Secondary	TVET					
Master weavers	4	5	2	1	12				
Apprentices	-	2	9	1	12				
Total	3	7	12	2	24				
Participants category	Work Experience								
	Year of work as a weaver				Total	Year spend as a trainer			Total
	10-20	20- 30	30- 40	Above 40		5-10	10-15	Above 15	
Master weavers	2	5	3	2	12	2	4	6	12
Apprentices	Year of Practice as Apprentice							Total	
	0-1	1-2	2-3	3- 4	4-5	Above 5			
	2	2	2	1	5	-	12		

Of the total 24 participants, 12 were apprentices and other 12 were weavers. From the two participant categories, all of the apprentices were in the younger age group (15-25 years) whereas the weavers/trainers distributed across all age groups, the minimum being 25 years old. In relation to their education, many of the master weavers were at the primarily level of schooling and one of them attained TVET program. On the other hand, ten out of twelve apprentices were above primary level. Concerning the work experience all master weavers have

worked for 10 years and above. All the apprentices' have 5 years or less involved in practicing weaving "training".

**Table 4.2. Key-informant Interview Participants**

No.	Participants	Educational Qualification	Work Position
1.	Academics from Curriculum and Instruction Department-AAU	Ph.D. in Adult Education	Assistant Professor at Addis Ababa University
2.	Academics from School of Social Work-AAU	Ph.D.in Social Development	Assistant Professor at Addis Ababa University
3.	Expert-Ministry of Education	Master in vocational and lifelong learning	Senior expert of Adult Education
4.	Expert-Addis Ababa Bureau of Education	Master in Adult education	Senior expert of Adult Education
5.	Adult education facilitator in Woreda, Gulele sub-city	High school certificate	Woreda Adult Education Programme Facilitator
6.	Expert-Ministry of Culture and Tourism	Master in Culture and Tourism	Director of Cultural industry development
7.	Expert- Addis Ababa Bureau of Culture and Tourism	Master in Culture and Tourism	Senior Expert of Culture
Total	7		

Key- informant interviews were conducted with a total of 7 professionals. They were selected as information rich cases from their constituencies based on the criteria described in the methodology chapter. Their educational statuses are one with high school certificate; four of them were in master degree level and two of them were in Ph.D. level. All results of study from the observation, discussion, interview and document have been classified under different themes. Some direct quotations from interviews, focus group discussion and observation note are stated by using code (see participants code on Appendix M.) and elaborated below.

### **4.3. Processes of Weaving**

Processes of weaving are referred to the practices of weaving that are applied from the beginning to the end of fabrics. Weaving is the daily activity for most of weaver's community in *Shero Meda*. On my first day observation was fascinating which is described as follows. "Early in the morning, while I was walking across the road around *Shero Meda*, I have seen that one old man is handed white yarn which is rolled on something and round from left to right repeatedly outside his home. There are two groups of short thick wooden stick planted on the ground like

pole which seems supportive to round with the white yarn. When I enter to the house, one old woman was spinning and twisting white cotton. Beside the woman setting, there was a wider room where the door was opened and some of the adult boys were setting and looming fabrics. One of them, was rotating instrument which is made from wood, it seems like hand machine which helps to spinning yarns.” (Observation Note 2).

It is easy to notice that all observed activities are the process of producing fabrics for traditional cloth. When I conducted in-depth interview and focus group discussion, almost all of the participants indicate that to produce fabrics, there are processes and steps that they should have to follow. One of the interviewees describes the processes as follows:

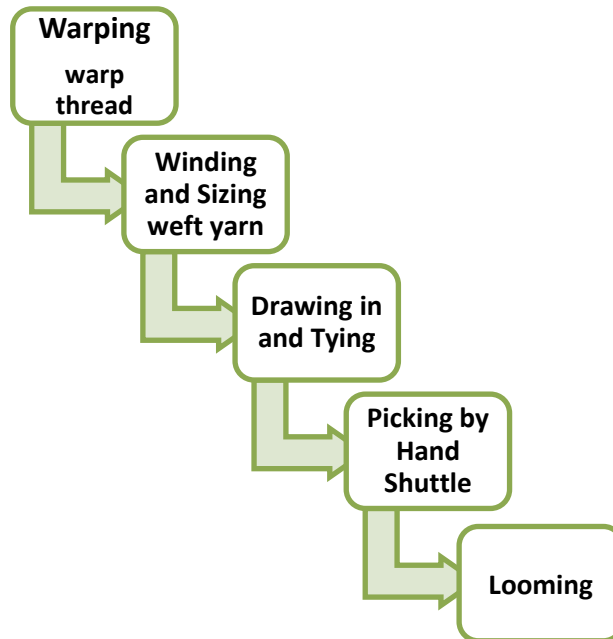
...to produce one single fabric, first... hhh... warping warp thread (yarn) must be equipped outside of the home or in any space which can be suitable. The material which helps to warping yarn is called “*Mezewer*”. And then ... hhh... the warped yarn will be inserted into loom (*Yearbe iqa*) . After that, winding the bobbin is next step to twist and sizing of different color yarns or weft and warp. Then, there is drawing in and tying. Next, is picking where the weft or warp is propelled across the loom by hand shuttle. Hh... then looming is final step till the fabric work is finished. During that time, there will be drawing in and tying weft and warp until the needed production of fabric... winding bobbin is simple ...working on design *tebeb* is tough! (In.10)

It is very usual to see the different types of fabrics which are garbed on model dolls and ordered on the display in the shops around Shero Meda (Observation Note1). All fabrics were not the same. There are different types, stages, color structure and material quality. “... A piece of colors of weft has its own number... Look ... watch here... this color number is 64... have you seen? It has number. And that one is 35 and this is 7. Likewise, all colors of weft have its own number...” said (In.1) by showing yellow color weft. Almost all participants agreed with this idea. The other interviewee had mentioned also “... Warps have different types. There are the so called ‘*Menen*’, ‘*Asmera*’ and ‘*Komtare*’. Each warp has its own quality level. ‘*Asmera*’ is very thick, ‘*Menen*’ is thin and ‘*Komtare*’ is very thin and smooth warp...” (In.9). I have seen some of the fabrics are like tissue which is a thin fabric with a loose, open weave; others are thick which is known as “*Gabbi*” and thicker one is “*Bulluko*”. Their color combination variety

is very ample (Observation Note 4.). The FGD conducted with the apprentices and master weavers have generated similar data regarding the process of weaving.

As the findings indicate, in order to accomplish particular traditional cloth fabrics (see Figure A1 in Appendix A.) has its own processes. Those fabrics are varying from one to the other. Their varieties depend on their color structure, size, thickness, and quality of material. Each color and quality of the yarns has its own number code and name. The simplest work from weaving process is winding bobbin (see the picture of bobbin in Figure A6 in Appendix A.) and in the final stage, while looming, design of border (*telet*) requires more efforts and creativity than looming pure white fabrics. For summary of general processes of weaving see Figure 4.1

**Figure 4.1. Weaving Process Flow Chart**



Source: Own presentation, 2017

#### **4.4. The Intention of Indigenous Knowledge Transference**

Intention, in this study refers to the context, the goal or purpose behind a specific action of weaving indigenous knowledge transference. Behind any action or set of actions there is the reason. Thus, to identify the reasons, all participants were asked to describe why they impart weaving skill, and why do they choose to be weavers. Responses of questions were given for these both during FGD and in-depth interviews.

Participants had various views in responding to the above questions. One of the participants said, "...this is the knowledge that we receive from God...so, we have to transfer for next generation..." (In.1). In one of the houses I visited, I have seen that "*Arancha osanchara worka bira salo malla zo zo malaka gimja loho oso osia osanchara dastncha osora ositezisa ubaka aratesara ositezisa ubaka osana malla aeta wozanan aeratsa kunsiras tailo masaph (Zaxate. 35÷ 35)*" (Observation Note 5). This was the Biblical quote which was written in Gamo language and pasted on the wall in the home where I entered for observation in my day five observation. Then, I asked for translation from one of the master weavers (In.10) who was weaving in the home. He translated the quote into Amharic language. After the quote was translated into Amharic, I translated the quote back into English based on English version of bible which reads as follows. "He has filled them with skill to do all kinds of work as craftsmen, designers, embroiderers in blue, purple and scarlet yarn and fine linen, and weavers- all of them master craftsmen and designers" (Exodus 35÷ 35).

Other master weavers mentioned their intent for income generation. One of them described that, "The purpose of transmitting weaving skill is for self- governing, if you have this skill and knowledge, you may have income which helps you to lead your own life and you will be independent. Even while we transmit our knowledge, we will inform for the novice, 'if you are able to weave, you can marry soon and you can lead your family by your own income'" (In.12).

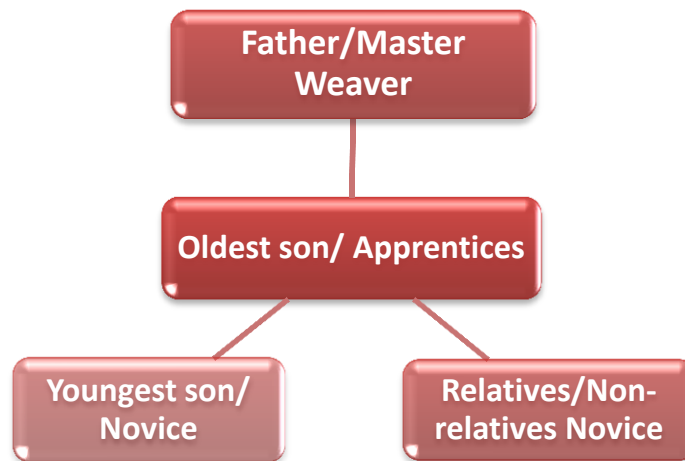
From the apprentices' side, three of them described their intent why they are learning weaving. Their intent is needed to lead independent life. Other two apprentices claimed that they need to help their father weavers to make him more profitable. There are also other apprentices who did not identify why they were starting learning weaving. For example, one of the apprentices stated "... while I was a child I used to live in Gamo Gofa and I was looking at the weavers who came from Addis Ababa for holiday celebration. I used to see them wearing nicely and looked like urbanites. Then, I decided to come to Addis Ababa with them. My intention was to lead life as them ..." (In.3).

All the master trainers participated in the focus group discussion reported that all their intention was to transmit their knowledge and to generate income to survive. On the other hand, all the apprentices participated in the FGD, except one, their interest was to generate income

upon completion of their training and become professional weavers. Only one of the FGD participant from this group described that he obtained the knowledge from his father and transferred it to his children.

The finding displays that the intention of Shero Meda weavers community towards transferring their indigenous knowledge from generation to generation is mainly connection with income generation because weavers believe that this is the wisdom which is given from God to survive on this earth. Thus, the father imparts his son and/or the master weaver imparts apprentice or relatives (see the structure in Figure 4.2). Master weavers intention behind weaving knowledge transfer is to preserve their indigenous knowledge and to keep it from disappearance. The reason of this is weaving seen as supportive skill for income generation. On the other side, apprentice’s intention is to get income and to be independent.

**Figure 4.2. The Structure of Knowledge and Skill Transfers**



Source: Own presentation, 2017

#### **4.5. Indigenous Knowledge Transfer Methods**

In this study, indigenous knowledge transfer methods deal with a process by which a task of training is completed; and ways of imparting weaving knowledge and skill. In a day of observation, “In the house there are four master weavers who are looming and two apprentices who are observing and doing ... Oh! My God! How it is beautiful! My goodness! ...’ Surprised! ... A youngest lady, who was coming with two middle age ladies, when she sees the product of fabrics in the house of weavers... ‘How much shall I pay?’ Asked the young lady, ‘As usual!’

said the weaver whom she was talking to him. Then, she gave him 900 birr” (Observation Note 4). “The produced fabric which are especially designed for ladies occasional traditional dresses are so attractive and beautiful for any observant. It doesn’t seems designed fabrics that produced by hands of man without any technology support” (Observation Note7). Regarding to this, any observant of traditional fabrics production may question that how do weavers get this wisdom? That was my question too.

### ***Observation***

One of the boys sat beside weaving loom and making winding and sizing blue color yarn and the other one was looking attentively to his hand work (Observation Note 4). When new comer starts learning weaving, the first method employed by master weavers was inviting the novice to observe all the processes of the work system. Almost all participants pointed out, observation is the essential stage. For instance, when I asked one of the participants in what method he gets the training, he said that “... *Yaw...first... Looking! ... Looking attentively everything what the master weavers are doing.*” (In. 14).

During the observation stage, apprentices should watch carefully. “*anth? Eyayeh new?*” asked the master weaver. Apprentice: *‘Awo!’* Master weaver said *‘Bedeneb eyy’*. Meaning, the master weaver said to the apprentices ‘Are you looking?’ The apprentice says ‘Yes!’ The weaver again responds ‘look carefully’” (Observation Note 4). The master weaver was asking the novice to check whether he is looking to the loom attentively or not, then he direct him again to focus on what he was observing.

The above description clearly shows that observation is the first method employed by master weavers when the novice starts to learn weaving process. As can be understand from the observation note 4, while the novice observes, the master weaver will evaluate and checking him whether he is observing attentively or not then there is an immediate feedback.

### ***Demonstration and Dialogue***

All master weavers and three apprentices mentioned that there is a careful look at each material and elucidate every single step after the novices observed and understood everything. One of the weaver responses on this issue is the following: “... new comer will sit beside me and

look all tasks. After that, I will show and tell each step of the task, if it is only explanation; the task might be hard to comprehend. In addition, the apprentice should sit beside me and watch carefully” (In.12).

From the apprentice side concerning this question “In what method does your father shows you?” The one apprentice explained as follows: “... method... hhh ...after I sit next to him my father usually tells me about materials and something others... use this ... in this way... do this ... *yaw*, he tells me step by step and I will try to do as he told me and showed me”(In.6). The other interviewee (In.5) describes that at the beginning he was observing quietly. Then, his father was telling him everything slowly and step by step. As most of the master weavers mentioned “...there is the so called *Dwer medwer* (winding baboon) where beginners start to learn about weaving methods and continue to be instructed by the same master weavers on each step including operating the hand machines...”(In.8). The following were conversations I heard during one of my observation sessions.

Master Weaver: “*menden naw yalku?*”

Novice: “*14 quter nw*”

Master Weaver (*endatersaw!*) (From Observation Note 2)

The master weaver was asking the novice about the number color of weft that he should twist and size. The novice answered correctly and master weaver told him not to forget it.

It is worthwhile to mention the fact that dialogue and demonstrations are like linking theory and action for learning of weaving. At this stage, the novice will identify the quality of yarns, color number, color combination, the thickness of weft and warp, and names of each of the materials that they use for weaving. Novices will be evaluated whether he sees and hears properly through question and answering method then there is also immediate feedback.

### ***Observation and Exercises***

The next stage is the novice/ apprentices will start watching and helping out with preparing the weft thread. All master weavers pointed out, after the observation of the work condition and conversant about every material and steps of tasks with explanation and

demonstration method, the novice/apprentices should observe the particular task and exercises immediately according to his observation. One of the participants from apprentices elaborates the method, with similar ideas: "...winding the bobbin is simple! ... Just observe attentively the winding machine here... while winding the bobbin ... then... do it" (In.4). During this stage there is strong control by master weaver: an example for this "...The master weaver picks and sees the sizing yarns which was organized by the novice and ordered him to put it properly..." (Observation Note 2).

As we can see from the above description the third step of the method employed by master weavers is let the apprentices to observe and helping or working simple tasks. Thus, the apprentices are engaged with observation and exercises immediately. During this time, there is also evaluation and feedback.

### ***Trial and Error***

As described by almost all participants, after the apprentices are able to winding the bobbin, next stage in weaving process is picking by hand shuttle, where the weft is propelled across the loom. In order to teach this process, the master weavers let the novice to sit beside him and practice as he is doing. The apprentices/ novice will try to practice as he sits beside the master weaver and when error occurs, there is continues follow up, immediate feedback and explanation how to correct.

One of the master weavers described, "After the novice knows how to do winding and sizing yarns properly, he will sit at my left side and ... then ... we will count threads and pick by hand shuttle. If I identified any mistake, I will tell him 'this is not correct' ... and I will correct it and give him back to do it again by saying... do this and do that." (In.11). In a similar way the apprentice stated, "...I was working winding bobbin. Then ... I sat at his left side and picking yarns by hand shuttle. Then, when I commit mistakes, he will tell me to correct it ... yaw..." (In.6).

From the above description one can understand that at this stage of the weaving process the apprentice are practicing dependently on their master weavers. While practicing, there could be error. When that occurs, there is an immediate evaluation through observation and feedback. Then, the apprentices will try again to make it correctly.

### ***Practice***

During my observation time, I noticed the following: “In the house, there are three adults who are looming multicolor *Tebeb*. A younger boy is sitting in the small grounded hole and working on a white fabric on loom, he is picking by hand shuttle and throw the shuttle across the threads... he picked again threw it across the threads... and continue the same practice and I asked him to do it...he was willing to show me how to do it. Then he left the hole (*gudegade*) to let me try (see Figure A5 in Appendix A). Then, I replace his setting and try to propel the hand shuttle with my right hand like him and I knockout my left hand with the shuttle rather than drive across the threads. ... all the weaver’s attention were grasped by my courageous try and laughed at me. Oh! It was really tough!” (Observation Note3).

From all the fourteen in-depth interview participants, twelve of them mentioned that when the novice/apprentice is able to work weaving with minimum or no error, the master weaver will let him to do it alone. This was explained by one of the participants as follows. “... after the novice exercise picking by hand shuttle, he will work on it for limited time. Within that limited time if we know that he is able to do by himself, he will start working and practicing independently ” (In.1). Similar expression was told by one of the learners. He stated, “...I was sitting beside my father and picking by hand shuttle then when I could do it correctly, he had approved my ability and given me my own place (*gudegade*). Now, I am working by myself” (In.14).

The findings from observation, in-depth interview and focus group discussion revealed that practice is the major and important method used to transfer weaving knowledge to apprentices. Shero Meda weavers community emphasizes the importance of practicing rather than explaining things in their training approach. Thus, the time spent for practicing is longer than the time given for demonstration and dialogue.

### ***Production and Proceeds***

Almost all master weaver participants elaborated that after all the above methodology is employed, the apprentices are expected to produce. If a novice learner practices for long time, and becomes creative then, he should produce fabric with new design. Apprentice’s production may start from scarves (*Yeanget lebse*) or white fabrics which do not have multicolor design

(*telete*) with small size or centimeter (see Figure A4 in Appendix A.). The production will be displayed for sale. If the fabric produced by the apprentice is sold with good price; it implies that the production is best.

One of the participants summarized the process of maturation in knowledge transfer to the learner in the following manner. "... All these trainings are not enough... there is also warping threads, tying... and then the novice will practice warping threads and tying for long time. After he accomplishes all these, he will start producing saleable fabrics" (In.1).

These findings show, the method that apprentices trained, will initiate them in order to be productive and profitable. Thus, apprentices weaving training goes to till visible, valuable production of traditional fabrics which can bring well sale value.

### ***Evaluation and Feedback***

Master weavers were asked how to identify the capable apprentices who are doing best on training processes and what they will do for best one and the slower one. Apprentices also asked about the feedback that whether they did well or not. All master weavers have similar idea. In order to evaluate their apprentices, they observe while he is doing, they will leave out the place to apprentices to practice independently and they will take into consideration the sale value of products. An example for this is described by In. 12 as follows: "... I will give him a chance to work independently a fabric with small size on the loom. I will order him to pick by hand shuttle ...I will see his hand when he propels the shuttle across the thread. ... While his doing fabric, if there is no error such as open weaves or loss yarns, we can say he is capable. And also, when he starts finishing quickly than before, I will provide all materials and give him to work for his own income."

Apprentices point out different ideas towards feedback and vary from person to person. For those doing best there is reward which is called "*Senebete Messa*", Sunday lunch "*Yeshay Genzebe*" money for tea, and weekly payment will increase than before. There are apprentices also who described they are provided with shoes and clothes when the work they did is found to be good. Other apprentices said that there is blessing and appreciation when they produce good products as per the expectations of master trainers.

I asked the question “What if you cannot do as your master weaver expectation?” Many of them said master weavers will explain and advise to do it again. Besides, there are also who said that there is punishment such as insulting, and knocking head. The master weavers who participated in the FGD also confirmed what the apprentices explained above.

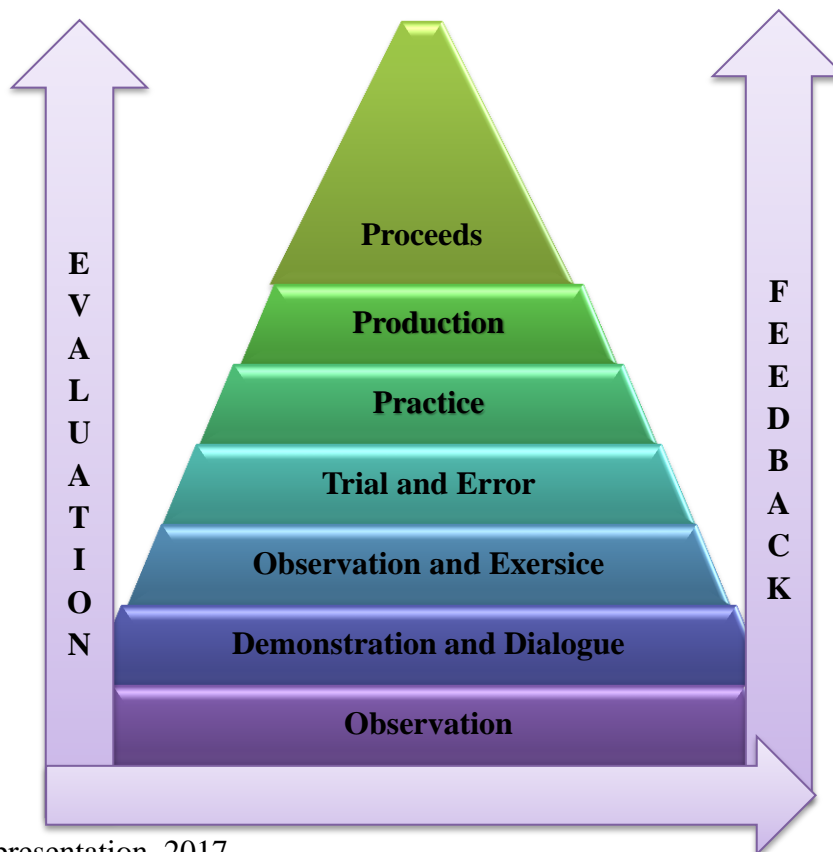
As it can be understood from the findings, master weavers have evaluation techniques and give feedback to apprentices. Their evaluation methods are asking oral question (as stated before from Observation Note 2), observing the product and notice the sale value of the product. The feedback may manifest in different ways and vary from person to person. This means, it depends on master weaver personality. Although there is variation, the common ways that feedback manifests in the community is punishment and reward. The punishment might be verbal and corporal, especially, some years ago corporal punishment was a very common practice. But currently, rather than corporal punishment the apprentice may payback the materials that he damaged during practice time and still verbal punishment is involved during apprentices practice such as insulting, and throwing any abusive term to the heads of the apprentice. The common ways of reward is Sunday lunch and money for tea. Such reward is usually undertake at the weekend mainly on Sunday which is off-job day and also weekly payment will increase. In daily manner, there are verbal rewards such as, bless you, good job; keep it up and so on. All those rewards and punishments happen while the apprentice is on training.

There is also post-training feedback. For apprentices who become effective, the master weaver will provide every material and place, and he will start making money. Those apprentices who are not effective on looming will be recommended to change their jobs. As weavers' community believes that this apprentice does not accept the wisdom from God and send him to Gamo Gofa to work on farming or the apprentices will change his job immediately.

To conclude, Shero Meda weavers community use common method to transfer their IK and knows how to impart weaving skill to new novice in order to make skillful weaver. Data on IK transfer method reveal that in order to impart weaving knowledge and skills for novices, the first stage starts from *observation*. Then, the apprentices will identify all the materials, quality, activity steps, and color combination with attractive structure through *demonstration and dialogue* method. After this, the novices start *observing and exercising* immediately after the

task of winding the bobbin to twist different color weft and warp which is the simplest task from weaving process. Then, it is the stage of *trial and error process*. Apprentices will sit beside the master weaver and start counting threads and try to looming. When the error occurs, the master weaver will make it correct and give him back to try again. When the apprentices become free from error or minimizing error, he will start *practicing* independently and start *producing* fabrics which can be sell with good price or *proceeds*. The products may vary depending on apprentice’s ability and creativity. *Evaluation* and *feedback* is provided at all stages of learning process starting from observation to proceeds. Figure 4.3 below summarizes the process of knowledge and skill transfer method.

**Figure 4.3. Indigenous Knowledge Transfer Method**



Source: Own presentation, 2017

#### **4.5.1. Master Weavers Roles during Training**

Based on the findings presented above we can understand the general activities of master weavers and apprentices. During the FGD with master weavers, participants explicitly mentioned the processes of learning may depend on the learner’s mind. Most of the novices start

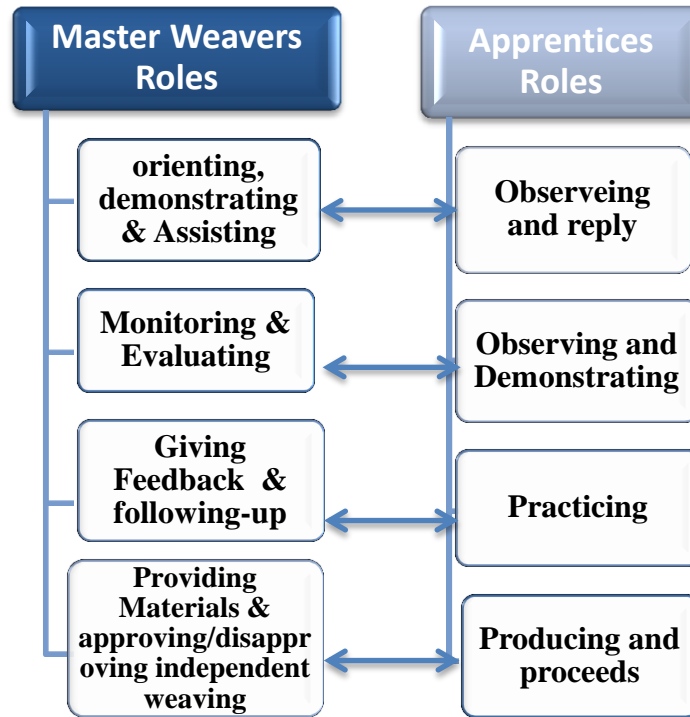
from winding the bobbin if they observe before and have hint of weaving. But if the novices do not know anything, they will let him to observe all the materials, quality of yarns, how to handle and other necessary supplies. Then, if novices can practice according their observation, that implies the novices become well trained. So, they may permit to work on picking by hand shuttle, warping threads then drawing in and tying. Finally looming will be simple to him.

During the training, master weaver assists the novice in different ways such as demonstrating everything; clarify if something makes him confused, as several interviewee pointed out. Once the master weavers assist them well, there will be evaluation to check whether the apprentice can do it as he observes and listens or not. The evaluation method of master weaver is only observation and asking oral question while training; and in the production stage, the sale value of the production will be considered. Then, if the apprentices do perfectly there will be positive feedback such as increase of weekly payment, and is verbal reward like good job, keep it up, may God bless you! If not, the feedback can be negative. Additionally, one of the master weavers said they will advise the apprentice to make the necessary correction and let them to work on it again. Finally, if the apprentices become capable in weaving, that means, if they are able to pass all the process of weaving and can produce quality fabrics; the master weaver will be responsible to provide every material and working place for the trainees. This means, the apprentices will start working independently for their own income generation. As one of participants said a master weaver is responsible even to provide what is needed for apprentice's marriage ceremony, if the apprentice plans to get married.

### **4.5.2. Apprentices Roles During Training**

Findings from in-depth interviews and focus group discussion revealed those apprentices roles during the training, start with observing. Then after, during the observation there might be demonstration and dialogue, at this time those learners should observe and reply attentively. As figure 4.4 shows the next stage that apprentices should do is to observe and exercise, then demonstrate immediately what they did. In addition to this, the lion's share of time on training is for practicing. Later on, production of quality fabrics with new design or duplicated forms which can have best sale value is expected from them. The roles of master weavers and apprentices during training are summarized in Figure 4.4 below.

**Figure 4.4. The Roles of Master weavers and Apprentices**



Source: Own presentation, 2017

#### 4.5.3. Materials Required for Practicing

As some of master weavers indicated that the material needed for the training is first provided by master weavers. However, the materials used by the apprentices are not the same as that of the master weavers are using. One of the master weavers stated that “When the apprentices become capable for looming, they will start from the thick warp which is called ‘*Asmera*’ by that warp they will be allowed to make *Nettela* for mothers and they will practice more with that” (In 9.). Similarly another master weaver claimed “... I have to provide hand shuttle for novices. My hand shuttle might not be appropriate for them. There is difference between mine and the novice shuttle. Mine is longer than the apprentice. It is about 30c.m but the novices hand shuttle is 25c.m ...” (In.12).

The above script indicates that the materials being used for practice are different from the materials that master weavers are using for production.

#### **4.5.4. Duration of Training**

At least four participants from the master weavers reported that the overall activities/training requires three to four years to make the apprentices skillful weaver and to see his best production of fabrics. Three of them said two years are enough and another three participants said five years are adequate to complete training. Still another participant claimed that two up to three years are sufficient. One of the master weavers reported that:

... the training period depends on apprentices' level of comprehension. There are some apprentices that take five years to accomplish their training. For others it takes four years and there are still others who completed within three years. The ability to grasp new ideas is not similar to everyone. There are persons who understand easily and there are also who cannot recognize easily... Isn't it? ...hhh... It is like that! There was also such person who cannot understand and work on it and go back to Gamo Gofa. (In.1)

I asked the apprentices the question "How often do you stayed on training in a day?" Almost all participants said full day except break time such as tea break and lunch break. But, there are also apprentices who stayed in regular school and practice weaving training during their spare time, especially after school in every afternoon. Other apprentices reported their training remains for half a day.

It is easy to understand from the findings the duration of training of novice/ apprentices varies from place to place. It does not have exact and common time boundary. The duration of training is also depending on the willingness of master weaver and apprentice's life condition. Thus, in weavers' community, the overall training takes place until the apprentices know and become skillful like master weavers (see Figure A2 and A3 in Appendix A.). In addition to this, to call the apprentices as the best weaver, they should start fabric production which can get good sale value. Thus, the training duration continues until the apprentices become effective.

#### **4.6. Problem Solving Strategies**

Everywhere problem may occur when someone is doing something. Almost all participants explain that if the problem is simple they try to solve by themselves. But if it is beyond their ability to manage they may be forced to wait for master weaver to solve. Among

seven in-depth interview participants, two of them explained that while practicing if the fabrics become erroneous, the first solution is to leave their work place and stay outside enjoying with something else. Master weavers believe that if the apprentices mind gets stressed and angry, they cannot solve the problem. They, rather, may commit more faults so; the apprentices are recommended to leave the job for a while and go somewhere. This was explained by participant 7 as follows. "... while you are doing, the warp might be detached. If it is simple to correct the detached warp, you will tie it by yourself, if not; you should wait for the master weaver to deal with it ..."

It is worthwhile to indicate the fact that the apprentices know how to solve problems when they faced challenges in relation to their work. Their problem solving strategy is first trying to solve it by themselves, if not, ignore for a while and refresh their mind then request for assistance from others who can solve the problem.

### **4.7. Outcomes of Indigenous Knowledge Transfers**

Creating new design, and/or producing more attractive fabrics, generating income and being ownership of resources are some of the anticipated outcomes as reported by the study. In order to understand their level of satisfaction participants were asked about their happiness and appreciation of their work. Except two participants, others were happy about their work because of the income that they earn and appreciate their skill when others wear and use their products. On the other hand, two participants indicate that they are not happy because of the less benefit their work generates compared to those who are tailors, designers and trader of traditional fabrics.

I asked participants to reflect on the question "What is the benefit of the community from the weavers' indigenous knowledge and skills?" All master weavers described that weaver's community were beneficiary because of earned income. They have survived with their family and have sent their children to school. Conversely, if the income compared, the other community members are more advantageous than weavers such as traders, tailors, designers, brokers who are at the middle of weavers and exporters or traders.

In order to identify who is more beneficiary regarding to sale value and business flow, I ordered a weaver to make four meter traditional fabric which has high quality and best design.

The one requested me to pay 700 birr; the other weaver requested 600 birr and told me that to come back after a week. The same fabric material was displayed in the other shop and I asked the trader its price where he replied to me that it is 1000 birr. Then, I took the traditional fabric with 600 birr and gave to the tailor to sew and make a formal dress with coat. He asked me to pay 900 birr. Now, it is clear that who benefits more. Here in the originators are disadvantageous as compared with non-originators.

From the apprentices' perspective, upon completion of their training successfully, they become weavers themselves and able to generate their own income and/or apprentices become employees of other master weavers. But, this depends on how they are supported by their former master trainers. Thus, it is possible to say that, the outcome of this training method initiates the trainers to be creative; insure self-independency; satisfaction and develop the sense of innovative and hopeful mind.

### **4.8. Challenges to Transfer Indigenous Knowledge**

“The weaver house is built by mud and bamboo. The door is made from timber. The roof seems came down to the head and goes to smash. In the house there is only one wooden chair with long width and three looms are planted on the dust ground in two setting positions. The one loom is fixed on place in a hole, at the weaver's feet, with a depth of 60–70cm, and besides, two looms are set on the ground with support of wooden chair. The fence is rounded with old can and tiny woods. Inside the house the second room seems bedroom which is suffocated with lots of tools including bed stuff and some kitchen apparatuses...” (Observation Note 5).

Many of the master weavers participated in the study mentioned that their skills, the efforts they make and the income they earn do not match. Three of the master participants listed a number of reasons for the serious challenge they encountered. It is their inability to connect their product with the right market as the result of which, a number of intermediaries are taking place, which benefited more than the producers themselves. The inconvenient physical setting was also mentioned as a major challenge. The other challenge mentioned by a master weaver, is poor habit of saving their sales. In old days, the day which is called *Sengo Marriyam* (Marry Monday) was a day for enjoyment by consuming too much traditional drinks such as *Teje*, *Tela*, *Areke*, *Borede*...etc. But now, because of attitudinal change, this day altered into Saturday

afternoon and some of them enjoy on Sunday. The following was another challenge mentioned by one of the participants.

... I don't want to continue with this job... I don't have the idea to transfer this knowledge and skill to my children...you know why? It is so tiresome job because you may not work as needed on time... Besides, most of communities have less trust in the weavers than traders when it comes to payment and they do not consider our effort... (In.11).

Based on my observation and participants' response, weavers' life condition and their skill were not well-adjusted together. Due to the various challenges stated above, their life conditions become more deteriorated. The time and effort exerted to produce a single fabric, and the price made available aggravates their hopeless to continue with the job. For this, it is possible to say that the less ability of business communication and undeveloped skill of persuasions, lack of saving culture and unknown to the trade system which do not supported by education can be considered as major obstacles for weavers' community wellbeing. As stated above, (Table 4.1) most master weavers education level is very low.

#### **4. 9. The Consideration of IK in Adult Education Program**

The key informant from Ministry of Education (MOE) described as follows: "IK has considered in Integrated Functional Adult Literacy (IFAL) curriculum framework in different package such as agriculture, income generation, health, environmental conservation and protection. For instance, in general form of income generation, the theme of handicraft is included." He also said that during the implementation of the program, the facilitators would consider the communities back ground knowledge and communities need, and would help them to acquire writing and numeracy skills by using the concepts and terms related to their work. The key informant from Addis Ababa Education Bureau, who is senior expert in adult education program, explains those indigenous people are supported with basic training on lessons related to saving, entrepreneurship, and social relations and so on in the IFAL program. The expert described that IK of weavers is not considered as full-fledged in the IFAL program. However, IFAL training facilitators are responsible to implement the lessons according to the specific

community needs. Besides, the expert mentioned that there might be problems on the actual implementation of the program.

A scholar of Adult Education from Addis Ababa University also agreed with the idea of that indigenous people and their respective knowledge do not get consideration in curriculum as well as in education. From Gulele sub-city at Shiro Meda area, a Woreda level expert was interviewed on the same topic. In the Woreda 01 where the study was conducted, adult education is providing in six centers. Participants in the program are those who are willing to participate and the lessons covered include numeracy and literacy specifically related to the participants' job involvement. The facilitator stated that the Woreda invites the community once in a year for the registration and participation in adult education program. In contrary, some of the community members from the study participants who are indigenous people in weaving mention that even they are not aware about the program and do not know adult education program in their sub city. Of course, one of the master weavers among the community member explained that he knows Entoto TVET programme that has started teaching weaving adults.

From my review, I have come across the document of IFAL, such as curriculum framework, implementation guidelines, books one and two, and adult education annual report. IFAL program that reaches out to adults and young people aged 15 or older and is available to women, disabled, and minority groups etc. It also includes, indigenous groups, under the categories of Ethnic/linguistic minority groups. The main goals of the program are to increase literacy rate, to promote women's empowerment, to improve participants' health and to raise the general standards of living with the communities. The program consists of sixteen- month course that participants complete within two years. Topic taught includes literacy, gender issues, environmental protection, civic and ethical education, health and disease prevention, family planning and agriculture. But, any lesson which specifically referred about IK in the book 1 and 2 of IFAL programme in Addis Ababa not found. For instance, lesson not found which integrated with weaver's community job and IK directly that can support to enhance weaving skill. This means, the content of IFAL is generally provided for anyone who never enrolled in school as well as who dropped out of first cycle primary education.

In general, in the curriculum framework of IFAL the indigenous people of weavers and their respective knowledge are not considered respectively. Even if, those people are considered

at the level of MOE, it is clear that, the problem is embedded on the implementation of the programme. There is no particular curriculum as well as training which is designed for this indigenous group of weavers in IFAL. In fact, in order to preserve the knowledge and to promote the products of their fabrics, MOE is implementing the weaving skill lesson at Entoto TVET center in the formal school setting and modern system of weaving. Still, the lack of awareness of community members about IFAL program indicates that there are problems in implementation of IFAL program. Further, as can be understood from an example of syllabus (see on Appendix B.) considering to learning-teaching methods, IFAL program use modern method which is applicable in formal school system rather than IK transfer method.

#### **4.10. The Relationship between Indigenous Knowledge and Community Development**

Key informant from Ministry of Culture and Tourism (MOCT), Cultural Industry Development Director indicates that MOCT is working on promoting and supporting the indigenous people towards changing their knowledge into economic development and also their cultural value has enhanced with the policy. He also mentioned that the activities that engaged regarding these are; providing and implementing training for trainers of indigenous groups with cooperation of Ministry of Education and regional TVET offices; working with universities to support IK with technology; striving to include IK in the curriculum as a subject area. He also indicates that the MOCT has a strategy to establish cultural industry centers which can promote indigenous people and their respective knowledge has planned.

On other hand, he underlined that even if those activities are engaged, still there are problems on implementation of the planned activities due to the lack of awareness among practitioners in considering the handcraft production as cultural assets. He also asserted that the MOCT is working on creating awareness for its practitioners. Key informant from Addis Ababa Culture and Tourism Bureau, senior expert of culture also stated that in general there is the training activity which is given on different issues however we are working on unity in diversity and promoting different cultures through drama, music and developing positive aspects of the culture. But, there is no activity is doing specifically focusing on handcraft of weavers in Addis Ababa.

The Cultural Industry Development Director mentioned that the solution for the problem of weaver's trade system. He said "we are advising weavers to establish their own association in order to develop their business communication skill. What we are facilitating for them, providing training such as entrepreneurship skill, marketing and related issues with trade. When the cultural industry centers establish, it will be more helpful for the connection of producers with customers directly."

For the question "What is the link between IK and community development?" Cultural Industry Development Director replied that the indigenous people use their knowledge to live in sustainable way within their natural environment. Thus, IK is an important tool for development if it is supported with technology and training. For example the IK of conflict resolution method has an important role for social development and while we see the farming IK such as soil conservation method, are helpful for economic development.

A scholar of social work, from Addis Ababa University indicates explicitly the links between community development and IK and the advantages of IK in practice of community development.

...community development is generally seen as when the community strives to improve the community's life. If the work of community development considers community's internalized and developed knowledge that the community possessed for long period ... the practice of community development will not be alien for the community. When the practice of community development is based on their knowledge, skill, capacity, considered priority need, and can be easily practiced by community...it can make sustain the community livelihood. Introducing external knowledge in the community will be difficult and take time in order to practice and contextualize the new knowledge. (Scholar of social work)

The findings revealed the relationship between IK and community development. IK is a means of sustainable life for community. IK is an important component for community development. If IK is supported with education and technology, it can serve as a main tool for community development. Moreover, if community development practices consider community's IKS and/or integrate with IKS; the outcome of community development will be achievable.

Ethiopia has numerous IK systems which can be an essential for cultural, social and economic development. Among these, conflict resolution method, soil conservation method, and different IK on handcraft like weaving can be mentioned as important input for development.

### **4. 11. Implication of IK to Adult Education and Community Development**

The scholar in adult education from Addis Ababa University indicated that IK is an important tool to solve personal, societal, and economic problem. If modern education can combine with IKS, it will be helpful for the learner. One advantage is that the learner may not forget his/her culture and won't be confused about their culture and traditions. He also said that there is a gap between IK and modern knowledge. Due to the adoption of modern culture and value in education system and lack of understanding about contribution of IK to modern education, IK wouldn't get consideration in the curriculum. The result of this gap, leads for negative assumption. IK is seen as backwardness and irrationality. Therefore, towards IKS needed to develop awareness in order to change the wrong assumption of people. At least, IK should insert in the curriculum as one content area. We must think on how IK can be integrated with modern knowledge, as he suggested. Cultural Industry Development Director agrees with this idea. He recommended that if IK components are considered in the curriculum and implemented in different academic institutions, then, we can maintain our precious culture and it will be easy to transfer from generation to generation.

Additionally, the scholar of adult education from Addis Ababa University also explained clearly about IK transfer methods and modern education system. He said IK transfer method is more practical, participatory and investigative. Adult education method should also be participatory, practical and investigative. In IK transfer method, while learner practice, may ask question and investigate more. Learner might not carry burden beyond themselves in IK methods, but still helpful to make the learner physically fit and also make stronger. On the other hand, modern education is time limited and large class size due to that learner may not get immediate evaluation and feedback. But, in IK transfer system, the learners immediately question out and get feedback immediately because this is more employed, hence such learning could be taken as free from time limitation. Besides, since it is matched with daily life and positive attitude and value, may develop in IK towards the lesson when learner practiced more. IK transfer system is purposeful even if the purpose is not structured or written in formal way.

Adult education should also aim at solving immediate problem. Participation and experience are also more important and needed to be focused in adult education.

The scholar of adult education further noted the implication of IK transfer methods to adult education and community development. Community development is focused on improving community life. But if the practice of community development is dropping community culture and planting other modern culture, it might be challenging. But if that is based on IK system and community development build on IK and supported by education can convey development. The scholar from the school of social work also asserted that IK should be supported by formal education as well as non-formal education in order to transform to community development. Education is necessary for IK people to avoid negative aspects and to build up the positive parts. Further, he suggested that if community development starts from local value, knowledge, resources and then supported by education, community may lead sustainable life and development won't be tough.

The responses from the interviewees emphasize that IK transfer methods are practical, participatory and investigative and it is significant for education system to assure community development. If IK system, value and skill can be supported by education, indigenous people and community will be beneficiary to develop with their respective knowledge. Likewise, if the adult education system can adopt IK transfer system, education method will be active, more practical, participatory and investigative. Then, community development will be expressive and easy to assure community wellbeing.

## 4.12. Discussion

The study aims to look IK transfer methods which can be an approach for adult training program and community development practices. Knowledge seen as in this study as an umbrella which includes skill and attitude. Klieme *et al* (2004), support this issues higher competency levels are characterised by the increasing ‘proceduralisation’ of knowledge, so ‘at higher levels’, knowledge is converted to skills. Besides, as Garvin (1993) stated, during the initial stage, cognitive learning leads to the alteration and improvement of thought patterns and knowledgebase. These are translated into new work practices, in the subsequent behavioural learning stage. Then, the actions which follow cognitive and behavioural learning lead to visible performance improvements (Garvin,1993). Thus, the term ‘Indigenous knowledge’ in this study considered skill and attitude as part of knowledge.

From the data generated in this study, it is noted that IK transfer method is an important tool for education to ensure the effectiveness of community development practice. According to the study, IK has both positive and negative aspects which cannot go hand in hand with modern knowledge transfer systems. In order to build up the positive aspects of IK and avoid the negative elements, non-formal adult education is found to be a necessary approach. According to the finding, IK transfer method is active, more practical, participatory and investigative. Thus, if adult education adopts the IK transfer methods, it can have a great contribution to enhance community development practice.

Many scholars and research findings prove that IK is very important for development in various directions. This study focused on the four research questions: How do weavers transfer their IK for adults? In what way does weavers’ IK get consideration in adult education program? Is there a link between IK and community development? And, what can be proposed to better maintaining the existing IK of Shiro Meda weavers Community? Since the sole objective of this study was to investigate of two important issues; the transfer method of IK and its implication to Adult Education and Community Development, I tried to supplement the findings in this regard with prior researches. As far as my knowledge is concerned, research was not conducted on IK transfer methods connected with adult education and community development practices in Ethiopia until now. The special thing with this work is identified in detail the IK transfer

methods of weavers community and also it encompasses the significance of IK integration with adult education for the result of community development practice.

#### **4.12.1. The Transfer Method of IK**

*How do weavers transfer their indigenous knowledge for adults?* Adult learners are characterized as goal-oriented students who choose to learn and value what they learn. They learn to acquire a specific skill. Mature learners rely on new knowledge to progress themselves towards a purpose. The purpose of Shero Meda weavers community towards transferring their IK from generation to generation is with the aim of creating means of income; to develop self-independent; to preserve the IK and to keep it from disappearance. According to Knowles principle adults are most interested in learning subjects having immediate relevance to their work and/or personal lives, and adults need to know why they are learning something. Effective teachers explain their reasons for teaching specific skills (Knowles, 1984). Besides, Hoppers (2004) recognizes towards the protection, development and promotion of IKS which help to improve the livelihoods and economic well-being of local communities.

Shero Meda weavers' community follows phases to transfer their IK of weaving. The first stage starts from observation. Second stage is demonstration and dialogue method. Third is observing and exercising. Forth is the stage of trial and error process. After that, it is the stage of practicing independently and start producing fabrics for proceeds. Those types of product fabrics may vary depending on apprentice's ability and creative mind. In these all instructional methods there is immediate evaluation and feedback in each single step. Hofverberg (2010) stated in general the educational model of weavers are "learning by doing", whereas young boys start practicing weaving under the leadership of an older teacher step by step. Hoppers (2004) recognized that IKS has standards for transmission, and a system of rules and practices including different practices of earning and sacrificing to gain knowledge. IK requires practices and hard working to master the knowledge. Of course, Shero Meda weavers have standards, system and practice for transmission of their IK.

Training focuses on tasks that adults can perform, rather than on memorization of content (Corley, 2011). Higher order thinking skills tend to be learned most effectively by creating, evaluating, and analyzing contents instead of memorization. When IK transfer methods of

weavers seen critically, learners are derived until creating new design of production. These shows IK transfer methods enhance the higher order thinking stage “CREATING”.

According to Dave (1975) psychomotor domain is characterized by progressive levels of behaviors from observation to mastery of a physical skill. Dave contends that the higher stage is naturalization. Naturalization is mastering a high level performance until it becomes internalized without needing to think much about it. When we see weavers training system, it seems drives till naturalize and internalized the skill, even, possessed within the knowledge. Not only that, their training system helps until changed the knowledge and skill into income generation. Thus, IK transfer method focus on the higher stage of skill “NATURALIZATION”.

The affective domain addresses interests, attitudes, opinions, appreciations, values, and emotional sets. If the purpose of teaching is to change attitudes/behavior rather than to transmit/process information, then the instruction should be structured to progress through level of affective domain (Krathwohl, Bloom & Masia, 1965). To these authorities the higher level in affective domain is characterization value. The outcome of weaving training method initiate the learner to be creative; insure self-independency; satisfaction and develop the sense of innovative and hopeful mind. This shows the values and emotional sets that the apprentices build through learning weaving. So that, IK transfer method change attitude and develop the sense of value, and appreciation.

Until the training accomplished, master weavers activities are assisting, evaluating, giving feedback and providing materials. On the other hand, apprentice’s activities are observing, and then observe and reply attentively, after that, observe and exercises immediately, finally, longtime of their training will take place by practicing until quality production of fabrics. Karge et al., (2011) have provided two examples of specific activities that are effective for adult learners: Tell-Help-Check and problem based learning. Silberman (1996) stated practical strategies include ways to get students active. Active learning characterized by learner acquires the knowledge through seeing and hearing 50%, through speaking 70%, through saying and doing 90% (Silberman, 1996). While we see master weavers’ activity it is more related with Tell-Help-Check. Apprentice’s activities are focused more in seeing, hearing, speaking, doing. Thus, this shows that IK transfer method is an effective active teaching- learning method. Active

learning provides students with opportunities to enhance skills, improve their critical thinking, and gain knowledge in an efficient way (Karge et al., 2011).

The materials that apprentices use as training inputs are different from what the master weaver are using. But, it is the real objects which are valuable for weaving processes. However, the size and quality of material is not the same as master weavers, but all materials are useful for fabric production. According to Edward (2008), learning resources or materials should be activity-based rather than lecture-based; draw students into group and co-operative learning, as well as provide for individual growth; promote hands-on activities. Based on the principle of Edward (2008), the practice material of apprentices is not a text book, or any reading material. It is real objects which are useful to practice weaving and support hands-on activities. Therefore, the teaching/ training aid or resource in IK transfer method is real object which can help to practice real learning process.

According to NCPHP (2014), providing more time and activities for students give plenty of opportunities to grasp the complexities. The duration of training that novice/ apprentices stayed on activity varies from place to place. It does not have time boundary. The duration of training depends on the willingness of master weaver and apprentice's life condition. Thus, in weaver's community, the overall training take place until the apprentices knows and become skillful. But, adult learners are more inclined to apply new knowledge and skills.

Apprentices, after accomplishing their training, they know that the importance of having this skill will lead them to be independent and lead them to generate income. The first Knowles principle recognizes and correlates the notion of self-concept with an adult learner's approach to learning. With maturity comes a person's inclination to become a more independent and self-directed human being (Knowles, 1980). IK transfer method enhances the sense for self-independent.

To conclude, IK and skill transfer method is generally active, more practical, participatory and investigative. IK transfer methods enhance the higher order thinking stage of creating. Indigenous skill transfer methods are focus on naturalization of skill. Moreover, indigenous methods change attitude and develop the sense of value, and appreciation. In addition to this, IKS offers plenty of opportunities to grasp the complexities; and is an effective active teaching- learning method. The teaching/ training aid or resource in IK transfer method is real

object which can help to practice real learning process and IK transfer method enhances the sense for self- independent. According to the conceptual frame work, IK is the collective body of strategies, practices, techniques, tools, intellectual resources, explanations, beliefs, and value (Gloria & George, 2014). In fact, the IK of weavers fulfilled these all as elaborated below.

- *Local Knowledge:* Shero Meda weavers' local knowledge is the knowledge of producing very attractive cultural fabrics through traditional ways of weaving process. In addition to this, they know how to impart weaving skill for others.
- *Practices:* weavers practice to producing cultural fabrics as the same time and transferring their knowledge.
- *Techniques /methods:* the methods of weaving to produce cultural fabrics are warping warp threads, winding and sizing yarns, picking by hand shuttle, drawing in and tying, and looming until the fabric accomplished. The methods of transferring their knowledge are observation, demonstration and dialogue, observing and exercising, try and error process, practicing alone and producing fabrics.
- *Tools:* the weaving tools and accessories are the local and traditional tools which are fabricated with own skill. To impart their knowledge, the tools are real objects which are used for weaving process.
- *Intellectual resources:* they know how to produce attractive fabrics and they know how to create skillful weavers
- *Explanations:* “The purpose of transmitting weaving skill is for self- governing, if you have this skill and knowledge, you may have income which helps you to lead your own life and you will be independent” (In.12)
- *Beliefs and value:* “This is the knowledge that we receive from God...so, we have to transfer for next generation...” (In.1)

In addition to this, Hofverberg (2010) in her thesis, classified the hand craft tradition of Shro Meda weavers as traditional knowledge system (TKS) for the reasons of their handicraft tradition is taught from one generation to another; the production takes place in their homes, using simple looms, and the products are mainly sold within the country; and it has a strong tradition and validity that is rooted in the knowledge functionality.

#### **4.12.2. The Implication of IK to Adult Education and Community Development**

*In what way does weavers' indigenous knowledge get consideration in adult education program?* The findings from key informants show that IK is an important tool to solve personal, societal, and economic problem. Due to lack of understanding about the contribution of IK to modern education, IK doesn't get consideration in the curriculum. As a result, there is a gap between IK and modern knowledge. The expert from MOE argued IK is considered in the curriculum frame work. Of course, there might be valuing of IK at the level of MOE in the plan and strategy. In the implementation guidelines (2011), among the specified target group of beneficiaries of IFAL programme, indigenous people are stated. However, there is no specifically referred lesson in the books 1 and 2 of IFAL programme in Addis Ababa. For instance, lesson not found which integrated with weaver's community job and IK directly. This means, the content of IFAL is generally provided for anyone who never enrolled in school as well as who dropped out of first cycle primary education. Likewise, Genet (2014) supported this, though there is political will and there are strategies and programs which are conducive to the provision of adult literacy, they are not being implemented accordingly. Hence, it seems necessary to consider this useful experience of weavers IK in adult education programme, plan, and curriculum framework.

*Is there a link between IK and community development?* Findings revealed that strong link between IK and community development. If practice of community development integrated and considered IK, there will be tangible development. Ife (2002) assured that IK is vitally important for any process of community development. Community knows best. The member of the community, who has the experience of that community life style, knows their own needs and problems, their own strength, and their own unique characteristics. IKS promotion is at once a restoration of dignity to communities, and part of a development strategy for enterprises and capacity building inside communities (Hoppers, 2004). Specially, in Ethiopia, there are plenty of IK systems that are not seen critically which can be essential for economic, social and cultural development. According to the Cultural Industry Development Director, the IK of conflict resolution method has an important role for social development and while we see the farming IK such as soil conservation method, are helpful for economic development. If this IKS can get consideration and investigated well, there might be the main and vital input for the process of

community development. Weaver's IK and skill as well as their training system are the best example for this.

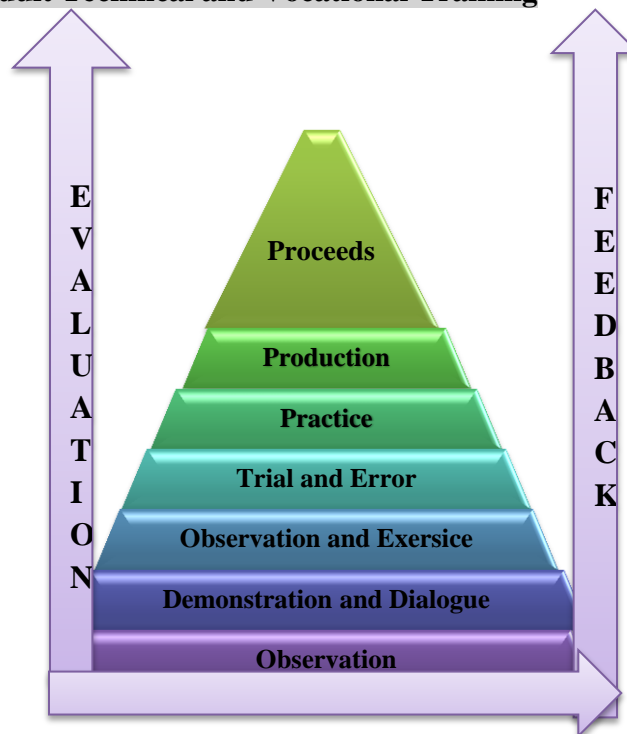
*What can be proposed to better maintaining the existing IK of Shiro Meda weavers Community?* Findings suggested that the integration of IK and adult education is necessary. The scholar in the field of adult education assured that if modern education can build up by IKS; it may have best aspects and will be helpful for the learner. One of the advantages is that the learners may not forget their culture and won't be confused about their culture and traditions. Fien (2010) supported this idea; indigenous people have a broad knowledge of how to live sustainably. However, formal education systems have disrupted the practical everyday life aspects of IK and ways of learning, substituting them with abstract knowledge and academic ways of learning. In order to preserve IK and to transfer from generation to generation easily, Cultural Industry Development Director and scholar of adult education recommended the integration and insertion of IK components within curricula. Fien (2010) supported this idea. He stated that it would be wise to sustain IK in traditional communities and integrate it into the school curriculum where culturally and educationally appropriate. In fact, if IK can be integrated with school curriculum, indigenous learners will be more beneficiary. Adopting IK transfer methods also in order to teach and to give training for adult learners would be more advantageous to generate qualified, creative and innovative workforce.

Based on the results of the study, I prefer preservation of IK to its replacement by modern method. Adopting the IK transfers methods of weaver which is summarized and illustrated on Figure 4.3(see below) into non-formal adult education system specially, for skill training programmes like TVET will be more significant. As stated above, IK transfer method is in general active, more practical, participatory and investigative. IK transfer methods enhance the higher order thinking stage of creating. IK transfer methods are focus on naturalization of skill. Moreover, indigenous methods change attitude and develop the sense of value, and appreciation. In addition to this, IKS offers plenty of opportunities to grasp the complexities; and is an effective active teaching- learning method. The teaching/ training aid or resource in IK transfer method is real object which can help to practice real learning process and IK transfer method enhances the sense for self- independent. On the other hands, adult education aims are to provide the knowledge that improves professional qualifications and to achieve civic, social, moral and

cultural attitudes and skills for performing responsibilities and for progress in all spheres of life. Thus, in order to meet the goals, IK transfer methods is suggestive for non-formal adult education programs.

According to Hofverberg (2010) study, Dorze education could serve as a local model for Education for Sustainable Development (ESD). As she described that the Dorze education is holistic, practical, individualized, and contains some problem solving. The education is highly assimilated in the daily life of the weaving community and is significant to local community. Moreover the education transfers a historical legacy of cultural stability, and has shown itself to be dynamic and adaptable to change. In fact, Hofverberg proposed the general form of Dorze weaving education as a model for general form of education for sustainable development.

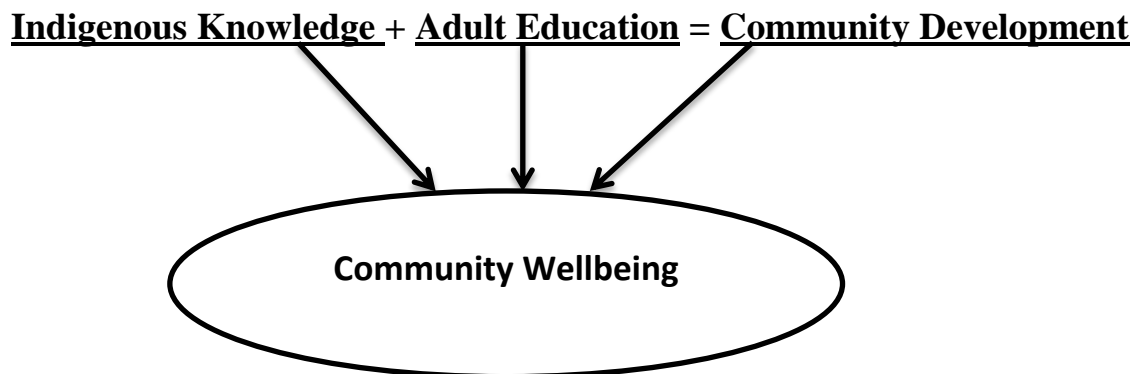
In other way, it is worthwhile to propose that specifically IK transfer method of weavers as a model for method of adult technical and vocational training for purpose of community development practice. If master weavers can generate skillful adults who can make their own income and govern independent life based on their IK transfer method, any other trainers of skills can use it as a model to create such kinds of skillful adults with easy, and cost wise method. Therefore, if educational programs such as non-formal adult education and skill training programs like TVET can consider and adopt the IK transfer methods, delivering quality education and skill training will be discernible. In advance, as weavers could create lots of qualified professional weavers through indigenous training system, generating qualified professionals will be marked. From my point of view, using weavers IK transfer methods as a model will be significant for individual, community as well as country economic development. Considering IK transfer methods as a model is also helpful to activate and deliver quality training program which enable adults to make their own income to be independent. Because, weavers skill training method have a potential until it creates skillful and capable adults who can make quality production with good sale value and proceeds. Based on the discussion, I have come up with the following model for method of adult technical and vocational training.

**Model for Method of Adult Technical and Vocational Training**

IK is particular relevance for community development and poverty alleviation (J-T & Theresa, 2015). The scholar from social work recommended that if community development starts from local value, knowledge, resources and then supported by education, community may lead sustainable life and development will be assured. Ife (2002) sustained this idea; community development must rely much more on local knowledge, and correspondingly less on universal knowledge; local culture also should be valued; to achieve self-reliance community workers and community groups need to explore the possibilities of creatively developing and using their own local resource, rather than those obtained externally. The other important point in changing from below perspective of Ife is valuing local skills and local community processes are keys to know where to start. Hoppers (2004) also confirm this idea IK is valuable in order to lives and sustains millions of people economically, socially and spiritually as a living framework for continuing creativity and innovation in most fields of technology. It is a source of wealth, both as an economic and cultural asset. In short, in order to assure tangible community development, IK should support with education and the practice of community development must embrace IK as a processes and input. Similarly, indigenous people also should be supported by adult education program in order to develop with their respective local knowledge, skill, resource and process.

To conclude, I would also propose that any community development practices and process should take into account community's culture, knowledge, skill, resources and process. I argue that If IK is supported by non-formal adult education programme, there will be an improvement of economic, social, cultural and/ or environmental situation. For this Shero Meda weavers community is a good example. This community has the resource which can be changed into adequate income generation. If the community is supported by non-formal adult education concerning to the system of trade and related issues, there is no reason to fail to become successful economically. And again, if they learn how to live peacefully, collaboratively and respectfully, social development may increase. If this culture of weavers is considered in the school curriculum, it is possible to say that cultural and economic developments may flourish. I argue that if those developments replace, the result will be change of environmental situation and can insure community wellbeing. Thus, if IK is supported with adult education and adult education methods adopt the method of IK the result will be community development. Then community wellbeing will be the ultimate outcome. Hence, I have come up with the following proposed notion: incorporating IK with Adult education leads to community development, which in turn ensures community wellbeing.

**Figure 4.5. Proposed Notion**



Source: Own presentation, 2017

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND IMPLICATIONS

#### 5.1 Summary

##### 5.1.1. Purpose and Objectives of the Study

The purpose of the study was to examine IK transfer methods which can be an approach for adult training program and community development practices based on *Shero Meda* weaver's community in Addis Ababa, Ethiopia. The specific objectives of the study were to identify the methodologies employed in weaving training; to determine the consideration given for IK of weavers in adult training program; to explore the link that exists between IK and community development; to propose ways of maintaining weavers IK transfer methods in non-formal adult training program for community development practices.

##### 5.1.2. Methodology

In this qualitative case study, I applied focus group discussions, in-depth-interview and observations to collect data from *Shero Meda* located in Gulele sub-city, Addis Ababa. Moreover, key informant interview was also conducted with professionals. A total of two focus group discussions; twenty one hours observation within seven days; I conducted in-depth interviews with fourteen participants and seven key informant interviews were employed to collect data. Participants were recommended by community leaders based on their knowledge and practice of traditional weaving. Key informants were purposefully selected. Question guides with open ended questions were used to lead discussions in focus groups, in-depth interview and to interview key informants. The question guides were validated by advisor and scholar of community development at Addis Ababa University. After the data were collected, it was analyzed by organizing it into themes and relationships in order to make easier to understand. This was followed by interpretation of data.

##### 5.1.3 Summary of Findings

*Processes of Weaving:* Producing particular traditional cloth fabrics has its' own processes. These are warping warp threads, winding and sizing yarns, picking by hand shuttle, drawing in and tying, and looming until the fabric is accomplished. These fabrics produced are varying from weaver to weaver. Their varieties depend on their color structure, size, thickness, quality level of material. Each of the colors and quality of yarns has its own number code and

name. The simplest work from weaving process is winding bobbin and in the final stage, the most challenging is looming, the design *tebeb*. It requires more efforts and creativity than looming pure white fabrics.

*The Intention of IK Transference:* The intention of Shero Meda weaver's community towards transferring their IK from generation to generation is with the aim of creating means of income. Because, they believe that this is the wisdom which is given from God to survive on this earth, the father imparts his son or the master weaver imparts novices.

*IK Transfer Method:* The first stage regarding the method of Shero Meda weavers community to transfer their IK, is observation. And then, the apprentices will identify all the materials, quality, steps of tasks, and color combination with attractive structure through demonstration and dialogue method. After these, the novices start observing and exercising immediately the task of winding the bobbin to twist different color weft and warp which is the simplest task from weaving process. Then, it is the stage of trial and error process. Apprentices will sit beside to master weaver and start counting threads and try to do the activity of looming. When the error occurs, the master weaver will correct it and give him back to try again. When the apprentices become free from error or minimizing error, he will start practicing alone and start producing fabrics for proceeds. Those types of product fabrics may vary as apprentice's ability and creative mind. In these all stages of the instructional method, there is evaluation and feedback in each step.

*Master Weavers and Apprentices Activities:* During the training, master weaver assists the novice in different ways such as demonstrating everything; there will be evaluation to check whether the apprentice do it as he observes and listens or not. The evaluation methods are observation and asking oral question, and sometimes the sell value of the production will be considered. Then, there will be feedback. Finally, the master weaver will be responsible to provide every material and working place for capable apprentices. This means, the apprentices will start working independently for their own income generation. Apprentice's activities during the training, will start from observation. Then, during the observation there might be demonstration and dialogue. At this time, those learners should observe and reply attentively. The next stage apprentices should observe and exercises immediately. In addition to this, the

longtime of their training will take place by practicing. Later on, production of quality fabrics with new design or duplicated form will be expected from them.

*Practicing Materials:* Practice materials of apprentices are different from those master weavers are using. This means, it is the real objects which are valuable for weaving processes. However, the size and quality of material is not the same as master weavers, but all material are useful for fabric production.

*Duration of Training:* In weavers' community, the overall training takes place until the apprentice knows and become skillful like master weavers. In addition to this, to call the apprentices as the best weaver, they should start fabric production which can get good sale value. Thus, the training duration continues until the apprentices become effective.

*Problem Solving Strategies:* Apprentices identified how to solve problems when they faced challenges on the work. Their problem solving strategy is first trying to solve it individually, if not, ignore the problem for a while and refresh their mind then ask for others who can solve the problem.

*The Outcome of IK Transfer Method:* Apprentices after they accomplished their training, they will become independent workers who are capable to generate income. The master weaver is supporter in providing work place and necessary materials. If the apprentices cannot work for his own income, he will be employed for his master weaver as an assistant. Thus, it is possible to say that, the outcome of this training method initiate the trainers to be creative; insure self-independency; satisfaction and develop the sense of innovative and hopeful mind.

*Challenges to Transfer IK:* Weaver's life condition and their skill may not be well-adjusted. Due to the various challenges stated above, their life condition becomes more obstacles. The time and effort that consume to produce a single fabric, the low price of their products and their low communication skills and lack of saving led at their life conditions usually hindrances.

*The Consideration of IK in Adult Education Program:* In the curriculum framework of IFAL the indigenous people of weavers and their respective knowledge are not considered respectively. Even if, those people are considered at the level of MOE, it is clear that, the

problem is embedded on the implementation of the programme. There is no particular curriculum as well as training which is designed for this indigenous group of weavers in IFAL. However the issue of IK was not considered as full-fledged programme, it is possible to consider the experiences of such highly skilled people in adult education programme, plan, and curriculum framework.

*The Relationship between IK and Community Development:* IK and community development have relationship. IK is an important element and input for community development. It is argued that if the practice of community development considered in IK, development will be enhanced. If each of IK system of Ethiopia is seen as critically and investigated in detail, it can contribute a lot for cultural, social and economic development.

*Implication of IK to Adult Education and Community Development:* The finding emphasizes the significance and values of IK for adult education and community development. If IK is incorporated in the education system, community development will be more enhanced, as a result, community wellbeing can be realized.

## **5.2 Conclusions**

Shero Meda weavers community is imparting their IK with constant phases. Weavers IK transfer method is generally active, more practical, participatory and investigative. IK transfer methods enhance the higher order thinking stage of creativity. Indigenous skill transfer methods are focus on naturalization of skill. Moreover, indigenous methods change attitude and develop the sense of value, and appreciation. In addition to this, IKS offers plenty of opportunities to grasp the complexities; and is an effective active teaching- learning method. From this, it can be safely concluded that weavers IK transfer method is very important if it can be model and adopted by non-formal adult education system especially for skill training program. Respectively, indigenous people are needed to be supported by adult education program. The result of the composition of IK and adult education might be community development. Then community wellbeing may substitute in the community. This paper served the purpose of describing and analyzing method of weaver's community in imparting their knowledge with its implication on adult education and community development. Using an inquiry framework to plan the curriculum for indigenous people and to improve method of non-formal adult education is

helpful in improving learning and teaching process to contribute for community development practices.

### **5.3 Implications**

As stated before, IK combined with adult education and community development will be effective and fruitful in order to assure community wellbeing. To this end the concerned organizations such as Ministry of Education and Ministry of Culture and Tourism should play their role.

- For IK to be preserved and transmitted to the younger generation, it need be included in the education system. For it to be included in the education system it must be well documented and adapted to the current social system. IK such as how indigenous weavers are processes and prepared should be promoted by being incorporated into the school curriculum in order to inculcate it into the youth. Thus, the MOE is advised to give more attention to the integration of weavers IK with school curricula. Furthermore, MOE is recommended to consider and support the experiences of Shero Meda weavers in IFAL programme.
- Higher education institutions offering adult education programme are also advised to consider the IK transfer methods in their curricula. They should also think how traditional education is relevant to the community life, especially, learning by doing, and included it in modern education.
- Addis Ababa TVET agency and concerning organization, such as government as well as non-government organization is advised to conduct an assessments and organize short- term training for Shero Meda weavers like literacy, trade system, saving, marketing, communication skill, etc.
- Documentation of IK is a means of protecting IK but not the end. IK must be documented and propagated through training and practice as well as with documented trails in order to define a methodology for terms of reference. Thus, MOCT is suggested to work on documentation, promotion and on awareness raising about the importance of IK of weaving and IK transfer methods.
- Community development practitioners, adult educators', policy makers and researchers are recommended to rethink and investigate more on the effectiveness of indigenous knowledge system.

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# APPENDICES

APPENDEX A



Figure A1: The acomplised design of traditional cloth fabrics which is used for the vest of man and for the women dress.



Figure A2: The border (*Telet*) of the accomplished traditional cloth fabrics done by master weaver. This border of fabric is very complex to accomplish, it is called *Negeste Saba*(Queen Saba). It requires more creativity and time.

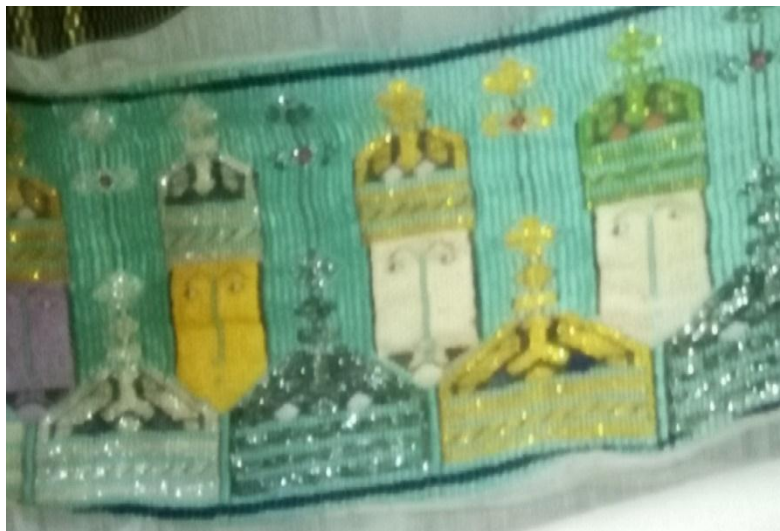


Figure A3: The other complex border design of fabric which is called *Negusu Solomon* (King Solomon). It is done by master weaver.



Figure A4: The simplest border (*telet*) which is done by apprentice while he practices.



Figure A5: ‘*Yearbe iqa*’ (loom) which used for looming traditional fabrics. I was trying to practice even though it is difficult to do it.



Figure A6: This is ‘*Medwriya*’ (Bobbin) which helps to winding the yarns, weft or warps.

**Appendix B**

**Example of IFAL Syllabus**

**Lesson: Agriculture (Bee keeping)**

**Objectives:** participants explain the benefit of bee keeping as a source of income; elaborate the benefit of using a modern bee hive; identify and know the type of things that make bees irritated and refrain from doing things that irritate bees.

Package		Skills to be developed	Learning-teaching methods
Agriculture packages	Reading, writing & numeracy package		
.Care and proper up keep of bees .Benefits of a modern bee-hive .Discipline of bee keeper .Honey quality and its benefit to the country .Management and preservation of honey products .Medicinal value of honey .Weighing and estimating the price of honey	<b>Reading and writing packages</b> .Bee keeping; modern hive .Use of honey as an income sources <b>Numeracy/ computation</b> . How many kilos or caps or glasses of honey are collected from one bee hive .How many drinking glasses would be filled from one kilogram of honey? .The number of letters constituting words .The sign of addition/+ and its use .Measurement of a modern beehive	.Making a modern bee hive .Keeping honey as clean per possible .Price of honey per kilogram .Appropriate up keep of bees	.Discussion about the character of bees, their up keep, modern and traditional bee hives .Ask if there are people who have earned income from bee keeping and discuss it .Encourage participants to talk about what they know about modern hives .Consult the local agricultural extension agent about how a bee hive is made; Demonstrate/practice how it is made .Show on the meter the different measurements of a bee hive; Encourage participants to jot down on paper or on the ground/ the measurements .Ask or tell the importance a number has on measurement and elaborate; Encourage the building of modern bee hives using local materials .Practicing writing the words making the phrase separately; add up the letters in the phrase by using the (+) sign; practice adding and writing.

Source: IFAL curriculum Framework (MOE, 2011, p.41)

**Ways of following up and testing (MOE, 2011)**

- Follow- up if participants have refrained from doing things that irritate bees
- See and help participants attempting to make modern bee hives
- Follow-up their success in increasing the amount of production of honey and the change they have registered in the preservation of the product
- Ensure that they are able to quantify their products in kilos and grams
- Follow-up and make sure that they can read, write and do basic arithmetic.

## APPENDIX C

### LETTER OF INTRODUCTION FOR INTERVIEW AND FOCUS GROUP DISCUSSION PARTICIPANTS

My name is Rahel Zelalem. I am conducting research on indigenous knowledge transfer methods in Shero Meda weavers community. You have been selected to participate in the study because of your valuable knowledge and a skill on weaving is highly significant. I would like to thank you for availing yourself. Participation in the study is voluntary, and you can choose not to take part or you can quit anytime of the interview if you feel so. All information provided by you will be confidential; your name will not be mentioned in the report. The time you will spend in the interview will be a free contribution to my study and no payment is available.

If you confirm your willingness to participate in the interview/ FGD, I will be interested to audio-record our discussion in order to grasp the details of the valuable information you will provide on the subject of my study. However, recording will be depending on your willingness. Otherwise, I will take notes as much as I can. So now, can you confirm your willingness of participation in the interview?

- (a) Yes I do agree and we can proceed.
- (b) No, I do not want to participate in the interview

Thank you very much for your willingness!

#### **Ground rules for FGD**

1. Participation is compulsory for every member of the FGD
2. Participants must respond according to the questions read by the facilitator
3. There is no wrong or right answer (All perceptions must be shared)
4. If you have a cell phone please switch it off.
5. The whole discussion will not take more than 2hrs.

**APPENDIX D**

**Instrument one: Checklists Guideline for Observation**

The purpose of this checklist is to observe the training method employed in learning weaving.

**Back ground information**

Sub-city \_\_\_\_\_ Woreda \_\_\_\_\_ Date \_\_\_\_\_

No. of trainee \_\_\_\_\_ Observation time in days: 1 2 3 4 5 6 7

Physical setting	<ul style="list-style-type: none"> <li>• How is the physical appearance of weaving environment?</li> <li>• What resources are available for training?</li> <li>• How many apprentices and master weavers are involved in specific training session /working area?</li> </ul>
Activities and interaction	<ul style="list-style-type: none"> <li>• What are the activities of trainer/ master weavers during training?</li> <li>• What are the activities of apprentices during training?</li> <li>• What are the contents of the training orientation given to the apprentice by the master weavers?</li> </ul>
Training method	<ul style="list-style-type: none"> <li>• What are the common training techniques employed by the master weavers in imparting skills to apprentices?</li> <li>• Do the training methods increase retention? (Doing a dramatic presentation, simulating the real experience, doing the real weaving activities)</li> </ul>
Materials	<ul style="list-style-type: none"> <li>• What is the material/training aids being used for the apprentice training?</li> <li>• At whose cost the material purchased? (Trainer or Trainee)?</li> </ul>
Evaluation	<ul style="list-style-type: none"> <li>• Is there any measurable evaluation method used to evaluate the performance of the trainee? (Asking oral questions, observing and providing feedback, etc.)</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>• What are the potential challenges that affect the training (for example, format, space, minimal resources, etc.)?</li> </ul>
General observations (if any)	

Note: any observed facts concerning indigenous knowledge transfer mechanisms/ method will be recorded by field note.

## APPENDIX E

### Instrument two: In-Depth Interview Guideline for Master Weavers

The purpose of these guiding questions for interview is, to gather information for the research regarding training method.

#### Background information

Name/code \_\_\_\_\_, age \_\_\_\_\_, sex \_\_\_\_\_

Year of work as a weaver, \_\_\_\_\_ Year spend as a trainer \_\_\_\_\_ Educational status \_\_\_\_\_

1. How do you transfer skills of weaving?
2. Why do you impart your weaving knowledge?
3. How long the overall training take?
4. How often do apprentices stayed on training in a day?
5. What methods are employed in training? Probe: oral presentation, simulation, doing /experimenting.
6. Do the chosen instructional methods help participants discover learning points themselves and practice skills used in interactions?
7. What if the method cannot help to practice newly acquired skill? Is there/are there alternative methods? Is so please describe?
8. How are the apprentices evaluated to ascertain their mastery of the trade?
9. Do you provide feedback to apprentices in order to apply new knowledge to a specific situation?
10. How do you get the training before you mastered the skill? Did you pass in the same process as your apprentices are doing now? Please describe.

\* Note: for each question probing words like why, how etc. will be used to get detailed information.

**APPENDIX F**

**Instrument three: In-Depth Interview Guideline for Apprentices Weavers**

**Purpose:** to gather information for the research regarding training method employed in weaving training.

**Background information**

Name/code \_\_\_\_\_, Age \_\_\_\_\_, Sex \_\_\_\_\_

Educational status \_\_\_\_\_ Year spend as an apprentices \_\_\_\_\_

1. When do you start learning weaving?
2. Why do you choose to be weaver?
3. How long did the overall training take place?
4. How often do you stayed on training in a day?
5. What methods do you use in training?
6. Is there feedback from master weavers in order to apply new knowledge to a specific situation?
7. How do you solve problems when you face challenges on training?
8. What will you do after you finish the training?

\* Note: for each question probing words like why, how etc. will be used to get detailed information.

## APPENDEX G

### Instrument four: Focus Group Discussion Guidelines for Master Weavers

**Purpose:** To identify the methodologies employed in weaving training and the links between their indigenous knowledge and community development.

Date \_\_\_\_\_ time \_\_\_\_\_ place of meeting \_\_\_\_\_

#### Background information:

Name/code \_\_\_\_\_ age \_\_\_\_\_, year of practice as a weaver \_\_\_\_\_,  
year of practice as a trainer \_\_\_\_\_ Educational status \_\_\_\_\_

1. Why do you choose to be trainers?
2. What are they learning, how and when are they learning?
3. If you were to teach someone to weave what would you start with? And then? What is the hardest to learn?
4. How did you make different design? From where you get the experience?
5. How do you appreciate your work?
6. What did you personally benefit from the trade of weaving in your life?
7. What is your future plan in weaving trade?
8. How do you relate and evaluate the importance of weaving trade to community at large?
9. Do you have any supporter from government body or abroad?

Note: for each question probing words like why, how etc. will be used to get detailed information.

## APPENDEX H

### **Instrument five: Focus Group Discussion Guidelines for Apprentices Weavers**

**Purpose:** To identify the methodologies employed in weaving training and the links between their indigenous knowledge and community development.

Date \_\_\_\_\_ time \_\_\_\_\_ place of meeting \_\_\_\_\_

**Background information:** Name/code \_\_\_\_\_ age \_\_\_\_\_, year of practice as a weaver \_\_\_\_\_, year of practice as a trainee \_\_\_\_\_ Educational status \_\_\_\_\_

1. Why do you choose to become a trainee in weaving
2. What are you learning, how and when are you learning?
3. If you are learning to weave what would you start with? Please describe the steps, and what is the hardest to learn?
4. How did you develop the different design? Where did you get the experience?
5. How do you appreciate your work?
6. What did you personally benefit from the trade of weaving in your life?
7. What is your future plan in weaving trade?
8. How do you relate and evaluate the importance of weaving trade to community at large?
9. Do you have any supporter from government body or abroad?

Note: for each question probing words like why, how etc. will be used to get detailed information.

**APPENDIX I**

**Instrument six: Key-informant Interview (KII) Guideline for Expert from Ministry of Education, Addis Ababa Bureau of Education and Woreda level expert from Gulele sub-city**

**Purpose:** To determine the consideration given for indigenous knowledge of weavers in adult training program.

**Background information:**

Name \_\_\_\_\_, Educational qualification \_\_\_\_\_,  
Position in the Ministry/Bureau \_\_\_\_\_

1. Is weaving indigenous training method known in IFAL program?

If yes!	If no!
1. In what way does weavers' indigenous knowledge get consideration in adult education program? 2. How weaving indigenous training method is implemented to IFAL program? 3. What successes and problems are registered in relation to weaving in IFAL program?	1. Why weavers' indigenous knowledge did not get consideration in the IFAL programme? 2. Is there any plan in the Ministry/Bureau to consider weaving indigenous knowledge in the IFAL Program? If yes when and how? If not, why not? 3. How can IK transfer method be transported into mainstream non-formal adult education for community development practices?

\* Note: for each question probing words like why, how etc. will be used to get detailed information.

**APPENDEX J**

**Instrument seven: Key-Informant Interview (KII) Guideline for Expert from Ministry of Culture and Tourism and Addis Ababa Bureau of Culture and Tourism**

**Purpose:** To understand the link that exists between indigenous knowledge and community development.

**Background information:** Name \_\_\_\_\_, Educational qualification, \_\_\_\_\_, Position in the Ministry/ Bureau \_\_\_\_\_

1. What is/are the role of your Ministry/Bureau in recognizing and preserving indigenous knowledge and skills in the country?
2. How do Culture and Tourism Ministry/Bureau recognize indigenous knowledge of weaving? Is there any study conducted, or any plan to conduct studies?
3. Do you notice the training method of weavers? If yes what components of this method can be preserved as indigenous knowledge and how?
4. Is there a link between indigenous knowledge and community development? If yes, can you describe how indigenous knowledge such as weaving can contribute to community development?
5. What is your suggestion/recommendation to maintain weaver's indigenous knowledge transfer method as non-formal adult training so as to use for community development practice?

\* Note: for each question probing words like why, how etc. will be used to get detailed information.

## APPENDEX K

### **Instrument Eight: Key-informant Interview (KII) Guideline for Scholars in Addis Ababa University**

**Purpose:** To understand the link that exists between indigenous knowledge and community development and to determine the way of preservation/ maintaining weavers indigenous Knowledge transfer in non-formal adult training programme for community development practices.

**Background information:** Name \_\_\_\_\_, Educational qualification, \_\_\_\_\_, Position in the Bureau \_\_\_\_\_

#### **For Adult Education Department**

1. What is the value of indigenous knowledge in education?
2. Does Indigenous knowledge have significance to Adult education?
3. If Indigenous knowledge insert in to modern education system, what it can contribute?

#### **For Community Development Department**

1. What is the link between indigenous knowledge and community development
2. What is the contribution of indigenous knowledge for community development practices?
3. If community development starts from local Knowledge, system, value...what it can contribute for the country?

\* Note: for each question probing words like why, how etc. will be used to get detailed information.

## APPENDIX L

### **Instrument Nine: Guideline for Document Review**

**Purpose:** To determine the consideration given for indigenous knowledge of weavers in adult training program, to understand the link that exists between indigenous knowledge transfer/ skill training and community development, and to determine the way of preservation weavers training method.

1. Is the indigenous knowledge of Shero Meda weaving training method known in IFAL program documents (such as curriculum, manuals, and guidelines)?
2. What is the links between indigenous knowledge and community development?
3. What are the ways of maintaining weaver's indigenous knowledge and skill transfer as non-formal adult training for community development practice?

## APPENDEIX M

## SAMPLE RECORD SHEET

**FOCUS GROUP DISCUSSION AND IN-DEPTH INTERVIWE PARTICIPANTS IN  
SHERO MEDA WEAVERS COMMUNITY**

<b>Participants code</b>	<b>Age</b>	<b>Gender</b>	<b>Day</b>	<b>Time</b>	<b>Sign</b>
Master weaver, In.1	78	Male	Mar 6, 2017	2:00pm - 2: 30 pm.	
Apprentice, In.2	18	Male	Mar 6, 2017	3:00 pm- 3: 20 pm.	
Master weaver, In.3	25	Male	Mar 6, 2017	3: 30pm- 4:00 pm.	
Apprentice, In.4	18	Male	Mar 6, 2017	4:00pm – 4: 30 pm.	
Apprentice, In.5	24	Male	Mar 7, 2017	2:15pm - 2: 40 pm	
Apprentice, In.6	22	Male	Mar 7, 2017	3:00 pm- 3: 25pm.	
Apprentice, In.7	25	Male	Mar 7, 2017	3: 30pm- 4:10 pm.	
Master weaver, In.8	33	Male	Mar 7, 2017	4:20pm – 4: 30 pm.	
Master weaver, In.9	59	Male	Mar 8, 2017	10:20am - 10: 50 am.	
Master weaver, In.10	35	Male	Mar 8, 2017	11:00 pm- 11: 20 pm.	
Master weaver, In.11	41	Male	Mar 8, 2017	2: 30pm- 2 :55 pm.	
Master weaver, In.12	32	Male	Mar 8, 2017	3:00pm – 3: 40 pm.	
Apprentice, In.13	15	Male	Mar 8, 2017	4: 30pm- 4:55 pm.	
Apprentice, In.14	19	Male	Mar 8, 2017	5:00pm – 5: 35 pm.	
Master weaver, FGD.1	56	Male	Mar 9, 2017	9:30am. – 10:45 am.	
Master weaver, FGD.2	73	Male	Mar 9, 2017	9:30am. – 10:45 am.	
Master weaver, FGD.3	29	Male	Mar 9, 2017	9:30am. – 10:45 am.	
Master weaver, FGD.4	47	Male	Mar 9, 2017	9:30am. – 10:45 am.	
Master weaver, FGD.5	57	Male	Mar 9, 2017	9:30am. – 10:45 am.	
Apprentice, FGD.6	24	Male	Mar 11, 2017	10: 30 am.–11:30am.	
Apprentice, FGD.7	24	Male	Mar 11, 2017	10: 30 am.–11:30am	
Apprentice, FGD.8	22	Male	Mar 11, 2017	10: 30 am.–11:30am	
Apprentice, FGD.9	18	Male	Mar 11, 2017	10: 30 am.–11:30am	
Apprentice, FGD.10	19	Male	Mar 11, 2017	10: 30 am.–11:30am	

**የፍቃድ መጠየቅ ደብዳቤ**

ስሜ ራሔል ዘሳለም ነው። በሀገር በቀስ ሰውነት እና ክህሎትን የማስተላለፍ ዘዴ በተመሰከተ በሽጭ ሜዳ ሽማግሌ ማህበረሰብ ውስጥ ጥናት እየሰራሁ ነው። ባለሀ/ባለሽ ጠቃሚ ሰውነት እና በጣም ስህተት የሆነ የሽመና ክግሎት ምክንያት በዚህ ጥናት ውስጥ ተሳታፊ ስመሆን ተመርጠሁ/ ተመረጠኝ። በዚህ ጥናት ውስጥ ስምታደርገው/ ስምታደርገው ተብብር በቀድሞ ሳመሰግን እውቀት። የሚደረገው ተሳታፊ በፍቃድኝነት ነው። ስለመሳተፍ ደቻላለሁ ወይም በቃሰመጠደቀ/ በውደደት ጊዜ በማንኛውም ሁኔታ ካስተረጎግ ማቋረጥ ደቻላለሁ። ማንኛውም ክስተት/ካንቺ የሚገኘው መረጃ ሚስጥራዊ ነው። ስምህ/ ስምሽ በሪፖርት ውስጥ አይደለም። ክስተት/ ክስንቺ ጋር የሚኖረን የቃሰመጠደቀ ሰለት ስጥናቱ በነዳ የሚደረግ ስለተዋደ ነው። ምንም ክፍያ አይኖረውም።

በቃሰ መጠደቀ እና በቡድን ውደደት ውስጥ ስለመሳተፍ ፍቃድኝነትህን/ ፍቃድኝነትሽን ከተረጋገጠ፤ ስሚደረገው ጥናት ጠቃሚ ሆኖ የሚገኘውን መረጃ በጥበቃ ስለመረዳት እና ስለመዘገብ፤ ውደደቱ በድምፅ መቀጠል ይቻላል። ነገርን ድምፁን መቀዳት በፍቃድኝነት ሳይ የተመሰረተ ነው። ስለበለጸግኩ በቻልኩት መጠን ሁሉ የደረሱ ማስታወሻ ስመዎዝ እሞክራለሁ። ስለዚህ ስሁን በውደደቱ ሳይ ስለመሳተፍ ፍቃድኝ መሆንህን/ መሆንሽን ስታረጋግጥህኝ ትችላለህ/ ትችላለሽ?

(ሀ) አዎ እስማማለሁ እናም መቀጠል እችላለሁ።

(ለ) አይ በውደደቱ ሳይ መሳተፍ ስለሆነም።

ስለፍቃድኝነትህ/ ስለፍቃድኝነትሽን በጣም ስመሰግናለሁ!

**የውደደት መመሪያዎች**

- ማንኛውም የውደደቱ ስባል የመሳተፍ ሀሳብን ስለበት።
- ስለተባባረው/ ጠደቀው በሚጠደቀው ጥያቄ መሰረት ተሳታፊዎች መመስሉ ስለባቸው።
- ትክክለኛ ወይም የተሳሳተ መሰል የሚባል የሰም ስለዚህ ሁሉም ሀሳቦች መንጠልቀቅ ስለባቸው።
- ስለክ ከደባችሁ ስባካችሁ የሰልክችሁን ድምፅ አጥፍ።
- ስለጠቃሳይ ውደደታችን ክሁስት ሰለት በሳይ አይወስድም።



**የቡድን ተኮር ውይይት ጥያቄዎች ስለሰጠህ ሽማግሌ**

ቀን \_\_\_\_\_ ስክት \_\_\_\_\_ የከብሰህ ቦታ \_\_\_\_\_

ሰሞ \_\_\_\_\_ ስድሜ \_\_\_\_\_ ደታ \_\_\_\_\_ የት/ሞ ደረጃ \_\_\_\_\_

በሽመና ስራ ሳይ ያገለገሉበት ስመት \_\_\_\_\_ በሰጠህኝነት የቆዩበት ስመት \_\_\_\_\_

1. ስለሰጠህ መሆን ሰሞን ፈሰጋችሁ?
2. ሰጠህኞች ምንድን ነው የሚመዘኑት? ስንዴት ነው የሚመዘኑት? መቼ ነው የሚመዘኑት?
3. ስንዴን ሰው ሽመናን ስለተምር ከተበሰክ ከምን ጃምረህ ታስተምራለህ? ከዛስ ቀጥሎ? ስመሚር የሚከብደው ምንድን ነው?
4. ስንዴት የተሰደዩ የዲዛዩን ስደነቶች ስንዴፈጠሩ ታስተምራላችሁ? ስናንተስ ሰሞዴን ከየት ስገኛችሁ?
5. ስራችሁን ስንዴት ታደንቁታላችሁ?
6. ከሽመና ስራ በግሰ ህይወታችሁ ምን ተጠቀማችሁ?
7. በዚህ ስራ ሳይ የወደ ፊት ሰቀዳችሁ ምንድን ነው?
8. የሽመናን ስራ ሰሰፊው ማህበረሰብ ያሰውን ፍደዳ ስንዴት ታዳምዱታላችሁ? ስንዴትስ ተገመገሙታላችሁ?
9. ከውጪ ወይም ከመንግስት የሚደረግላችሁ ድጋፍ ስለ? ምንድን ነው?

**የቡድን ተኮር ውይይት ጥያቄዎች ስለሰጠህ ሽማግሌ**

ቀን \_\_\_\_\_ ስክት \_\_\_\_\_ የከብሰህ ቦታ \_\_\_\_\_

ሰሞ \_\_\_\_\_ ስድሜ \_\_\_\_\_ ደታ \_\_\_\_\_ የት/ሞ ደረጃ \_\_\_\_\_

በሽመና ስራ ሳይ ያገለገሉበት ስመት \_\_\_\_\_ በሰጠህኝነት የቆዩበት ስመት \_\_\_\_\_

1. ሰጠህኝ መሆን ሰሞን ፈሰጋችሁ?
2. ምንድን ነው የምትመዘኑት? ስንዴት ነው የምትመዘኑት? መቼ ነው የምትመዘኑት?
3. ስትምሩ ከምን ጃምራችሁ ትመዘኑላችሁ? ከዛስ ቀጥሎ? ስመሚር የሚከብደው ምንድን ነው?
4. ስንዴት ነው የተሰደዩ የዲዛዩን ስደነቶች የምትሰሩት/ የምትፈጥሩት? ስናንተስ ሰሞዴን ከየት ስገኛችሁ?
5. ስራችሁን ስንዴት ታደንቁታላችሁ?
6. ከሽመና ስራ በግሰ ህይወታችሁ ምን ተጠቀማችሁ?
7. በዚህ ስራ ሳይ የወደ ፊት ሰቀዳችሁ ምንድን ነው?
8. የሽመናን ስራ ሰሰፊው ማህበረሰብ ያሰውን ፍደዳ ስንዴት ታዳምዱታላችሁ? ስንዴትስ ተገመገሙታላችሁ?
9. ከውጪ ወይም ከመንግስት የሚደረግላችሁ ድጋፍ ስለ? ምንድን ነው?

**ሰባሰባዎቻችን የተዘጋጀ ቃሰ መጠደቅ**

ሰትምህርት ሚኒስቴር ባሰሙዎ፤ ሰአዲስ አበባ ትምህርት ቢሮ ባሰ ሙዎ ፤ ሰወረዳ ትምህርት ቢሮ ባሰሙዎ

ሰም /ኮድ \_\_\_\_\_ የት/ም ደረጃ \_\_\_\_\_ የከራ ሁኔታ \_\_\_\_\_

1. የሽመና የሀገር በቀሰ የሰሰጠና ዘዴ በተግባር ተኮር የጎሰማሶች ትምህርት ሙሰሆ ደታወቃሰ?

መሰሰሱ ስም ከሆነ	መሰሰሱ ስደዳሰም ከሆነ
<ol style="list-style-type: none"> <li>1. የሽማግሌዎች ሀገር በቀሰ ስሙቀት በምን ስደነት መሰሰሱ በጎሰማሶዎች ትምህርት ሙሰሆ ተኮረት ስግኝቷሰ?</li> <li>2. የሽማግሌዎች የሰሰጠና ዘዴ ስንዴት በተግባር ተኮር የጎሰማሶች ትምህርት ሙሰሆ ደተገበራሰ?</li> <li>3. ከሽመና ጋር በተዛመደ ምን ስደነት ደክመት ስና ሞንካራዎች በተግባር ተኮር የጎሰማሶች ትምህርት ሙሰሆ ተመዝግቧሰ?</li> </ol>	<ol style="list-style-type: none"> <li>1. ሰምን የሽማግሌዎች ሀገር በቀሰ ስሙቀት በተግባር ተኮር የጎሰማሶች ትምህርት ሙሰሆ ተኮረት ስሳገኘም?</li> <li>2. የሽማግሌዎችን ሀገር በቀሰ ስሙቀትን በተግባር ተኮር የጎሰማሶች ትምህርት ሙሰሆ ተኮረት ሰመሰጠት በትምህርት ሚኒስቴር ወደም ትምህርት ቢሮ የታቀደ ስቀደ ስሰ? ስም ከሆነ፣ መቼ ስና ስንዴት? የሰም ከሆነ፣ ሰምን?</li> <li>3. ስንዴት የሀገር በቀሰ ስሙቀት መተሳሰሪዎ ዘዴን ሰጎሰማሶዎች ትምህርት ስና ሰማህበረሰብ ስደገት ተግባር ሳደ መሞሰ ስንችሳሰን?</li> </ol>



**ሰ ስዲስ ስበባ ዩኒቨርሲቲ ሙሉ-ራኖች የተዘጋጀ ቃስ መጠደቅ**

ሰም /ኮድ \_\_\_\_\_ የት/ም ደረጃ \_\_\_\_\_ የስራ ሁኔታ \_\_\_\_\_

**ሰገሰማሳዎች ትምህርት ክፍል**

1. የሀገር በቀስ ስውቀት በትምህርት ሳይ ምን ድርሻ ስሰው?
2. የሀገር በቀስ ስውቀት ሰገሰማሳዎች ትምህርት ጠቀሜታ ስሰው?
3. የሀገር በቀስ ስውቀት በዘመናዊው ትምህርት ስርዓት ውስጥ ቢገባ ምን ስስተዋዩ ያደርጋል?

**ሰማህበረሰብ ስድገት ትምህርት ክፍል**

1. በሀገር በቀስ ስውቀት ስና በማህበረሰብ ስድገት መካከል ተያያዥነታቸው ምንድ ነው?
2. የሀገር በቀስ ስውቀት ሰማህበረሰብ ስድገት ተግባር ያሰው ስስተዋፃ ምንድ ነው?
3. የማህበረሰብ ስድገት ክስገራዊ ስውቀት፣ ዘዴ፣ ህሴት፣... ቢጸምር ሰሀገር ምን ፍደዳ ደኖረዋል?