

Socio-Economic Effects and Prospects of Oromo-Somali Conflicts: The Case of Miesso District of Oromia, and Mullu District of Somali Regional States, Eastern Ethiopia

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Abstract: This study aimed to investigate the socio-economic effects and prospects of capacities of sustainable peace surrounding the conflicts between Oromo-Somali PAP groups in the study area. Conflicts between *Oromo* and *Somali* PAP groups have existed in different forms for centuries. A number of empirical studies were conducted on the effects of Oromo-Somali conflicts between the PAP groups in a generic manner. Nonetheless, earlier studies have methodological dearth in pinpointing conflict of interests between range resources users, the main effects of conflicts and prospects of peace in the study area. So, it needs to bridge existing information and knowledge gaps. Hence, 160 PAP households were randomly selected to facilitate primary data collection by using household survey. Qualitative data were also collected by using key informant interviewees (KIIs) and focus group discussions (FGDs). Descriptive research design; descriptive and inferential statistics were employed. The proportion of sample households composed of 49% of Oromo and 51% Somali groups. The result of findings showed death and injury, internal displacement, destruction of infrastructure and public services, weakening of customary institutions; loss of household assets and livelihoods, weakening government capacity, land degradation and fertility deterioration due to lack of natural resources management were also found the socio-economic impacts of violent conflicts. Traditional customary and formal security institutions were found the important factors of capacities of peace. Strengthening the formal and customary institutions in defining and enforcing property rights, limiting opportunistic behavior would help significantly to maintain rule of law and ensure sustainable peace. Sustainable development interventions and looking for alternative solution to the degrading and deteriorating resource environment are critical to reduce vulnerability in the study area.

Keywords: Conflict, Effects, Ethnic Group, Oromo and Somali

1. Introduction

1.1. Background of the Study

Conflict is one of human induced disasters having varied sources with different frequencies and severe impacts on society, economy, and environment at different levels [1]. The effect of violent conflicts on human well-being is disastrous; armed conflicts destroy lives, wastes capital and

direct scarce resources away from productive uses. [2] Estimated the average cost of a typical civil war to a country and its neighbors to be roughly \$64 billion, in addition to the immediate aftermath a civil war, economic output declines by an average of six percent [3].

Conflicts severely affect the livelihoods of PAP communities [4]. Scholars suggested that conflict on range resources use should be considered as part of resource management. This is because effective community-based

management institutions can improve access for different users when there is variation in resource condition across pace and time. They also point out that in areas where there is high in security; grazing resources are either under used or completely unused. This implies that conflict causes environmental damages due to over-grazing and more herd concentration over a limited space; though diverse ecological systems produce appropriate environment for pastoralists to manage risk through spatial dispersion of their herd.

Conflict impairs pastoral mobility and access to diverse grazing patches. It needs to make distinction between conflict of interests on how and who should use resources, which is a source of violent conflicts [5]. Conflicts range from simple practices of verbal attacks due to unfair distribution of benefits, to violent conflicts involving guns, killings and losses and destruction of properties and body injury [6].

The recurrence inter-groups conflicts between *Oromo* and *Somali* PAP groups in *Miesso/Mullu* area of West *Hararghe* Zone of *Oromia* and *Sitti* Zone of *Somali* Regional States. The study area is one of well-documented violent conflicts in eastern Ethiopia. In this area, the stock of natural resources are shrinking from time to time due to the impacts of drought, land degradation and changes in land use between crop cultivation and livestock production relying on communal grazing lands. To this effect, one can see that there is no doubt the factors mentioned intensify resource scarcity and competition over range resources that lead to violent conflicts.

A number of empirical studies were conducted on aspects of inter-group conflicts between PAP groups in the eastern Ethiopia, the studies mainly focused on the causes and effects of conflicts in a generic manner [7]. They assessed the underlying factors behind the formation, development and transformation of inter-group conflicts [8]. Other studies revealed that the prime causes of inter-group conflicts in PAP areas of eastern Ethiopia centered on competition over grazing land and water resources [8]. Accordingly, most of the studies agreed territorial expansion, livestock raids and counter raids, ethnic rivalries and revenge attack for past hurt as the main causes of recurring conflicts between PAP groups in the area [9]. Inter-group conflicts were also instigated by lack of political representation, absence of good governance, historical animosities and lack of household income, unfair resources distribution and volatile regional boundaries [10].

Nonetheless, earlier studies have methodological dearth in pinpointing conflict of interests between range resources users, the main effects of violent conflicts and prospects of sustainable peace in the *Miesso/Mullu* PAP area. Therefore, it needs to bridge existing information and knowledge gaps in the study area.

1.2. Statement of the Problem

Conflicts between *Oromo* and *Somali* PAP groups have existed in different forms for centuries, and are not new

phenomena. Centuries of interactions between the two groups have created a complex pattern of ethnic and linguistic relationships [8]. *Oromo* and *Somali* groups share common grazing resources in *Miesso/Mullu* area [11]. The primary resource users in the *Miesso/Mullu* area are *Oromo* and *Somali* ethnic groups. The *Oromo* groups mostly agro-pastoralists, while the *Somalis* are pastoralists. However, PAP livelihoods are characterized by risk and uncertainty due to fluctuating environment and occasional shocks.

Traditionally, the vagaries of the natural environment have been overcome by access to and management of communal pastures, livestock mobility and institutions of mutual support based on the principles of flexibility, complementary, multi-functionality, reciprocity and sustainable communal resource management [12]. However, the high herd mortality is often viewed as a symptom of inherent deficiencies in animal productions; barren pastures are considered evidence of unsustainable grazing pressure and increasing land degradation. Since recent decades with the problems of human and livestock and population pressure and shrinkage of range land resources, pastoralists are observing significant decrease in the availability and quality of key range resources that form foundation to (agro) pastoralists' livelihoods [13].

During the same period as [14] reported, hidden hands of power elites from *Oromo* and *Somali* groups were wagging proxy conflicts in the study *Miesso/Mullu* area and beyond that led to displacement often many thousands of households from the two ethnic groups in the *Miesso/Mullu* districts [15]. Apparently, the frequency and magnitude of recurrent conflicts between PAP groups in the eastern Ethiopia has increased through time [16] as these groups are increasingly finding themselves fighting for survival [17]. Overall, violent conflicts affect development and provision of social services, limit access to rangeland resources. Unless the conflicts are managed wisely, the rangeland resources and PAP livelihoods will continue to deteriorate.

To this end, understanding and identifying the conflict context, socio-economic effects, and prospects of peace and existing conflicts of interest between resource user groups is crucial for designing/scaling an effective conflict prevention intervention. On the other hand, little is known about actors, institutions and relationships that have agreed to strengthen peace-building capacities in the study area. As such, in the study area socio-economic effects and prospects of *Oromo-Somali* conflicts have not been investigated, well-understood and documented. So, this research was aimed to filling the gaps by the following objectives.

1.3. Objective of the Study

General objective: To investigate socio-economic effects and prospects of *Oromo-Somali* conflicts in *Miesso* district of *Oromia* and *Mullu* district of *Somali* regional states.

Specific objectives:

- 1) To analyze socio-economic effects of *Oromo-Somali* conflicts in *Miesso/Mullu* area;

- 2) To explain the environmental effects of Oromo-Somali violent conflicts in the area.
- 3) To assess prospects of Oromo-Somali conflicts in the study area;

1.4. Significance of the Study

The findings of study are expected to help researchers and academicians to broaden understanding and awareness on the main effects of conflicts and prospects of Oromo-Somali conflicts in a specific context of *Miesso/Mullu* area in eastern Ethiopia. The findings would also contribute somehow significance information to design and/or scaling-up/out of interventions that help to improve peaceful co-existence between PAP groups in the study area. Moreover, the findings hopefully, would serve policy makers, planners, and development agencies as an input in formulating policy and context-oriented programs in the future.

2. Research Methodology

2.1. Description of Study Area

2.1.1. Location and Area

The study was conducted in neighboring districts known as *Miesso* and *Mullu* districts. They are located in the West *Hararghe* Zone of Oromia, and *Sitti Zone* of Somali Regional States. Geographically, *Miesso* and *Mullu* districts are located between 8°29'41"N and 11°54'33"N; and 40°9'30"E and 41°23'29"E stretched on a land area of 2,821km². *Miesso* and *Mullu* are the capital towns of the two districts situated in the estate distance of 290km and 323km from Addis Ababa along the main Addis-Harar/Dire Dawa asphalted road and the only Ethio-Djibouti railway line of the Country. It is also the Centre of trade and largest livestock cattle and camel market situated in the study area. Figure 1 below illustrates the location map of the study area.

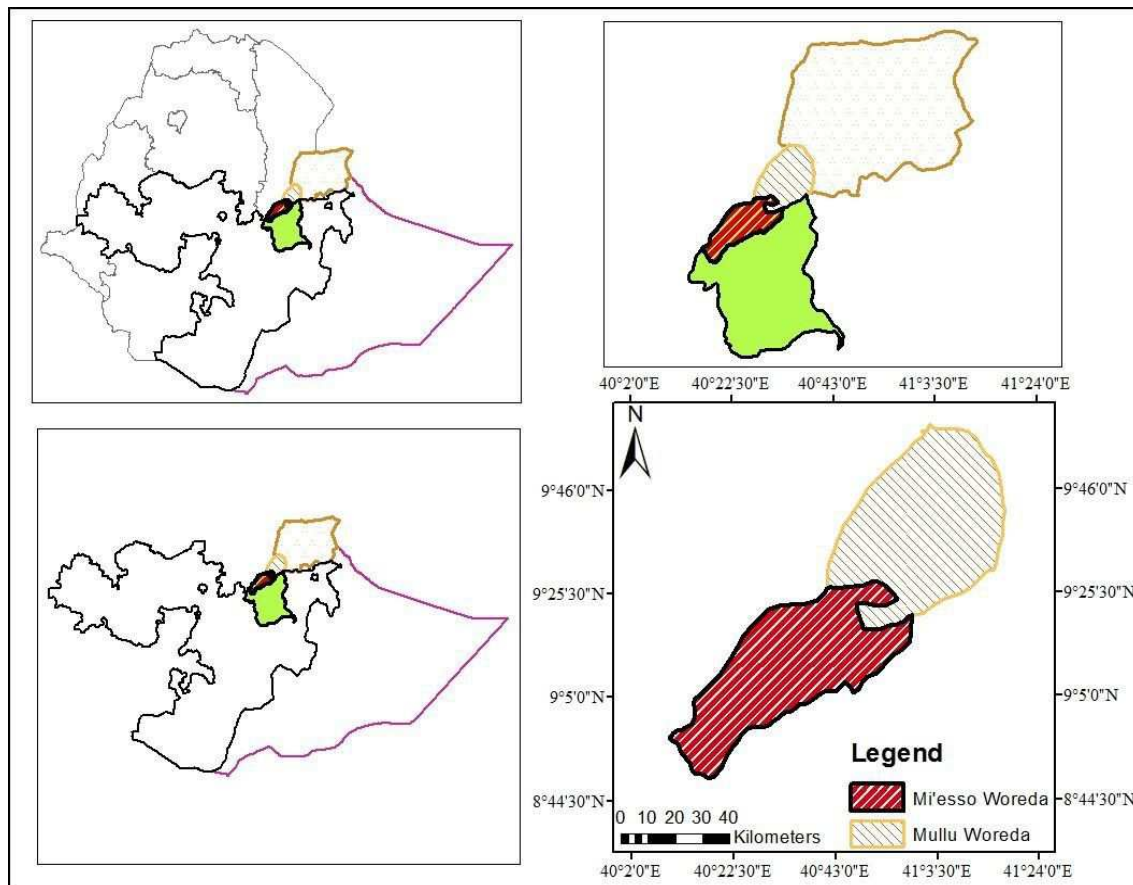


Figure 1. Location Map of the Study Area Source: [18]

2.1.2. Relief and Soil

Miesso/Mullu districts are surrounded by a chain of mountains in nearly all directions. The altitude of the study area is ranging from 760m–2500m above mean sea level. The major soil types are sand and clay [19].

2.1.3. Climate and Drainage

According to the Ethiopian National Meteorological Agency data indicated that the mean annual temperature of

Miesso/Mullu area around 23.0°C with mean maximum 31.5°C and minimum of 13.4°C, while average annual rainfall is about 690mm and lies between the ranges of 471mm and 1145mm [20]; Moreover, the climate system of *Miesso/Mullu* area is classified under *Kola* (semi-arid and arid) climatic zone. The drainage pattern of the districts mainly encompasses *Chiro* and *Miesso* river that only drain during rainy season with a little contribution to irrigation. The drainage system also a part of the *Awash* basin.

2.1.4. Vegetation and Wild Life

Miesso/Mullu districts are endowed with abundant natural resources and it has command of massive rangelands where agro-pastoralists and large number of livestock rely on during drought periods [21]. Hilly areas are under bush grass land; flat land is under rain fed crops. Extensive grazing system is the major land use in the area. Cattle, goats, camels and donkeys are core stock. Trees include: *Boswelli apapyrifera*, *Acaciaseyal*, *Acaciasenegal*, *Acacianilotica*, *Ziziphus*, *Diospyromespiliformis*, and *Balanitesaegyptiaca* are the dominant bush species. The districts also home to diverse wildlife which *Traquelaphusscriplus*, *Phacochoerus africanus*, *Theropithecusgelada*, *Grivelmonkey*, *Oryxbesisa*, *Oryctolaguscuniculus*, *Geochelonasulcata*, *Colobusquereza* and *Equusquaqqaa* are the major ones [19].

2.1.5. Population Characteristics

Based on information obtained from the *Miesso* district's

Office of planning and economic development, 203,432 (51% females) human population is estimated to live in the two districts with density of 72 people/square kilometers [22]. Of total population, about 14% or 30,515 (49% males) are urban dwellers residing in small towns of *Asebot*, *Miesso* and *Mullu*.

2.1.6. Land Use and Land Cover

The total land area of *Miesso/Mullu* districts presumed 1,960km², from this 215.5km² (11%) is cultivated for crops production. About 205km² (10.5%) of land area is used for grazing. Moreover, 563km² (28.5%) of land area was covered with forests and bushes, 470km² (24%) potentially cultivable; 467.5km² (22.8%) is uncultivable (barren) land; and 39km² (2%) of which used for social services [22]. Figure 2 below shows the land use and land cover information of the study area.

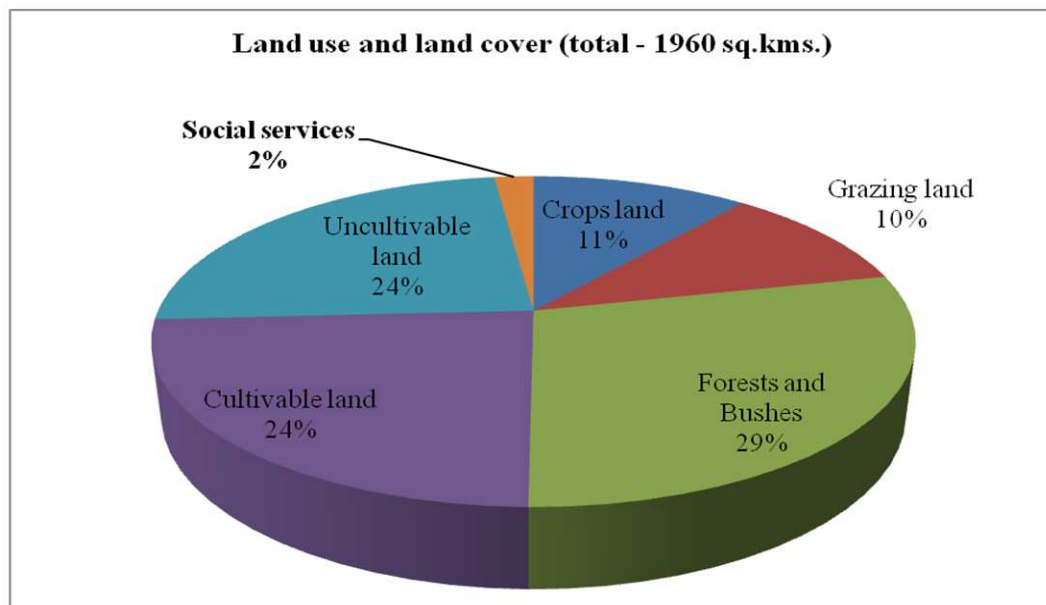


Figure 2. Features of land use and land cover Source: Own survey (2021).

2.2. Research Design

Research design is a master plan specifying the methods and procedures for collecting and analyzing the needed information [23]. In this regard, the descriptive and explanatory research designs were used based on the purpose for which it can serve to fulfill the objectives of the study. Moreover, descriptive type survey research has advantages in that it employs large amount of data from relatively wider area and allows high degree of interaction with respondents. It can easily be adapted to collect general information, provides relatively simple and straight forward approach to study attitude, values, and beliefs, and can also help to measure particular phenomena at a fixed point in time. Thus, the survey method helps to obtain first hand information and enables to have access to multiple methods of data collection.

This study tried to describe effects and prospects of sustainable peace for Oromo-Somali conflicts in the study area. Accordingly, both quantitative and qualitative data were collected concurrently by using mixed methods. [24] recommends that combination of methods for data collection and data analysis help to confirm, triangulate and substantiate the results of analysis and findings of the study.

2.3. Sampling Procedures

For the purpose of this study, the researcher was employed a multi-stage sampling strategy. In the first stage, the *Miesso* and *Mullu* districts are purposely selected based on its conflict hotspots area with increasing frequency and prevalence of Oromo and Somali inter-group conflicts. In the second stage, six *kebeles* (three from each district) were purposely selected from the list of 31 and 24 *kebeles* in the two districts respectively. The selection process of sample

kebeles was based on documents review; field visit and discussions held with key informants selected, namely; knowledgeable elders, clan leaders, Das, experts from two districts peace and administration offices, pastoralist areas development and disaster risk management officers.

The sampling procedure also followed some core parameters like; farming system, level of land degradation, vulnerability to recurrent conflicts, frequency of security issues and necessity for the inclusion of woman headed households. To this end, agreement was reached that homogeneity existed in agro-ecology, semi-arid and arid ecology holds the same for the two districts. Likewise, pastoralist production system is the dominant farming system in the *Mullu* district *kebeles*; while agro-pastoralist system covers for majority of *Miesso* district *kebeles*. Thus, *Mullu*, *Somedayo* and *Kulmiye* *kebeles* were selected from *Mullu* district of Somali regional states; whereas, *Kurfa-sawa*, *Fayo* and *Kikiliftu* *kebeles* were selected from the *Miesso* district of Oromia regional state. Finally, six sample *kebeles* were selected for this study.

2.3.1. Sample Size

According to [25] suggested that a target population is well-defined set of people, service, elements, events, groups or households that are required to investigate. A target population should have some observable characteristics about which the researcher intends to generalize the results of the study. Sample size from the target population is also necessarily determined for household survey. Sample size determination for a study is also required to have a demarcation of the boundary area in which the survey is undertaken reasonably with available time, resources and researcher's knowledge of the study area. To decide the sample size of the target population, the sampling frame of member household heads in each sample *kebeles* was used.

Thus, for this study, sample size was determined based on the formula recommended by [26] for a finite population;

$$n = \frac{Z^2 \cdot p \cdot q \cdot N}{e^2(N-1) + Z^2 \cdot p \cdot q}$$

Where, N: the population size;

n: sample size;

p: the sample proportion, 0.5, (q=1-p);

Z: the standard deviation at 95%C.I. ($\alpha=1.96$); and,

e: acceptable error (precision); 0.075;

Given: N=1874;

Required: n=?

Soln: $n = \frac{(Z)^2 \cdot p \cdot q \cdot N}{(e)^2(N-1) + (Z)^2 \cdot p \cdot q}$

$n = \frac{3.84^2 \cdot 0.5 \cdot 0.5 \cdot 1874}{0.0056(1873) + 3.84^2 \cdot 0.5 \cdot 0.5}$

n=156

Thus, the result, n=156 was the minimum reliable number of sample size or sampling units. To maintain safe and accurate sample size it was adjusted to 160 by considering replacement of at least 4 sample households if missed for some reasons unknown. The unit of analysis for this study is pastoralist/agro-pastoralist household heads selected from each sample *kebele*.

2.3.2. Sampling Techniques

In the third stage of sampling, the probability proportion to size (PPS) technique was used to assign the number of sample household heads in each *kebele*. Finally, sample households were randomly selected from the sampling frame of household heads in the respective sample *kebeles*. Purposive sampling was employed to select participants of FGDs and KIIs. Table 1 below summarized sample household heads selected for the study.

Table 1. Sample household heads selected for this study.

No.	Name of sample <i>kebeles</i>	Dominant Ethnic group	Number of households	Sample size (number)	Percentage (%)
1	Mullu	Somali	384	33	21
2	Somedayo	Somali	317	27	17
3	Kulmiye	Somali	268	23	14
4	Kurfa Sawa	Oromo	332	28	17
5	Kikiliftu	Oromo	282	24	15
6.	Fayo	Oromo	291	25	16
Total			1,874	160	100

Source: Own survey, 2021

2.4. Methods of Data Collection

2.4.1. Types of Data, Data Sources and Instruments of Data Collection

(i). Data Types

In order to make data collection process more comprehensive and fulfill the objectives of the study, the type of data required included both primary and secondary in nature, and quantitative and qualitative in scale. Primary quantitative data collection emphasized on demographic and

socio-economic characteristics of sample households. Primary qualitative data also included conflict context and farming system, perspectives, views and perceptions towards the nature of conflicts between the Oromo and Somali PAP communities, main actors, and frequency of occurrence, socio-economic and environmental effects, peace capacities and conflict spoilers.

(ii). Sources of Data

Primary quantitative and qualitative data were collected from sample household heads during formal survey done in

each sample *kebeles* more knowledgeable local leaders, elders, clan leaders like; *Abba Gadas* and *Ugazes*, religious heads, community representatives including those venerable like; women, children disable and youth group, DPs, Offices experts and internally displaced peoples (IDPs) participated on KIIs and FGDs. Secondary data were collected from records and reports, published and unpublished materials, books, government publication, journals and periodical performance reports.

2.4.2. Instruments of Data Collection

(i). Questionnaire

Questionnaires were used for primary data collection from sample respondents through semi-structured interview schedule (SSIS) for the formal survey. The SSIS was constructed with open-ended and closed-ended items. Interviews were carefully selected and constructed based on review of literature and opinions collected from experts and academicians carried out in the study area. Data were collected from April 2020–June 2020. A total of 167 questionnaires were used to collect data by trained enumerators including 7 extra-questionnaires for replacement, as a result the response rate was 96% in that it was able to secure 160 filled questionnaires for all sample household heads.

(ii). Focused Group Discussions (FGDs)

Qualitative data were generated through using semi-structured key informant interviews, focus group discussions, personal observations and informal discussions. The total of 61 participants of FGDs were involved in seven (7) FGDs conducted, each comprised 8-10 members in each focused study *kebele* and districts level discussions. This includes 14 elders (community opinion leaders), 12 local leaders, 6 clan leaders (*Ittu*, *Ala* and *Jarso*, *Nole* clans of Oromo and *Issa* and *Hawiyya* clans of Somali groups), community representatives of 7 women and 9 youth groups, and 13 Das guided by a check list carefully constructed for the same purpose. The rationale is, the researcher would found and discern individuals with rich knowledge and experience about issues under investigation.

(iii). Key Informant Interviews (KII)

Interview with key informants were carried out to collate qualitative data on views, perspectives, perceptions, attitudes and explanations on the occurrence and nature of violent conflicts between Oromo and Somali PAP communities, main actors, its frequency and magnitude, socio-economic and environmental effects, capacities of peace and conflict spoilers. KIIs involved local leaders, elders, clan leaders (*Abba Gadas* and *Ugazes*), office experts and development agents internally displaced peoples. Check list was carefully constructed and adopted to guide KIIs. Total of 52 key informants were involved. Each session comprises minimum of seven (7) and maximum of 12 key informants, total of eight (8) KIIs in each of the six study *kebeles* and district level discussions.

(iv). Field Observation

The objective of field observation by the researcher was to

create self-acquaintance with Oromo and Somali community members, study environment and related aspects deemed necessary in the course of undertaking the research. The field observation helped the researcher to create a mental picture of the local context and understand the facts, phenomena, frequencies of events, cause and effects relationships between study variables and/or attributes, and ultimately the impacts on the society, economy and environment. Besides, the instrument helped the researcher to look into existing opportunities that can be envisaged to improve the current state of challenges. A check list was used to guide the field observation.

2.5. Reliability and Validity

2.5.1. Reliability Test

Reliability is concerned with the extent to which a measure is consistent and stable in measuring what it is intended to measure [27]. In this study, a reliability test for internal consistency of study instruments was administered following the construction of selected items, checking for detection of deficiencies and comments and feedback from the supervisors. Thus, it was managed to contact experts from WHZPAO, *Miesso/Mullu* area experts and academicians from Oda Bultum University with immediate relevance to the topic of the study. Accordingly, the researcher became able to invite 18 experts as well as knowledgeable persons and convene in West *Hararghe* Zone Peace and Administration Office meeting hall to evaluate the study instrument.

Thus, total of 54 items, 36 for SSIS and 18 for the check lists were distributed to participants to test each item on a five-point Likert scale as: 5 for “strongly agree, 4 for “agree”, 3 for “undecided”, 2 for “disagree” and 1 for “strongly disagree.” The test scores were collected and fed to SPSS Ver.23.0 programme for Cronbach’s alpha test. Cronbach’s alpha is a convenient test used to estimate the reliability or internal consistency of a composite score for survey instrument. It involved the Pearson Product Moment Correlation analysis [28]. The result of analysis indicated that Cronbach’s alpha coefficient was found to be 0.791. As Cronbach’s alpha provide the following rules of thumb to interpret values as: Cronbach’s alpha of: “> 9–Excellent, > 8–Good, > 7–Acceptable, > 6–Questionable; > 5–Poor, and < 5–Unacceptable.” As a result, instruments were found consistent with the objectives of the study and research questions; finally, it was made possible to head for actual data collection procedure.

2.5.2. Validity Test

Validity refers to the extent an instrument or scale tests or measure what it intends to measure. This means validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested [26]. In this study, a pilot test for both interview schedules and check list was done before actual data administration. Thus, question items were subjected to pre-testing on a small group which 10 sample and 9 from non-sample households of two *kebeles*.

The purpose of the pilot test was to assess ease of

comprehension, relevance, effectiveness in conveying use full information, and to what extent the questions are understood by different individuals. Thus, reconstruction and modifications were made based on the feedback and suggestions obtained from the participants involved. The validity test procedure helped ensure effectiveness of the items in capturing the proper information. This resulted in the final step where the English version was translated to *Afan Oromo* and *Afga Somali* to fit specific local languages of PAP communities and proceed towards actual data collection.

2.6. Method of Data Analysis

As usual, the collected data were analyzed by using different analytical techniques after coding and entry into computer programme of statistical packages. Qualitative data generated from household survey, FGDs, KIIs, field observation and secondary sources were analyzed by using tabulation, triangulation, and interpretation of situations, perceptions and explanations of themes based on the objectives of study. Both descriptive and inferential statistics were adopted to facilitate processes of data analysis and interpretation results. Secondary data were also incorporated to augment the results of analysis for primary data in each step as required. The following sub-subsections briefly discuss the statistical and analytical tools used in the study.

2.6.1. Descriptive Statistics

In this study, descriptive statistics was used to reduce quantitative data collected into summary formats by tabulation in order to facilitate for comparisons between groups or variables involved in the study. In this regard, the researcher employed frequency of occurrences, means, standard deviation, range, percentages, pie-chart, figures, graphs and tables.

2.6.2. Inferential Statistics

Inferential statistics allows inferring from data through analysis the relationships between two or more variables, and how several independent variables might explain the variance in a dependent variable [29].

(i). Chi-square Test

The Chi-square test of independence or the Pearson Chi-square test is one of the most useful statistics to analyze group differences when the dependent variable is measure data nominal level. In this study, chi-square test is used to explain that among groups of sample respondents with identical responses, there exists significance difference in opinions the majorities' suggested that might substantiate the need to consideration for measures to be recommended.

(ii). One-Sample T-test

Basically, one-sample T-test is applied to measure the difference between sample mean tabulated by descriptive statistics for scores of mean and standard deviation for each of indicator variable on five-point Likert scale. By using

One-sample Test statistics, sample mean is compared with test value of 3, (average for "1.5," the maximum point of five-points Likert scale; which, 5 for "strongly agree", 4 for "agree", 3 for "undecided" or "no idea", 2 for "disagree" and 1 for "strongly disagree"), then it will indicate whether there is a significant difference between the sample mean and the test value. Low p-value (<0.05) indicates high significant difference between sample mean and test value.

(iii). Correlation Coefficient

In addition, correlation coefficient is applied to test the internal consistency and reliability of the properties of measurement scales that compose the composite score for survey instrument; i.e., Cronbach's alpha tests [28].

2.7. Ethical Consideration

Research ethics is the moral principle guiding research; which has an obligation to respect the rights, needs and desires of the informant(s) [24]. In this regard, all the participants of research were appropriately informed about the purpose of study and their willingness and, their consent was secured before the commencement of distributing questionnaire and asking interview questions. Although, all interview sessions has tried to tape-record, it was impossible as the respondents were not voluntary. Regarding privacy, the study maintained the confidentiality of the identity of each participant. In all cases, names are kept confidential, thus collective names like 'respondents' were used.

3. Results and Discussion

3.1. Socio-economic Effects of Oromo-Somali Conflicts

[1] Stated that conflict is one of human induced disaster having varied sources with different frequencies and severe impacts on society, economy, and environment at different levels. This sub-section presents the findings of study on the social, economic and environmental effects of recurring and protracted Oromo-Somali conflicts in the study area. Sample respondents were asked to react to the social, economic and environmental effects of conflicts on five point likert scale as very important, important; not sure, it's important and not important from a list items constructed based on suggestions of PAP households in *Miesso/Mullu* area and related literature. The result of analysis discussed in the following sub-subsections.

3.1.1. Major Effects of Violent Conflicts on the Social System

The findings of study revealed that ten response variables were identified as a major effects of Oromo-Somali conflicts on the society with significant differences between the two ethnic groups in each of indicator variable at $p < 0.01$, 0.05 and 0.1. The difference between Oromo and Somali groups is due to their differences in socio-economic, cultural and political affiliations and attitudes of sample households observed in the research. Table 2 below summarizes the results of analysis.

Table 2. Main effects of conflicts on the social system (N=160).

No.	Description of social effects of the violent conflicts	Agro-pastoralists		Pastoralists		Total		χ^2 Test (sign.)
		Index	Rank	Index	Rank	Index	Rank	
1.	Death and injury at battle fields;	4.51	1	4.04	3	8.55	2	83.5**
2.	Damages of houses/villages;	4.16	4	3.26	7	7.42	5	54.8*
3.	Internal displacement;	4.43	3	3.95	4	8.38	3	42.3***
4.	Disruptions of social relations;	4.13	5	3.12	8	7.25	6	38.7***
5.	Destruction of infrastructure and facilities;	3.98	6	4.17	2	8.15	4	63.4**
6.	Interruption of public and social services;	4.46	2	4.47	1	8.93	1	26.8*
7.	Social relocations;	3.56	8	3.39	5	6.95	8	72.3**
8.	Weakening of customary institutions;	3.85	7	3.27	6	7.12	7	39.7*
9.	Sexual violence on the vulnerable groups;	3.49	9	2.92	9	6.41	9	52.4**
10.	Opportunistic behaviour and violation of social order;	2.74	10	2.34	10	5.08	10	24.6**

Source: Own survey, 2021; *, ** and ***- Significant at $p < 0.01$, 0.05 and 0.1

Accordingly, the social effects ranked from 1 to 5 were interruption of social services, death and injury, internal displacement (innocent children, pregnant women, aged, handy capped households, etc), destruction of infrastructure of residence houses/villages, significant at $p < 0.1$, 0.05, 0.01, 0.05 and 0.1 probability level respectively. For instance, while interruption of social services ranked second social effects of conflict for Oromo and first for Somali groups; death and injury also ranked first for Oromo and third for Somali groups.

As the result of findings damages to residence houses/villages ranked fourth for Oromo and seventh for Somali groups. [2] also supported the findings in that extreme events disturb public services and economic activities and loss in terms of physical assets and death and injured people. Participants of FGDs and KIIs also confirmed violent conflicts in the *Miesso/Mullu* PAP area often result in substantial deleterious effects of death and injury of PAP households and supported with recorded account of causalities of inter-groups conflicts between Oromo and Somali groups [11] documented in the last 50 years (1970-2020).

The report showed 5,761 people killed and 8,313 were wounded, and 6563 residence houses were destructed or burnt. Moreover, the assessments figure doubt that the number of schools, ware houses, clinics and water points were dismantled; namely, 1,086,839 and 29 respectively. The assessment also documented damages of crops as a result of deliberate herd entrance into crop fields by Somali groups particularly during harvesting time. On the other hand, recent study by [14] revealed that hidden hands of power elites from both conflicting groups were wagging proxy conflicts in the *Miesso/Mullu* area and beyond during the recent 2017 violent conflicts between Oromo and Somali groups.

As a result, tens of thousands of the Oromo agro-pastoral households were internally displaced from nine *kebeles* and resettled in neighboring *kebeles* of the district [15]. Likewise, the findings also showed that disruption of social relations (trust and reciprocity), weakening of customary institutions, social relocations, violence sex to vulnerable girls, women and children and opportunistic behavior and violation of social order were found the sixth, seventh, eighth, ninth and tenth ranked social effects of recurrent and violent conflicts between Oromo and Somali groups in the study area with significant

differences between the two study groups at $p < 0.01$, 0.1, 0.05, 0.05 and 0.05 probability level, in the mentioned order. Disruption of social relations was found the sixth social effect of inter-group conflicts in *Miesso/Mullu* area.

Although traditional mechanisms used to overcome the challenges of uncertain and fluctuating natural environment through access to and management of communal rangelands, mobility of stock, and institutions for mutual assistance between the different range resources users had strong social relations based on the principles of peaceful coexistence, flexibility, complementarity, multi-functionality, reciprocity and sustainable communal resource management.

However, with the recurring drought in PAP areas has led to a declining grazing resource base and gradually intensified competition over scarce resources and protracted violent conflicts. This has eroded the accumulated social trust and reciprocity among recourse user groups into hostile relationships that endangers vulnerable PAP households [12]. Moreover, the disruption of social relations within the community either fail to penalize members taking unfair opportunistic actions against others or could even reward them if the actions are expected to benefit their community. Consequently, this would further cause the community to become less cooperative with others.

Such rival communities attempt to resolve tensions more with force than with peaceful negotiation. In such situations, the customary institutions of each community, which are the expression of the belief and value system, the norms and code of conducts of the community tend to appreciating forceful actions and undermine peaceful negotiations. If there are some members who are willing to transact with the rival communities, for any reasons, their intention could be regarded as deviant of the social norm and hence, refrain from expressing it in fear of social sanctions. Consequently, enforcing rule of law becomes difficult. Particularly, the problem becomes serious if the conflicting groups belong to different ethnic and socio-cultural setting.

This experience augments the extensively documented evidence on the limited capacity of customary institutions in managing resource conflict among several pastoral groups. Furthermore, acts of sexual violence against vulnerable women, girls and children of the hostile groups during severe

conflicts have been the usual behavior of opportunistic violent groups in the study area. The participants of FGD at *Kurfa-sawa*, *Kikiliftu* and *Mullu kebeles* confirmed as one of the worst effects of conflicts in *Mi'esso/Mullu* PAP area.

3.1.2. Major Effects of Conflicts on the Economic System

Amare [30] argued that conflicts have significant economic costs on a country. This sub-section discusses the findings of study on major effects of Oromo-Somali conflicts on the economy of local communities and the region/nation at large. As can be seen from the table the first five ranked indicator variables for economic effects of conflicts were found to be damage to household assets and loss of livelihoods, weakening government capacity to achieve development agenda, reduction of marketable products,

killing and rustling of livestock, inability of marketing products and diminishing household income that had significant difference between the two groups at $p < 0.05$, 0.05, 0.01, 0.1 and 0.05 probability level respectively.

The result of findings showed that damages to household assets and hence loss of livelihoods is the major economic effect which vulnerable PAP households of the two ethnic groups suffer from. This response variable was ranked third for Oromo and first for Somali groups. Assessment report of [11] on economic losses in the last 50 years (1970-2020) as the result of Oromo-Somali conflicts in the study area showed 11,703 cattle were raided, 8,314 camels looted, 17,455 goats thieved. This had been devastation to vulnerable and needy PAP households in conflicting areas.

Table 3. Main effects of conflicts on the economic system (N=160).

No.	Description of economic effects of violent conflicts	Agro-Pastoralists		Pastoralists		Total		χ^2 Test (Sign.)
		Index	Rank	Index	Rank	Index	Rank	
1.	Damages to household assets/loss of livelihoods;	4.33	3	4.19	1	8.52	1	62.7**
2.	Killing and rustling of livestock;	4.54	1	3.03	8	7.57	7	29.4*
3.	Reduction in household income (increased poverty);	4.39	2	3.37	7	7.76	5	61.3**
4.	Reduction in marketable products and export;	4.14	6	4.05	3	8.19	3	54.4***
5.	Increased unemployment;	3.91	8	3.76	5	7.67	6	58.2**
6.	Inability of labour and products marketing routines;	4.18	5	3.99	4	8.17	4	29.5*
7.	Weakening government capacity to achieve development agenda;	4.27	4	4.08	2	8.35	2	56.9**
8.	Restriction of local investment opportunities;	3.94	7	3.54	6	7.48	8	27.3**
9.	Increased dependency ratio in a household;	3.36	9	2.06	9	5.42	9	52.2***

Source: Own survey, 2021; *, ** and ***- Significant at $p < 0.01$, 0.05 and 0.1

As the result of findings weakening government capacity to achieve development agenda is the second ranked important factor which ranked fourth for Oromo and second for Somali groups. Similarly, reduction in marketable products, the third ranked indicator variable, the second for Oromo and seventh for Somali groups. The fourth ranked factor, inability of labour and products marketing routines, was found sixth and third ranked effects for Oromo and Somali groups, respectively. Poverty is likely to increase due to increased reduction in household income through inability to engage in productive labour, such as herding or crop farming. Besides unemployment also became the consequence of conflicts as the findings showed. [31] also agreed that conflict has arranged effects on poor people's entitlements.

Firstly, there is likely to be an increased reliance on direct entitlements as households retreat into subsistence. Secondly, there is a serious and progressive depletion of the rural asset base, in particular the loss of land to production and the decline of livestock herds. Participants of FGDs and KIIs also confirmed that killing and rustling livestock during violent conflicts (ranked first for Oromo and seventh for Somali) was one of the characteristics of contending groups. This is because the offending parties kill herd resource they come across in grazing lands as part of an attack and provocation to exacerbate conflicts.

Furthermore, diversion of resources from investment for economic development program to conflict management, emergency aid and recovery. Wars are frequently financed by

inflation, since in a civil war in a low-income country the scope for paying for a war out of increased war time production and employment are negligible. Productive investment is deflected by wartime conditions [17]. Wartime insecurity reduces investment opportunities in a given locality. [32] observed that scarcity driven resource conflicts have continually weakened and reduced countries' capacity to achieve their development agenda.

Conflicts occurring at micro-level on specific resources prevent from undergoing rapid social and economic change. Besides, higher dependency ratios caused by an increased proportion of the old, women and disabled in the population is another economic effect of inter-group conflicts as the findings of this study exhibited. The result of findings also agreed with [33] also showed a global analysis of conflict affected countries found similar patterns of macro-economic effects including a fall in GDP per capita, food production and exports, a fall in gross investment, government revenue and expenditure. Overall, as [34] reported the PAP livelihoods involve risks and uncertainties come from both natural and human activities. Economic shocks are strongly correlated with civil conflict. Economic shocks redistribute income and political power and can create incentives for rebellion, while reducing the capacity of governments to repress or accommodate potential challengers.

3.1.3. Major Effects of Violent Conflicts on the Environment

This sub-section presents the findings of the effects of

Oromo and Somali inter-group conflicts on the environment (table 4). The result of findings showed that over grazing was found the first ranked response variable for the effects of Oromo-Somali conflicts on the environmental aspect due to

impaired pastoral mobility and lack of access to diverse grazing patches, the second ranked response variable, with significant differences between responses of the two contending groups at $p < 0.05$.

Table 4. Main effects of conflicts on the environment ($N=160$).

No.	Description of environmental effects of violent conflicts	Agro-Pastoralists		Pastoralists		Total		χ^2 Test (sign.)
		Index	Rank	Index	Rank	Index	Rank	
1.	Impaired pastoral mobility;	4.54	2	4.28	2	8.82	2	37.3**
2.	Damage due to overgrazing;	4.68	1	4.29	1	8.97	1	45.7**
3.	Land degradation;	3.93	5	3.65	4	7.58	4	54.3*
4.	Deforestation;	4.13	3	3.73	3	7.86	3	65.2***

Source: Own survey, 2021; *, ** and ***- Significant at $p < 0.01$, 0.05 and 0.1

According to [18] point out that conflicts in PAP areas cause environmental damages due to overgrazing in limited areas where there is insecurity, impaired pastoral mobility and access to different grazing patches; though diverse ecological systems produce appropriate environment for pastoralists to manage risk through spatial dispersion of herd. Deforestation and loss of wildlife was found the third ranked response variable for environmental the effects of conflicts, significant at $p < 0.01$, between the two responses groups.

As the result of findings indicated that deforestation and loss of wildlife are a common phenomenon of conflict due to daily expenses by selling forest products (cut trees and burnt charcoal) for which weak institutional measures are in place to protect deforestation. This is because of insecurity and controversial sentiment among conflicting parties to which group the area belongs. Thus, little sense of responsibility has been observed for environment as a result one can cut trees and burn charcoal for individual economic purpose.

Land degradation and fertility deterioration was the fourth ranked response variable for the effects of Oromo-Somali conflicts on the environment, significant at $p < 0.1$, between the two responses groups. This often happened due to lack of natural resources management in the conflicting environment during violent conflicts insecurity and emergency state seriously restrain the usual farming practices instead the over grazed bare lands become susceptible to agents of erosion, wind and water. Erosion result in loss of soil nutrients and difficulty of cultivation. This is the main manifestation of land degradation that has led to environmental degradation.

3.2. Prospects of Violent Conflicts

The overall increase in ecological scarcity is the root cause of conflicts in PAP areas [35]. Violent conflicts are characterized by the actions, attitudes or systems that cause physical, psychological, social or environmental damage. Killing and intimidation are the most visible forms of violent conflict. Violent conflicts always have negative repercussions [36]. Prospects of violent conflicts in the study area were assessed from two perspectives. One is the capacities of peace that refer actors, institutions or relationships that have the desire and/or capacity to promote peace. This is similar to

the idea of 'connectors', which are positive factors that reduce tensions between groups, improve cohesion and promote constructive collaboration.

On the other hand, conflict spoilers are individuals or groups that actively seek to hinder, delay or undermine conflict settlement [37]. They often benefit from the war, and would be negatively affected by an end to conflict. This is similar to the idea of 'dividers', which are negative factors that increase tensions between people or groups, reduce their ability to resolve conflicts non-violently and may lead to violent conflict. This study tried to assess the prospects capacities of peace in the study area. Sample respondents were asked to rate on the importance of factors, institutions, organizations that call for non-violent act and connect people across conflict lines on three point likert scale, as very important, important and not important. Figure 3 below portrays the findings and results of analysis.

As can be seen from the figure traditional customary institutions were rated the very important capacity of peace as majority, 81% of sample respondents demonstrated attitude. These are an amalgam of connectors where the common culture (norms, values, principles, sanctions, beliefs manifested in the language and religion) that promote people to remain connected across sub-group lines despite the division secreted through conflicts. In PAP area, the reason for conflict of interest to develop into violence is the gradual erosion of elders' authority and the state failure to provide security [18]. The role of customary institutions in the aspect of conflict management has been rewarded much.

Customary institutions are essential to conflict resolution in three aspects as: a) the traditional way of conflict resolution helps develop trust and credibility to commitments [38]; b) traditional mechanisms consider local, social and ecological contexts in which different communities live; and c) the immediate impacts of conflicts remain to be local, not national. Participants of FGDs also agreed with the notions discussed above. The second most very important institution that enhances capacity of peace is inter-clan/ethnic marriage alliance, rated by 64% of sample respondents. Celebrating ritual ceremonies were found the third important factor of peace capacity, as 56% of sample households. [10], ritual splay an important role in achieving and enhancing the societal oneness, in his term 'communitas'.

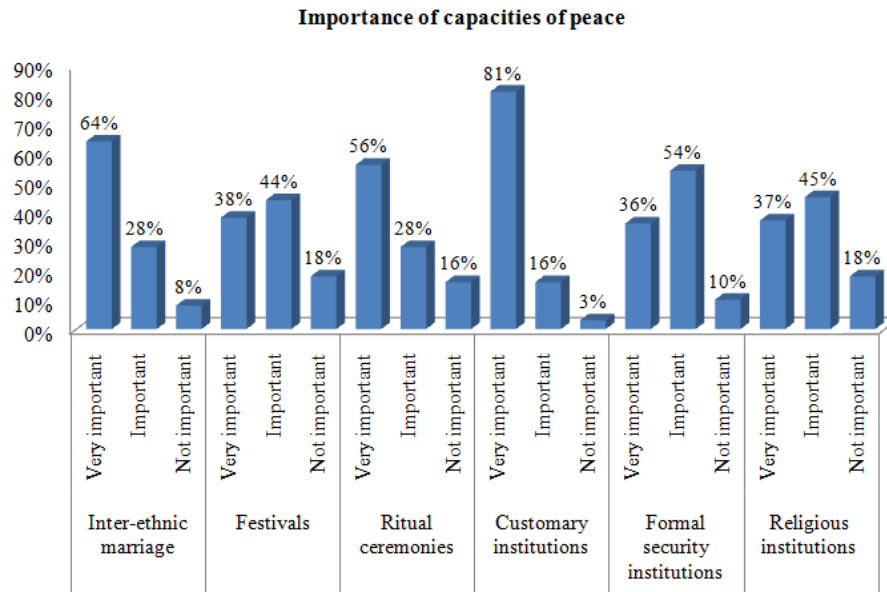


Figure 3. Importance of capacities of peace (Source: Own survey, 2021).

Further as elaborated rituals are social drama that resolves crises by dramatizing the advantages of cultural values and social arrangements [39]. Ritual ceremonies are performed in response to the breach of law during time of societal conflicts to restore the fractured social order and maintain the status quo. Such ritual practices are performed in societies for the intended purpose of restoring and maintaining the social order if the rival groups are engaged in blood feud. Furthermore, formal security institutions were found the fourth main factor of capacity of peace, as 54% of sample households.

Moreover, one of the well experienced lawyer Wondu Asegid who born in a small village of conflicting area called 'Dalecha' suggested that the public institutions support institutional arrangement and the importance of intervention to resolve violent conflicts and the challenge customary authority face in cases where there lacks fruitful litigation. This implies how strengthening and institutionalizing customary conflict management institutions are indispensable to resolve natural resource-based conflicts in the study area.

Religious institutions also rated as important factor of capacity of peace, as 45% of suggested. As it is known well

more than 99% of the members of both Oromo and Somali groups are adherents of Islamic religion. Thus, this institution helps as bridge-building between the conflicting groups. Celebrating festivals at different occasions was also found as the fifth important factor to promote peace and reconciliation between the two groups. It can be useful to think about capacities for peace play in entrenching or bridging the divides. On the other hand, this study tried to identify individuals and groups who directly or indirectly benefit from continuation of inter-group conflicts in the study area.

Accordingly, power elites of ethnic groups found to have key role of negatively influencing contending parties to delay conflict management to fulfill individuals or group(s) goals, as 34% of sample households responded. Participants of FGDs and KIIs also opined that the power elites working for their ethnic groups or regional governments provide implicit and explicit supports to the members of own ethnic groups to embark on violent conflicts than to encourage lessening the effects of severe conflicts in the area. Homogeneity among members of one ethnic group can motivate offenders to carry on conflict against the other groups. Figure 4 below depicts the results of analysis.

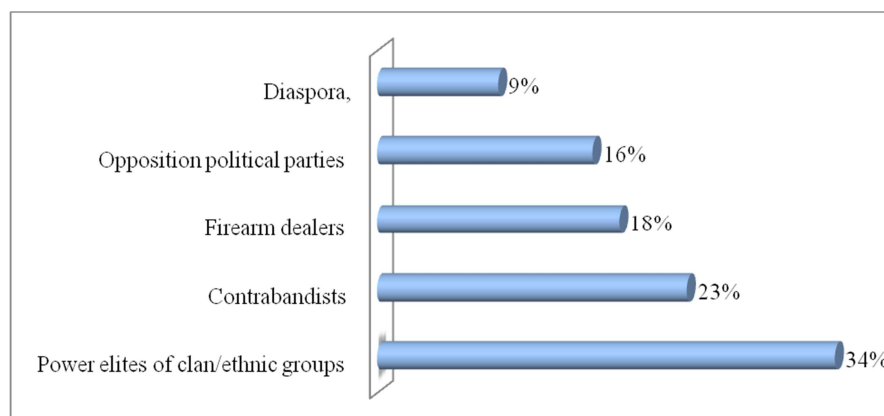


Figure 4. Conflicts spoilers (Source: Own survey, 2021).

Differences in socio-cultural identity and the administrative structures may help politicize events related to particular ethnic groups to focus on spoiling agendas to induce further tensions and conflicts. In this case, the factors that help divide the competing groups and magnify the sources of tensions, such as revenge attack/blood feud, theft of property and cattle raiding would sound important among group members. Moreover, contrabandists and fire arm dealers were also found the second and third main conflict spoilers, 23% and 18% of sample households reacted. Participants of FGDs and KIIs disclosed that these individuals/groups intentionally entice children, women, youth and conservative elders of stories for brutal act how members of opposing ethnic group hurt their one in the past supporting with enmity proverbs, sayings and songs either to heighten hatred or instigate them towards conflicts against the contending groups.

In such way that they can fulfill their own goals in two ways: *first*-prior to tension and conflicts they smuggle fire arms, weapon, and electronic equipments, medicine, textile, etc., and dump it somewhere along the Djibouti border towns/villages in remote areas away from *Miesso/Mullu* vicinity; *second*-the time tension and conflicts erupt and insecurity prevails in the area they begin to transport the contraband and transit to *Awash*, *Adama*, *Mojo* and *Addis Ababa* through their net works on the one hand, and insist on prompting the conflicting parties to carry on violent conflicts and escalate to further area son the other hand. This offers the opportunity to further smuggle items and divert the concentration of the government towards severe conflicts even from other agendas.

It is opined that members from the Oromo and Somali groups have significant involvement in this category. The other group conflict spoilers found to have influential role in conflict escalation were opposition political parties and the Diaspora, 16% and 9% of sample respondents reflected. Accordingly, the findings of study revealed the Ethiopian federalism has given a new paradigm for the already existing conflicts between the Oromo, Somali and Afar PAP groups who used to share common range resources into autonomous regional states. At present, with the recurring drought that has led to a declining grazing resource base and continual resources shrinkage due to population pressure and conflicting land use systems; the PAP areas of eastern Ethiopia (including the study area) transformed to intensified competition and violent conflict. However, ethnicity has become the primary means of ethnic mobilization as a rewarding strategy in that numerous conflicts have been sparked by decentralization, and the success of the regional political elites in territorial gains render in to more administrative power, land, tax revenue and food aid [18]. In this sense, the role of some Diaspora and contrabandist has intensified in the recurrence and protracted violent conflicts between PAP groups.

4. Summary and Conclusion

4.1. Summary

This study aimed to investigate the socio-economic and environmental effects, and prospects of conflicts between Oromo and Somali PAP communities in the *Miesso* district of Oromia and *Mullu* district of Somali regional states, Ethiopia. Hence, based on the results of field survey and discussions with KIIs conducted prior to the study period, 160 PAP households were randomly selected from six *kebeles* to facilitate primary data collection by using household survey. Qualitative data were also collected from local leaders, elders, clan leaders (*Abba Gadas* and *Ugazes*), religious heads, community representatives of women and youth, DAs, office experts and internally displaced peoples (IDPs) with the benefit of KIIs and FGDs guided by carefully constructed checklists.

Field observation, informal discussion and review of secondary data were also supported data collection process of the study. Descriptive research design was used in this study accompanied by mixed qualitative and quantitative research approach and both quantitative and qualitative data were collected concurrently by using combination of methods for data collection and data analysis so as to confirm, triangulate and substantiate the findings of the study. Both descriptive and inferential statistics were employed with appropriate statistical tests and interpretation was made accordingly. The findings of study on the demographic and socio-economic characteristics revealed from the total 160 PAP households randomly selected for the study, the proportion of sample households from the two ethnic groups constituted 49% and 51% respectively.

The study found indicated that, the two groups are significantly different in all factors that prompt contending groups to embark on conflicts due to the differences in socio-economic, cultural, political and resource-related factors. Likewise, the findings also revealed the major social, economic and environmental effects of the recurring and protracted Oromo-Somali inter-group violent conflicts in the *Miesso/Mullu* PAP area. Accordingly, interruption of public and social services, death and body injury, internal displacement of innocent people including; children, pregnant women, aged and disable people, etc...), destruction of infrastructure and facilities and damages to residence houses/villages, disruption of social relations (trust and reciprocity), weakening of customary institutions, social relocations, sexual violence to vulnerable girls, women and children and opportunistic behavior and violation of social order were found the major effects of violent conflicts ranked in order to importance affect the society of the study area, significant at $p < 0.01$, 0.05 and 0.1.

The reasons for significant differences between Oromo and Somali conflicting groups in each response variable are due to the differences in the socio-economic, cultural and

political factors and attitudes of individual sample households. The findings also showed nine indicator variables to signify the economic effects of inter-group violent conflicts in the study area. The result of study showed that damages to household assets and loss of livelihoods, weakening government capacity to achieve development agenda, reduction in marketable products and export, killing and rustling of livestock, inability of labour and products marketing and diminishing household income were found the main response factors for effects of violent conflicts on the economic sector, significant difference between the two groups at $p < 0.01, 0.05, 0.1$.

Furthermore, over grazing was significantly affected the environment through soil erosion and fertility deterioration, impaired pastoral mobility because of lack of access to diverse grazing resources, deforestation and land degradation due to lack of natural resources management were also found to affect the environment, significant difference between the two PAP groups at $p < 0.01, 0.05, 0.1$. On the other hand, the findings of the study also demonstrated prospects of capacities of peace and existing challenges that can negatively influence efforts done to reduce vulnerability to tensions and violent conflicts and strengthen peaceful co-existence through improving mutual assistance among PAP groups.

Overall, traditional customary institutions, inter ethnic marriage alliance, ritual ceremonies, formal security institutions, religious institutions and festivals were found the important institutions to enhance capacities of peace in the study area, while power elites of ethnic groups, contrabandists and fire arm dealers, opposition political parties and the Diaspora were found to have influential role in conflict escalation in the *Mi'esso/Mullu* PAP area.

4.2. Conclusion

The conclusions were drawn from the key findings based on the objectives of the study. Inter-group conflicts between Oromo and Somali communities has long history in the *Miesso/Mullu* PAP areas of eastern Ethiopia. Both Oromo and Somali ethnic groups were inhabited in *Miesso/Mullu* area before many years and still are the primary resource users of the area.

Although both groups had equal access to communal range resources since long time; antagonist attitudes grew following the shifts in conflicting land use system, the Oromo groups belonged to agro-pastoralist production system; whereas, the Somali groups were pastoralists and never engaged in crop cultivation. With the effects of population pressure and the stiff interest to crop cultivation in the range lands of Oromo groups created conflicts with Somali groups. At present, the recurring drought that handled to declining grazing and water resources base has gradually intensified competition and violent conflicts between the two groups. Besides, increased reduction in availability and quality of key range land resources due to bush encroachment and alien weed species significantly reduced access to range resources for both agro-pastoralists and

pastoralists conflicting groups.

The conflict context in *Miesso/Mullu* area is characterized by recurring prevalence of tensions and violent conflicts that result in significant socio-economic losses that jeopardized the life and livelihood of PAP communities. The inter-group violent conflicts also weakened government capacity to achieve development agenda through diversion of resources to conflict efforts. Land degradation and fertility deterioration were the major environmental effects of the area. However, adverse effects, there are also prospects of opportunities to strengthen the capacity of peace in the conflict context of the study area.

5. Recommendations

Resource scarcity based violent conflicts between PAP groups have severe impacts on society, economy, and environment at different levels. This demonstrates that deliberately designed interventions are necessary to help reduce vulnerability and concurrently with mitigating the impacts to sustainably improve access to communal resources. Based on the findings of this study the following suggested recommendations were made.

- 1) Strengthening the formal and customary institutions in defining and enforcing property rights, limiting opportunistic behavior would serve significantly to ensure rule of law and collaboration among actors to maintain mutuality.
- 2) Establishing internal negotiation on rights can affirm the recognition of customary rights of all ethnic groups. The success of this is determined by the extent to which the state law gives a backup and enables local state agencies work closely with customary leaders.
- 3) Emphasis on promotion of peaceful dialogues to strengthen cooperation and promote mutuality in improving access to scarce resources.
- 4) Strengthening development interventions to improve access to scarce range resources of grazing land and water points.
- 5) Empowerment of the local, districts and zonal level public institutions to bear duties and discharge expected responsibilities.
- 6) Interventions by the Federal Government would better adhere holistic and integrated approaches towards strengthening institutions that constrain opportunistic actions enforce human and property rights, promote cooperation and freedom, and check and balance the powers of individuals and organizations.
- 7) Practical application of the existing Ethiopia federalism restricts easy movement of pastoralists across regions and even trans-national boundaries in search of pasture and water. There should be recognition to the flexibility/ mobile nature of pastoral way of life during drought seasons irrespective of manmade regional boundaries.
- 8) Weak indigenous institutions of conflict resolution should be revitalized to fully functions responsibilities

until the formal security service institutions become capable and fully functional.

- 9) If not possible, there should be another alternative solution to the degrading and deteriorating resource environment which jeopardized the PAP livelihoods system under pressure.
- 10) Development of infrastructure s like water points (water resources development), education and health services, improving access to road, promotion of irrigation agriculture are urgently and strongly required.
- 11) It is also important to consider mapping of mobility patterns of (agro) pastoralists in each of PAP areas and range lands to better manage and improve access to mobility during drought periods.
- 12) It is crucial to capitalize the common values of traditional customary institutions, inter-ethnic marriage, ritual ceremonies, formal security institutions, religious institutions and festivals that promote peace and connection among community groups to bridge the entrenched valley between contending groups and strengthen mutual assistance and reciprocity among Oromo and Somali ethnic groups.

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