



Full Length Research Paper

**Exploration of Indigenous knowledge for Conflict Management in
Communities in Southwest Ethiopia**

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Abstract

The main objective of this study was to explore indigenous knowledge for conflict management of some communities in southwestern Ethiopia and develop a web-based system for its preservation and dissemination. The study employed a qualitative research approach for exploring IK using focus group discussion, interviews, and observation. Questionnaires were used for quantitative data collection. In this study, the target populations were from Mana and Mareqo Woreda. The study's findings showed that there is a long time trend among Mana and Mareqo Woreda people to manage their conflicts mostly through traditional mechanisms such as 'Jaarsummaa' and "Raga-Mara." The communities believe that traditional mechanisms are much better than the modern court procedure. It can produce a win-win result that is influential for dispute parties' future-friendly and family relationships, easily accessible, time-saving, less costly, no perjury tolerated, and vital for social stability. Data collected during the study from local organizations' employees indicated that out of the total respondents, 94 (96.9%) of them were familiar with the practices of such indigenous knowledge, but 91 (93.8%) of them indicated that they had never used traditional manner of conflict management web-application system. The study revealed that the traditional manner of conflict management plays a vital role in settling a peaceful environment within the communities of southwest Ethiopia. Since such essential indigenous knowledge is in danger of being lost, a system that uses new technology for its preservation and dissemination, as a web-based application, is recommended, especially for the youth.

Keywords: Traditional manner, indigenous knowledge, social capital, conflict management

Axareeraa

Kaayyoon gooroo qorannoo kanaa beekumsa ganamaa wal-dhabdee hawaasaa furu kan hawaasaalee muraasa Kibba-Lixaa Itoophiyaatti argamanii qorachuun akka hin dhabamne marsaareetii fayyadamuudhaan kuusu fi hiruuf ture. Walitti qabiinsa ragaa qorannoo kanaaf meeshaalee bargaaaffii, marii garee xiyyeeffannaa, akkasumas ilaaluun dhimma bahameera. Xiyyeeffannaan qorannoo kanaa hawaasa aanaalee Mannaafi Maaraqoo turan. Argannoowwan qorannoo kanaa akka agarsiisanitti hawaasni aanaa Mannaafi Maaraqoo wal-dhabdeewwan isaanii irra jereessan akkaataa aadaatti, kan akka Jaarsummaafi “Raga-maraa”-tti dhimma bahuun yeroo dheeraaf furaa turaniiru. Hawaasotni kunneen akkaataan aadaan wal-dhabdee furuu adeemsa seeraa ammaayaawaa irra niwayya jedhanii amanu. Garee wal-dhabdeen gidduu isaanii jiruuf firii madaalawaa, kan hiriyyummaa isaanii egereefi walitti dhufeenya maatii isaaniif murteessaa ta’e, wal-dhabiinsi akka salphaatti xumuramuu, yeroo qusachuu, baasii xiqqeessuu, hanga murtiin taasifamutti obsaan eeguu, akkasumas tasgabbii hawaasaa horachuun nidanda’ama. Ragaaleen yemmuu qorannoon kun gaggeeffamu hojjetoota dhaabbilee adda addaa naannoo Sanaa irraa argaman akka agarsiisanitti, hirmaattotni 94 (%96.9) adeemsa beekumsa ganamaa akka kanaa akka quba qaban himaniiru. Haa ta’u malee 91 (%93.8) akkaataa aadaatti wal-dhabdee furuuf kan tajaajilu siistama gara marsaareetiirraanii sirumaa akka fayyadamanii hinbeekne ibsaniiru. Qorannichi akka mul’isutti akkaataa aadaatti wal-dhabdee furuun hawaasota Kibba Lixaa Itoophiyaatti safara naga qabeessa ta’e uumuuf gahee daraan barbaachisaa ta’e nitaphata. Beekumsi ganamaa akka kanaa badiinsaaf waan saaxilamaniif siistamii teknoolojii haarawa kan beekumsicha kuusuufi hiruu, fakkeenyaafi applikeeshiinii gara marsaareetii, keessaayyuu dargaggootaaf qophaa’uu qaba jenna.

Jechoota Ijoo: Akkaataa aadaatti, beekumsa ganamaa, qabeenya hawaasaa, wal-dhabdee furuu

1. Introduction

Conflict management is a set of strategies that can satisfy human needs of security, identity, self-determination, and quality of life for all people engaged in a conflict (Sanson and Di, 2007). In a similar context, Dereje (2010) explains conflict resolution as the suppression of conflict that has already broken out in searching for a solution that would reduce the levels of violence and prevent its intensification either through formally or using indigenous conflict management mechanism. The word indigenous, traditional or local knowledge refers to knowledge and know-how accumulated over generations and guides human societies in their innumerable interactions with their surrounding environment. This knowledge is the communities’ main wisdom to invest in the struggle for survival, produce food, provide shelter, and achieve control of their own lives. Indigenous knowledge is considered the social capital of the poor. In a society where the majority of the populace is poor with widespread illiteracy culminating in a lack of access to justice and the high cost and scarcity of lawyers, traditional conflict resolution stands out as the best method of conflict resolution.

According to Senanyake (2006), knowledge management is a systematic process for acquiring, organizing, sustaining, applying, sharing, and renewing tacit and explicit knowledge. It also makes relevant information available quickly and easily for people to use productively. For KM to move from ideas to implementation, the definition of KM needs to address: creating, sharing, and reusing knowledge; understanding the relevance of different information as determined by the customer; training for KM methods and services; incorporating cultural aspects of KM into operations; and responding to funding and chargeback issues (Senanayake, 2006). From the above and other literature, such knowledge needs to be preserved. As development at a national level requires a new kind of technological invention in different sectors, the community also tends to follow and try what is unique to cope with the rest of the world and be competent and develop a winning mentality. So the new generation is ready and eager to encompass those characteristics, there has to be a study in indigenous knowledge which will be suitable for finding a solution as putting a foundation to the continual development of the country involving the community by making them believe that the potential development comes with the development of technology (Berhane, 2014).

Thus, indigenous knowledge is context-specific and embedded in the everyday practices of the community members; according to Banuri and Marglin (1993), IK has historically been excluded from scientific models that have their origins in Western concepts of rationality, on the assumption that it is inferior. Consequently, it has not been seriously considered in domains such as state planning and the design of information system (IS) applications. Today, in socio-economic development, such marginalization of indigenous knowledge is gradually being reversed to a certain extent. This change of perspective is due to various factors; for instance, changes in the politics of development aid instances of the breakdown of technology-driven applications; such a formal recognition is by itself a step forward (Puri, 2007).

For implementing the task of ICT in the preservation of indigenous knowledge to be forwarded, a baseline will be maintained. Explorations of the indigenous knowledge will be studied first and disclosed to the community by the researchers and scientists who are concerned on the transformation of knowledge; system designers and developers will also play their part in inculcating the indigenous knowledge system into the society, design and ensure it reaches the young generation for presenting it using communication technology. ICTs facilitate gathering data about crime and conflict and reduce the gap between warning and response (Mancini, 2013).

Ethiopia is one of the developing countries where most people are from different ethnic groups living integrally through marriage and various kinds of relationships in harmony. The use of indigenous conflict resolution mechanisms (ICRMs) in Ethiopia is deeply rooted in various racial groups' cultures, customs, and traditions, which could play a big role in resolving violent conflict (Mekonnen, 2016). Nakata (2014) described vast improvements in digital and virtual technologies now provide a range of new opportunities for many to renew their traditional knowledge interests. Management of indigenous knowledge can be enhanced by information communication technology in that it facilitates the process of capturing, storing, preserving, distributing, using, and finally reusing the knowledge. Thus, this study was initiated with the main objective to explore indigenous knowledge for conflict management in some communities in southwestern Ethiopia and to manage it

by developing a web-based application system for its preservation and transfer. Most of the indigenous knowledge disappears due to the intrusion of foreign technologies and development concepts that promise short-term gains or solutions to problems without being capable of sustaining them (Senanayake, 2006).

1.1 Statement of the Problem

According to Oluwaseun (2012), in the last 20 years, there has been an increase in the frequency of occurrence and the scale of conflicts around the world. These conflicts have been mainly a result of political up-rising, ethnic and religious intolerance, terrorism, scramble for resources, and growing inequality amongst the populace. This issue is typical of the current situation in Ethiopia. Traditional African societies are closely attached to deep-rooted cultural facts, and elders play major roles in solving problems, creating strategies, and shaping local visions based on skills and wisdom. Therefore, elders apply their indigenous knowledge to develop and solve social issues (Tafese, 2016). So as much as IK's existence manages the occurred conflict, the prevalence of disputes rose in type and amount. Moreover, those conflicts were not handled appropriately in a shorter period.

The biggest challenge confronting humans today is not about the occurrence of conflict but how these conflicts are fully managed whenever they occur to prevent them from further escalating. However, the certainty of disputes becomes pathological to society depending on the type and nature of the resolution methods used. Today, many of the conflicts that occur called 'new wars' are more internal, none- conversational, and culture-sensitive (Kaldor, 2007). Many of these 'new wars' need intervention mechanisms that are culturally-based and relate to their environment (Bukari, 2013).

As far as the shortcomings of traditional conflict resolution are concerned, according to Ebissa (2014) and the references therein, the traditional ways of conflict resolution are oral practices and are not well documented. Even though explorations of indigenous knowledge in various sectors such as resource management, formulation of medicine, conflict management, and so on are available from literature review, little effort is made in preserving it via technological tools as to the researchers' knowledge. IK is still important among local communities and the global scientific community acknowledgment of its value in Africa, but it is not well documented. It is in danger of being lost (Ajayi et al., 2017). Sithole (2007) argues that documentation is a way to protect indigenous knowledge from exploitation by actors other than its true originators (Haider et al., 2010).

In Ethiopia, currently, there are a lot of indigenous knowledge practices almost in all parts of the country. So far, there is no system to preserve such knowledge for the future generation, especially in the traditional way of conflict management as of the articles reviewed by the researcher. This means we need to have a system that preserves and transfer the knowledge on the traditional manner of conflict management for the sake of keeping the knowledge from being lost; hence the living condition of the future generation is not conducive for the normal persistent of this indigenous knowledge, and therefore this study will address this gap.

1.2 Objectives of the Study

General Objective

The general objective of this study was to explore indigenous knowledge for conflict management from communities in southwest Ethiopia and to develop a web-based application system for its preservation and transfer.

Specific Objectives

- ❖ To identify indigenous knowledge for conflict management of Mana and Mareqo Woreda communities on how they manage the conflict using the traditional manner of conflict management.
- ❖ To identify the requirements for the indigenous knowledge system for conflict management to preserve and transfer the knowledge.
- ❖ To develop a conceptual framework for the traditional manner of conflict management.
- ❖ To design an application system for indigenous knowledge for conflict management.
- ❖ To develop a web-based system for indigenous knowledge of conflict management.

2. Materials and Methods

Research Design

An exploratory research design (quantitative and qualitative approaches) was used for this study. The qualitative research approach was employed in the study because of its appropriateness for exploring the role of indigenous knowledge holders in managing or settling conflicts in the study area for the following reasons. First is the nature of the research, which focuses on the community's beliefs, opinions, attitudes, and relationships. The second is that this technique enables the critical and deeper understanding of the social phenomenon often carried out in a natural context (Kothari, 2004). Qualitative data was collected through focus group discussion, interviews, personal observation, and document review. Moreover, for collecting all requirements for the web-based system development, a quantitative approach was necessarily implemented.

Description of the Study Area

First, the sites were selected based on the availability of indigenous knowledge and conflict management practice in the traditional manner. Digo clan of Oromoo communities is settling in Gara-muleta and Butterree Kebele of Mana Woreda, and many elders in Qoshe one and two kebeles of Mareqo Woreda whom, with indigenous knowledge, recently managed the conflict. Mana is one of the woredas in the Oromia Region of Ethiopia. Part of the Jimma Zone, Mana is bordered on the south by Seka Chekorsa, on the west by Gomma, on the north by Limmu Kosa, and the east by Kersa Woreda. Among the 21 Kebeles in the woreda, elders from each kebele were selected based on the availability and respect gained from the society. The other woreda chosen as a study site was Mareqo Woreda which was chosen due to the long practice of conflict resolution trends using elders called "Raga-Mara" and the recent experience of resolving conflict between two clans using the traditional manner successfully that the researcher found the practice of indigenous knowledge within the community. Mareqo Woreda is located in SNNPR state, one of the Woredas included in the Gurage Zone. It is bordered on south and southwestern by Silte zone, on the north by Mesqan Woreda and Oromia regional state, on east and northeast by Oromia Regional State.

Sources of Data

As sources of data, both primary and secondary data sources were used for this study in Jimma and Gurage zones, but the study population was only from Mana and Mareqo Woredas, those were selected due to the reasons mentioned above, and stakeholder institutions in those woredas working particularly in IK, experienced and successful social groups are inhibited in the area (a group of people from respected elders, religious leaders, local security respondents, etc.).

Sample Size

The first contact was made to the woredas' administration office. The kebele leaders wrote a letter to an average of seven elders in the kebele who mostly participate in conflict management to present themselves according to the date he specified. The total sample size for the study was determined as the following; interview (Semi-structured) was conducted with a total of 8 individuals; four with elders, four with the local known person and religious leaders (Christian, Muslim, and other) two individuals in each kebele; a total of four FGDs in two woredas having 6 to 8 members in each group from four kebeles one in each kebele, an average of seven members in each FGD from elders, youth and locally respected in both woredas 28 individuals. Thus the total sample size of the study was 133.

Sampling Method

A sample comprises some fraction or part of the total number of units in a defined population—sampling adopted in this study covered based on available elder groups for indigenous knowledge exploration. A random sampling method was used in this study to represent the sample population for professionals in stakeholder organizations. Data was gathered from the woredas elders and governmental organizations (youth, culture and truism office, peace forum office, and peace and security office) in the woredas proportionally. The reason for using available elder groups as a sample is to obtain a representative sample from the local communities in the kebeles and organizations.

Data Collection Instruments

It would be more effective if multiple data gathering tools were used. Based on this assumption, the investigator used a combination of four popular data collection instruments, namely focus group discussion, semi-structured interviews, observation, and questionnaires. Moreover, closed and open-ended questions were included in the questionnaire to get enough information.

The Procedure of Data Collection

Participants in this research were from village elders, conflicting parties, religious representatives, known persons, social institutions, and local governmental organizations' employees. All necessary data was collected during the actual ritual of managing conflict using audio and video recorder. Distributed questionnaires were collected answered by the respondents. Thus results from the questionnaires of those respondents were analyzed.

Methods of Data Representation

After collecting data during FGD, interviews, and observation from the elders, it was organized in the video, audio, and image then represented in text format. A better descriptive statement analysis

was presented after the collected data (questionnaire sheet) were organized with the support of tables and figures, making the representation of data very clear and reasonable.

Methods of Data Analysis

All data collected in the form of pictures, audio, and video was analyzed by result matching, pattern checking, and cross-checking what was acquired from focus group discussion, interview, and observation was also made. To analyze data obtained from the questionnaire, SPSS data analysis tools were used to generate a report; only then this study realizes patterns that give sense or meaning. Eventually, results were presented from the Mana and Mareqo Woredas community and then concluded based on the practices and answers. Here are the steps followed for the analysis:

The steps followed for quantitative data analysis were as follows: Step 1: the integrity of the data test was continually analyzed. Hence, a validity check is implemented to: identify inconsistencies in the data within each data collection instrument. Step 2: Conduct descriptive analyses. Step 3: the cross-tabulation and comparison of information within and between target groups where sufficient sample size existed. The steps followed for qualitative data analysis were as follows: Step 1: Coding; Step 2: Categorization; Step 3: Classification; Step 4: Comparison; Step 5: Conclusion.

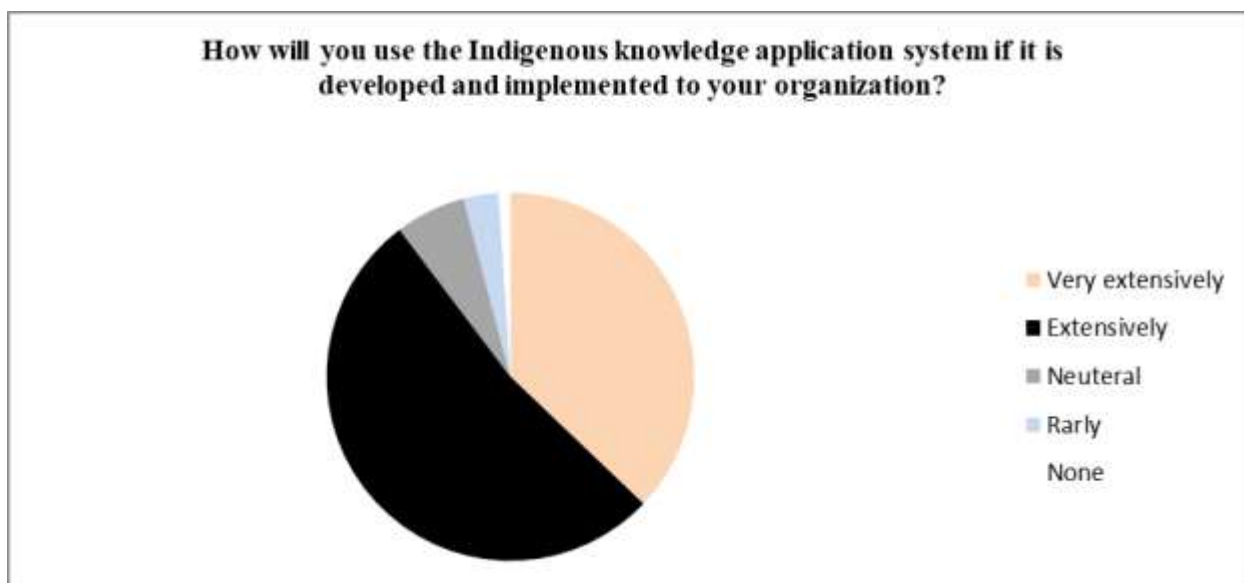
3. Results and Discussion

Quantitative Results

According to the result, females were 23 (23.71%), and males were 74 (76.28%), but in terms of experience, only 11 (11.34%) of them worked for six and above years in such organization. Most professionals are 26 to 35 years, which depicts an active working group manpower. In terms of the current working organization, 33 (34.02%) of the respondents were from Youth, Culture, and Tourism office, 28 (28.86%) were from the peace and security office, 29 (29.89%) were from the peace forum office, and the rest 7 (7.21%) were from other office but not specified, in terms of job title 6(6.18%) are office head, 6(6.18%) are vice head, 22(22.68%) are team leader 57(58.76%) are expert, and 6(6.18%) are in other job title but not specified.

There were no Ph.D. and MSc/MA educational level workers, but 29 (29.89%) were in BSc/BA academic level, 49 (50.51%) were in diploma educational level, and 19 (19.85%) were in certificate educational level. Out of the total respondent, 94 (96.9%) of them were familiar with the practices of such knowledge, all respondents said that there is no problem at all in preserving and exchanging IK, 78 (80%) of respondents confirmed the existence of their organization has initiative to protect and exchange IK. Still, it was only aimed at documenting events while conflict management rituals were performed for reporting to higher organizations.

The quantitative data shows that respondents are very demanding and expressed their degree of utilizing the web-based knowledge sharing system. The inquiry reveals the demand and the features the system should have. The responsible organization or ministry office that should own the system and modes of preservation are expressed in tabular form.



Focus group discussion results

A focus group discussion was the first task to gather the knowledge from the representatives to explore the indigenous knowledge. Various questions were raised that were explained and discussed through which the knowledge was collected. Most elders explained their understanding about traditional conflict management as it is an act by which a selected group of elders from a zonal settlement based on their acceptance by the society will hear the justification of the disputants and pass fair judgment, or act of elders who represent all community to create an agreement between two sides to every community member live in harmony and encourage making peaceful place. All of them agreed about the traditional manner of conflict management effectiveness. Furthermore, it doesn't last long; it is called "Jaarssumma" and "Raga-Maga" in Mana and Mareqo Woreda, respectively.

The other aspect identified from the elders' knowledge is how they manage conflicts. By describing the category of conflicts and the current causes of conflicts, they put the ways to manage it. So it was found that conflict categories are; individual, family, neighbor, and clans timely causes are; border, grazing land, rumors, insult or disrespect talk, property, theft, competition for wife or fiancée, money loan, killing, etc. The mechanisms used to manage those conflicts are arbitration, mediation, negotiation, begging, advising, marking with plant, and "Maariffa, a" local word to mean conciliation by telling false evidence.

Interview Report

Four elders from each woreda were interviewed and answered they are less educated but experienced in managing conflict; most of them get the knowledge from their elders.

Observation Report

Results in observation using a checklist are presented in table 1 below.

Table 1: Results obtained by observing while elders resolve disputes

Results obtained from the observation					
S. No	Checklist activities	For elders		For disputant	
		Mana	Mareqo	Mana	Mareqo
1	Number of Participating Members	8-12	8 for each	1-2	1
2	The setting Arrangement	Keeping in order	In order	In front of Elders standing	In front of Elders standing
3	Getting information about Place of Meeting	Elders leader	Elders leader	Elders appointment	Elders appointment
4	Getting information about Time and date	Elders leader	Elders leader	Elders announced	Elders announced
5	Any word used	No		No	
6	Action performed on getting together	greetings	Accept file, put their hand on the ground, vow	Present or tell the case	Justify the case
7	Action performed during the ritual	Debate Listing	Debate Listing	Debating, verifying	Debating, verifying
8	Action performed after judgment pass decision	Advice and warn rivalry	Order disputant to swear by the term	Call a bail person for disobeying	Spray honey made fluid

Both quantitative and qualitative data were collected through previously mentioned techniques and tools. The findings were organized to share the IKCM practices from Mana and Mareqo Woredas. So the organized data were checked and analyzed with the steps expressed in the previous section. Thus, the following major findings were earned from the quantitative and qualitative results. Such a result assured that there is required manpower that can successfully preserve and disseminate the IK using new technology.

Some proverbs, trends, and procedures during the ritual ceremony are unique findings of this research. Proverbs in Mana Woreda were “kissii fi sareen hin nyaatantu,” which means compensation and dog never be eaten; “Haabuluu” this proverb is used when elders are confronted with managing a complicated case, and if they need more time, they will be forced to let it stay for a longer time. Some existing trends during the ritual were elders need to show no emotion, not present

themselves as a witness; no movement is allowed until it ends successfully, vowing act called “Tiroo” and “Feroo” performed by the witnesses. Concerning the procedures, the ceremony is conducted in a setting on wet leaves and mostly performed under a big tree called “Odaa,” at the time of presenting an issue by the one who thought like a victim.

The conceptual framework was developed based on the results obtained from qualitative data and preservation system development (figure 1). The constituent is conflict categories, current time conflict causes, conflict managing institutions, conflict managing methods, and system development.

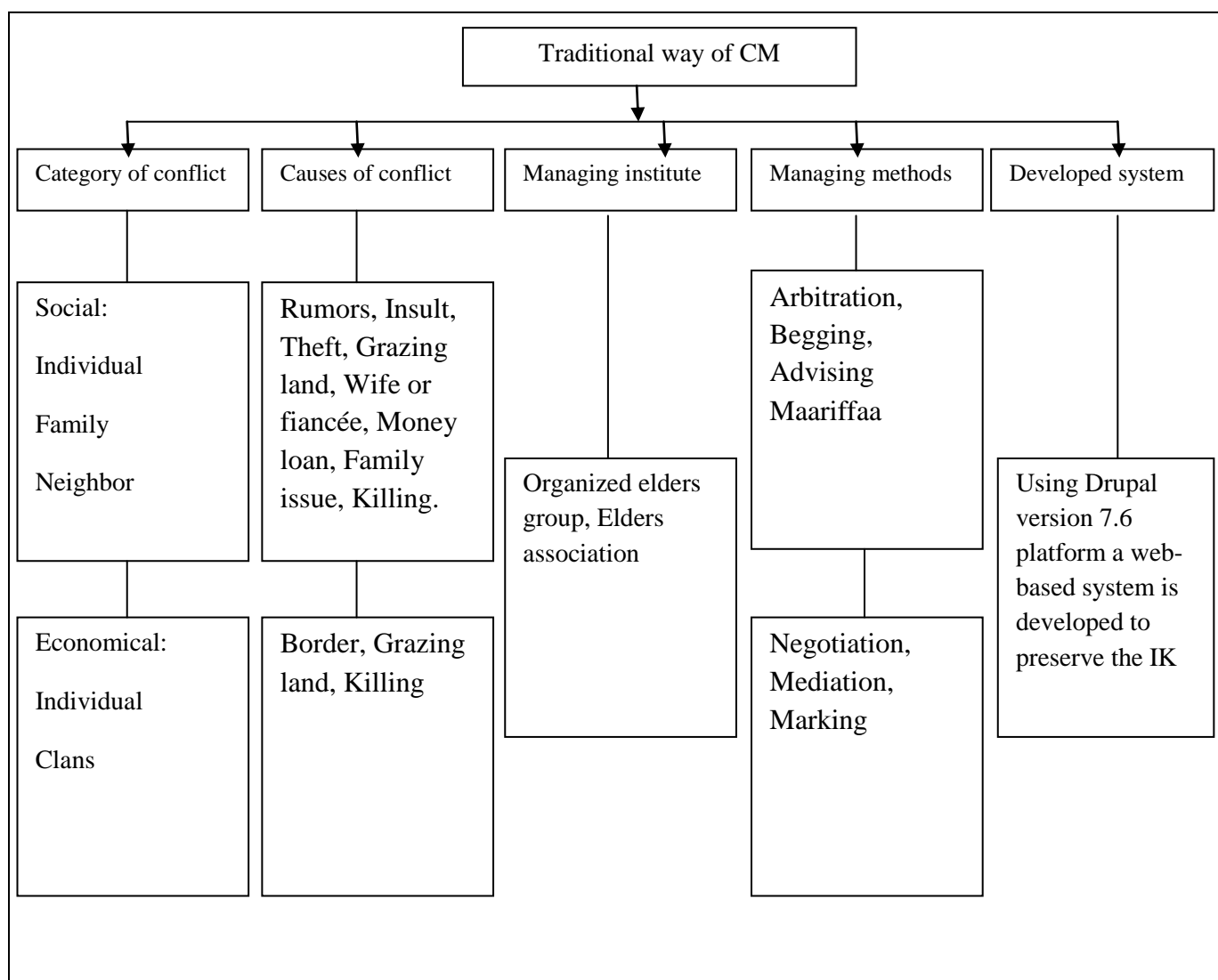


Figure 1. Conceptual framework of the system that preserves indigenous knowledge of conflict management

4. Discussion

The traditional manner of conflict resolution have been contributing and still playing its part in solving almost all sort of conflicts within the community in different parts of the country. It came from a long way from generation to generation to rich to this current time with which it faces circumstances of loss; some published documents witnessed that such tradition starts from the 13th century (Walelign, 2012).

Indigenous communities mostly use oral communication or hands-on experiences such as apprenticeships, ceremonies, practice, and others to preserve and transmit their knowledge. Preservation of indigenous knowledge is important because it ensures the continuation of the community with its indigenous knowledge. If indigenous knowledge is not recorded and preserved, the knowledge will be lost through the death of elders and traditional leaders in African communities (Sylvia, 2014). Even if the governmental organization stakeholders explained that their organization has the initiative to preserve IKCR by documenting, it helped with taking pictures and text. Still, it is only used for reporting to a higher hierarchical organization level.

Despite acknowledging the important role indigenous knowledge plays in sustainable development and peacebuilding, many governments, donors, and NGOs appear to make little use of this valuable resource. Such knowledge was not supported by technology as its preservation and exchange were handled unorganized and unmanaged by those responsible institutions to be used nationwide. Beyond assisting in conflict management knowledge prevention, participatory data collection, and processing tools, new technologies can empower communities to resist violence and recover after conflicts (ITU, 2012).

Other experience shows that strong government support and involvement in recognizing indigenous knowledge systems is critical for it to gain prominence in development, promote innovations, and protect the intellectual property rights of innovators. For example, the government of South Africa has developed a policy on indigenous knowledge systems that were adopted by its cabinet in 2004. This policy provides a basis for countries like Ethiopia to develop their indigenous knowledge policies (Adam, 2005).

5. Conclusion and Recommendations

Conclusion

To achieve the objective of this research, it was strived to explore the indigenous knowledge for conflict management from the communities of southwestern Ethiopia, particularly in Mana and Mareqo Woreda. The exploration of IK showed that hence traditional way of conflict management maintain a peaceful living environment by finding all possible ways of setting agreements when conflicts occur; it has been taking place in both communities for more than a century with its originality from generation to generation with the unique methods.

This study considers the need for Indigenous Knowledge preservation via a web-based system. Before the system was developed, the actual practices of traditional conflict management were explored and documented well using different data collecting methods for qualitative data.

Recommendations

The following recommendations are provided based on this research finding.

- Using new technologies like ICT tools, documenting materials and procedures, policies, rules, and reservation of IK mechanisms in libraries, museums, and heritages archives is recommended.
- Encourage young people to visit, use and learn about what the original culture of their ancestors looked like should be a mandate of the government.
- Create a conducive environment for scholars to explore and preserve IK, particularly in conflict resolution, so that the knowledge will not be lost.
- Elders who are the knowledge owner should reconsider how the young generation could benefit from their knowledge. The young generations are recommended to examine what the elders do with devotion and passionately involve themselves in the process.

This study was limited to the only experience of Mana and Mareqo Woredas IK because no conducive environmental and unsettled community peace dictated the researcher to get an opportunity to explore the IK of other communities of the country. When a stable condition is assured, further exploration needs to be conducted to preserve the knowledge from the community and share it is necessary.

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