DOTTORATO DI RICERCA IN
INTERNATIONAL COOPERATION AND SUSTAINABLE DEVELOPMENT POLICIES

Ciclo XXIV

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14B2 – Storia delle relazioni internazionali, delle società e delle istituzioni extraeuropee

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SPS 13 – Storia e Istituzioni dell’Africa

TITOLO TESI

PASTORAL LIVELIHOODS IN SOUTH ETHIOPIA – VALUE CHAIN ASSESSMENT OF GUM & RESINS IN MOYALE AREA

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Esame finale anno 2012
When I gazed into the horizon
all I could see was the savannah: red soil, bush and acacia trees....
# Table of Contents

Abstract .................................................................................................................................................. 5  
List of Figures .......................................................................................................................................... 6  
List of Tables ........................................................................................................................................... 6  
Acronyms .................................................................................................................................................. 7  
Acknowledgements .................................................................................................................................. 10  

**Chapter 1 – Pastoralism and livelihoods in Moyale area** ....................................................................... 11  
1.1 Introduction ......................................................................................................................................... 11  
1.2 Pastoralism in Moyale area: more than mobility and livestock ......................................................... 14  
1.3 Pastoral Livelihoods .............................................................................................................................. 19  
1.3.1 *Definition of livelihoods in this research* ...................................................................................... 19  
1.3.2 *Pastoral livelihoods challenges* .................................................................................................... 23  
1.3.3 *The vulnerability of pastoral communities and ways to cope with it in Moyale area* ................. 27  
1.3.4 *The pastoral vulnerability as a dynamic and historical condition* ................................................... 31  
1.4 Overview on the international programmes to face vulnerability in pastoral areas of Ethiopia .......... 34  
1.5 Promoting livelihoods to sustain food security .................................................................................... 36  
1.6 Pastoral development: strategies and approaches ............................................................................... 38  

**Charter 2 - Political representation of pastoralists in Ethiopia and effects on the pastoral system of Moyale area** ......................................................................................................................................... 41  
2.1 Introduction ......................................................................................................................................... 41  
2.2 Political structure of Ethiopian government and implication for pastoral representation .................. 44  
2.2.1 *The Ethiopian constitution* .......................................................................................................... 44  
2.2.2 *Parties and political representation* ............................................................................................. 48  
2.3 Regional governments ......................................................................................................................... 53  
2.4 Brief introduction to the regions targeted by this research .................................................................. 55  
2.4.1 *The Oromia NRS* ......................................................................................................................... 55  
2.4.2 *The Somali NRS* .......................................................................................................................... 56  
2.5 Sub-regional levels ............................................................................................................................... 57  
2.6 The central government and the pastoralists in Moyale area ............................................................... 58
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7</td>
<td>Land issues for pastoral people in Moyale area</td>
<td>63</td>
</tr>
<tr>
<td>2.8</td>
<td>The recent federal efforts to include the pastoral interests in the political agenda</td>
<td>66</td>
</tr>
<tr>
<td>2.9</td>
<td>Interaction between state and traditional structures of representations</td>
<td>71</td>
</tr>
<tr>
<td>2.10</td>
<td>Pastoral representation and conflict resolution in the southern lowlands</td>
<td>74</td>
</tr>
<tr>
<td>2.11</td>
<td>Development interventions in pastoral areas</td>
<td>78</td>
</tr>
<tr>
<td>2.12</td>
<td>Pastoral voices</td>
<td>81</td>
</tr>
</tbody>
</table>

**Chapter 3 - Dynamic ethnography of the studied area**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>General presentation of the area</td>
<td>86</td>
</tr>
<tr>
<td>3.2</td>
<td>Human population and ethnic composition</td>
<td>88</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Introduction</td>
<td>88</td>
</tr>
<tr>
<td>3.2.2</td>
<td>The Borana</td>
<td>91</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Other ethnic groups living in Oromia side, but sharing Somali characteristics</td>
<td>96</td>
</tr>
<tr>
<td>3.2.4</td>
<td>The Somali groups</td>
<td>99</td>
</tr>
<tr>
<td>3.2.5</td>
<td>The Garri</td>
<td>101</td>
</tr>
<tr>
<td>3.2.6</td>
<td>The presence of other identities</td>
<td>102</td>
</tr>
<tr>
<td>3.3</td>
<td>Customary institutions in modern governance</td>
<td>103</td>
</tr>
<tr>
<td>3.4</td>
<td>The history of movements and territorial spaces among people living in the target area</td>
<td>107</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Tracing the roots of the present situation starting from the 17th century until the 20th century</td>
<td>107</td>
</tr>
<tr>
<td>3.4.2</td>
<td>The territorial dynamics after the second world war and until the defeat of the Great Somalia</td>
<td>112</td>
</tr>
<tr>
<td>3.4.3</td>
<td>The returnees and the rivalries on the territory starting from the 1985</td>
<td>116</td>
</tr>
<tr>
<td>3.5</td>
<td>Local political dynamics in the modern state</td>
<td>122</td>
</tr>
<tr>
<td>3.5.1</td>
<td>People and territories: still a controversial issue</td>
<td>122</td>
</tr>
<tr>
<td>3.5.2</td>
<td>The territorial reorganization and the borders’ setting</td>
<td>124</td>
</tr>
<tr>
<td>3.5.3</td>
<td>Local political elections and “new” territorial tensions</td>
<td>128</td>
</tr>
</tbody>
</table>

**Chapter 4 – Territorial pastoral resources and management**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Introduction</td>
<td>133</td>
</tr>
<tr>
<td>4.2</td>
<td>Climatic context and livelihoods</td>
<td>135</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Physical characteristics and climate</td>
<td>135</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Farming activities in the studied area</td>
<td>137</td>
</tr>
</tbody>
</table>
4.3 Local resources and market/transport infrastructures

4.3.1 General aspects

4.3.2 Market opportunities

4.4 Water resources management

4.5 Soil characteristics and suitability for grazing

4.6 Herd management, seasonality and resource use cycles

4.7 Pastoral systems under change

4.7.1 General characteristics of the pastoral systems change

4.7.2 Ecological trends and encroachment

4.7.3 Land use and agriculture

4.7.4 Property and use rights: from the common use to the kalloo

4.8 The effect of external intervention on pastoral resources and management

4.8.1 The emergency relief

4.8.2 Water resources development

4.8.3 Resources tenure

4.8.4 The promotion of agriculture

Chapter 5 - Gum and resins collection as livelihood option in Moyale area

5.1 Introduction

5.2 Referring to gum and resins as a livelihood strategy

5.3 Market orientation

5.4 Resins and gum: lessons learnt from other countries

5.5 Export commercial value of resins and gum

5.6 Area covered by resins/gum bearing species in Ethiopia

5.7 First approach on the field to local names and uses of resins and gum

5.8 Gum and resins producing trees

5.9 Challenges in gum and resins production

Chapter 6 – The Value chains analysis

6.1 Introduction: the value chain

6.2 The methodology

6.2.1 Methodological instruments
6.2.2 Implementation of the methodology

6.3 Resins and gum value chain

6.3.1 General outputs

6.3.2 Moyale Somali Woreda Value Chain Analysis

6.3.2.1 Political and geographical characteristics

6.3.2.2 Resins and gum value chain

6.3.2.3 Availability of incense

6.3.2.4 Actors

6.3.2.5 Summary

6.3.2.6 The final step within the country

6.3.2.7 Connection of Hudet Woreda with Moyale Somali Woreda value chain

6.3.3 Moyale Oromia Woreda

6.3.3.1 Kebele surveyed

6.3.3.2 Guchi and Gofa kebele: actors and specific characteristics

6.3.4 Moyale town: resins and gum in the local market

6.3.5 Dhas – Dire Woreda

6.3.5.1 Political and geographical characteristics

6.3.5.2 Preliminary Assessment

6.3.5.3 Dhas - Dire Woreda Resins and Gum Value Chain

6.3.5.4 Final consideration on Dhas and Dire Value Chain

6.4 The quality issue

6.5 Final considerations

Annex 1. Questionnaire for Survey - Value Chain, Black Incense - Yellow Incense - White Incense - Agarsu - Arabic Gum

Bibliography

Thanks
Abstract

The objective of this research was to assess an alternative to livestock as a livelihood option for pastoral people living in an area located in the southern lowlands of Ethiopia. This research assessed the value chain of gum and resins in four woreda of southern Ethiopia. They are Moyale Somali woreda in Somali regional state, Moyale Oromia woreda, Dhas and Dire woreda in Oromia regional state. The output of this research is the elaboration of three value chains. The first is a general value chain for all the assessed woreda, while the other two are more specific: one concerns the Moyale market and the other refers to the Dubluk market. The value chains take into consideration products that are locally available and well known by pastoralists in the area. They are mainly the gum arabic from Acacia trees (Senegal and Seyal types) and incense, both black and white, which is exuded by the dunkhal tree, from the Boswellia family. While analysing the different steps of the chain and the various stakeholders, a particular focus was on the first step of the chain: the collection of resins and gum by pastoralists. The aim of this study was not only to understand the value of resins and gum through the chain and profits gained by each stakeholder, but more importantly, the way in which pastoralists use the opportunity of resin and gum collection to diversify and increase their income sources, and how this could be improved upon.

The first chapter analyses what it means to be a pastoralist in the Moyale area and the main challenges of the pastoral livelihoods system. The second chapter describes how the policies of the central state, from imperial times until the present federal government, influenced pastoral access to rangelands and water sources and the way in which this contributed to the increase in conflict among the different groups in the studied area. In this chapter a particular focus is on the settlement. The third chapter describes the different ethnic groups living in the studied area and their management system to preserve resources and cope with the dry season. This chapter also considers the way in which relations among the various groups evolved dynamically, mainly in terms of negotiating access to resources, while faced with political and climatic challenges. The fourth chapter illustrates the physical context and the environment, the way it has been managed by pastoralists in order to preserve their lifestyle and the effects of the humanitarian system. The fifth chapter focuses on the description of gum and resins found in the studied area, their characteristics and utilization. Finally, the sixth chapter describes how the value chain methodology was applied in this specific context and the results of the research. Final considerations on the way in which pastoralists take advantage of this income opportunity conclude this research.
List of Figures

Figure 1  The Regions of Ethiopia  46
Figure 2  The Southern Lowlands of Ethiopia  86
Figure 3  The Genealogy of the Oromo-Borana  92
Figure 4  The Somali Genealogy  100
Figure 5  The Garri Moieties and Clans  101
Figure 6  Resins and Gum Value Chain in Moyale Somali Woreda, Moyale Oromia Woreda, Dhas and Dire Woreda  200
Figure 7  Moyale Somali Woreda Resins and Gum Value Chain  203
Figure 8  Hudet and Moyale Somali Woreda Map  205
Figure 9  Dhas and Dire Woreda Resins and Gum Value Chain  228

List of Tables

Table 1  Terms of Trade in pastoral sector, under various conditions  142
Table 2  Time needed for pastoralists to recover livestock after a drought cycle  156
Table 3  Quantity of gum and resins exported by Ethiopia and its value from 1999 to 2008  183
Table 4  Estimated hectares covered by gum/resins bearing species in different regions of Ethiopia  185
Table 5  Assessed resins and gum during the preliminary phase of the study  187
Table 6  Uses of assessed resins and gum  188
Table 7  Number of the interviews performed and characteristics of the informants  198
Table 8  Kebele of Moyale Somali woreda, from which resins and gum are collected  204
Table 9  Availability of resins and gum in the assessed kebele  206
Table 10  Villages from where resins and gum are collected  209
Table 11  Prices and quantities of gum and resins in the Moyale Somali Woreda Value Chain  217
Table 12  Costs and profit of the largest trader in Moyale  218
Table 13  Area and population of the assessed woreda in the Oromia side  226
Table 14  Increase of prices from collectors to traders in Dhas and Dire Value Chain  231
Table 15  Quantities and value of resin traded in the Dubluk market  231
<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
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<td>All Amhara People's Organisation</td>
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<td>AEUP</td>
<td>All-Ethiopia Unity Party</td>
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<td>AFD</td>
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<td>Amhara National Democratic Movement</td>
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<td>ASAL</td>
<td>Arid and semi-arid lands</td>
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<td>ASARECA</td>
<td>Association for Strengthening Agricultural Research in Eastern and Central Africa</td>
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<td>AU-IBAR</td>
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<td>BLSG</td>
<td>Booji-lime stone grassland</td>
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<td>CAFPDE</td>
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Acknowledgements

The idea of this research was framed during my staying in Ethiopia from November 2007 to June 2010, while collaborating with the NGO LVIA: 1 year in Moyale and 1 year and half in Addis Ababa. During my presence in Moyale I faced the drought at the beginning of 2008 and then I also worked during the emergency caused by the flood in March 2010. I assisted at different food relief interventions in the area, which were almost continuous during my time in Ethiopia.

I got aware of the importance of food aid as well as of other kind of assistance in time of emergency, though their constraints and distortion effects (Andrea Segrè 2004). Mostly I became conscious of the importance to increase the means and capacitate people in facing droughts or floods in a long term, before and after they happen. Different activities under this idea were promoted in Moyale by organizations, such as CARE, Save the Children, LVIA, often collaborating within the same consortium, others just trying to integrate their activities: improve the management of natural resources, as water and rangelands, strengthen the local economy, promote the human and animal health, improve veterinary service, etc.

Mostly I got interested in livelihoods, in studying income and food sources for pastoralists, and in particular in not-livestock options. This because they can contribute in sustaining basic needs, mainly when livestock capital is minimal or over-utilised, as during climatic stress times. Investigating further income sources didn’t mean for me to substitute livestock, because herding is part of a vital and dynamic production system of pastoral people living in ASAL (Arid and Semi Arid Lands) as Moyale area. Rather it intended to reinforce pastoral coping mechanisms and to improve the response to climate change and other challenges, by utilising complementary resources.

When I gazed into the horizon, all I could see was the savannah: red soil, bush and acacia trees….

The inputs of this research are coming from my direct field experience in the studied area, the long presence of NGO LVIA – Lay Volunteer International Association, in Moyale, for which I was working during the data collection of this research, discussions with Ethiopian colleagues, experts and friends, mainly Oromo and Somali, traditional knowledge from pastoral communities, lessons learnt from development programmes and literature.

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1 Proceedings of the course Policies for Rural Development at the University of Bologna, Faculty of Agriculture.
CHAPTER 1 – Pastoralism and livelihoods in Moyale area

1.1 Introduction

This research intended to explore livelihoods options for pastoral people living in an area of the southern lowlands of Ethiopia, surrounding Moyale town (3° 31’ 37.2” N, 39° 3’ 21.6” E). In particular, the studied area concerns the Moyale Somali woreda (Somali Regional State), the Moyale Oromia woreda, the Dire and Dhas woreda (Oromia Regional State). I decided to refer to this territorial space as Moyale area². People in Moyale area are mainly pastoralist, for what concerns both income sources and cultural system. They are depending mainly on livestock for their subsistence, food, income, capital, and also when other sources of revenues are present in the family, the ownership of some livestock is kept, in order to maintain a position within the pastoral community and a link with the pastoral culture. Even if people in the studied area don’t own animals, because they lack the means or they live outside the provenience area, all of them are pastoralist just because they define themselves like this. To be pastoralists in Moyale area means to consider important to herd livestock and to keep this as first objective, even when it is not possible to pursue it. While greeting people in Moyale area, it is a good rule to ask not only about the family members’ health, but also the livestock’s one. Pastoralist life style in Moyale area is keeping itself since centuries, thanks to an attentive management of the environment and the water, migrations during specific times of the year, customary systems to regulate access to rangelands and water sources. Sometimes soils used by pastoral communities seem at a first look to be empty and unutilised, but most probably they are just recovering to be utilised for the next dry season.

Moyale area is classified as ASAL (arid and semi arid lands) and is characterised to be lowlands and drought-prone area. Actually most of the pastoralism in the Greater Horn of Africa is practised in hot and arid low-lying areas, ecologically inhospitable environments with erratic rainfall patterns³. By the way, this is not the only challenge that pastoralists are facing in the studied area.

Since the imperial time, Ethiopian governments privileged the agricultural sector and the exportations, reserving water and better soils for this⁴. The pastoralist life system, practised in

² Moyale town is the location from where this research started; moreover it is the place where preliminary findings were elaborated. It is also the biggest centre in the studied area and it is the capital city of two, out of the total four woreda assessed by this research.
different areas of Ethiopia, in the north as in the south, and in the east as in west, was therefore compromised. On 1994, the Ethiopia government established a federal structure and tried to define clear borders among the different regions. Populations of Moyale area are regularly crossing the borders between Ethiopian regions and also entering in Kenya and Somalia, following not state borders, but water and rangelands pathways.

Moreover, the ownership of pastoral rangelands has been usually communitarian and not individual, therefore the central state system found difficult to assign a position for these lands within the central state classification, because this kind of arrangement was not forecast\(^5\). Also it has been complicated to count the pastoral population, because herders are moving across international borders and in some cases they recognize themselves as part of a group that may live between different countries. This is the case of some pastoral groups in Moyale area, as Borana who are living between Ethiopia and Kenya, and Somali who are moving between Ethiopia, Kenya and Somalia. Pastoralism has been generally considered a disaggregating element by the centralised state, mostly when the effort to organize different ethnic groups under a unified state was strongly pursued and different secessionist pushes were faced, as it is the case of Ethiopia\(^6\).

Recently the climate change is making harder the recovery time between a dry season and the following one. The average time among the different drought periods is becoming shorter. Nowadays, it is reasonable to estimate two-three years between two drought episodes instead of the six-seven years of precedent times. Because of this, pastoral life system is hardly challenged: the water sources and the rangelands don’t have enough time to recuperate their capacity, they are therefore much exploited and after some time their sustainability is compromised\(^7\). Because of a reduced access to water and rangelands, the quantity of livestock owned by each herder has decreased, while the increase of droughts’ frequency has caused an augmentation of animal diseases and deaths. In this situation, pastoralists have started to differentiate their income sources.

This research inserts itself in this logic and investigates further income sources other than livestock for pastoral households. The aim is not to substitute the role played by the livestock as income source. Rather it is to reinforce the capacity of pastoralists in Moyale to face

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challenges coming from external factors, by understanding the economical potential of other assets that are already present in the area and known by people there. This research addresses a particular economic activity that can be also promoted within the strategies to reduce food security in Moyale area. It is the collection and selling of gum and resins, naturally produced by acacia and boswellia trees, typical vegetation of savannah in that area. This research will show how gum and resin can provide an economic contribution to pastoral households in Moyale area, by analysing their market potential and their valorisation from its collection to the final exportation. By analysing this type of income source, the research will also address the definition of poverty as it is and is perceived in pastoral areas. The collection of gum and resins is actually mainly practiced by poorest pastoralists and the most vulnerable groups in Moyale area.

The applied methodology to get the objective will be the value chain analysis. Analysis’ results will be firstly descriptive: they will identify how the sector of gum and resins, from the collection to the final step of exportation is organized, operates and performs, the contribution of the different stakeholders to the chain and their perceptions, the movements of the items from Moyale area to the capital city, Adis Ababa. Secondly, recommendations will be provided mainly concerning the importance to share information with pastoralists, in terms of price, items demanded, quality, to make them aware of gum and resins economical potential for their family income, in order that they can operate conscious choices.

In this sense the research follows the ideas developed by the Nobel Prize in Economic Sciences Amartya Sen (1998). He goes beyond the fulfilment of basic physical or monetary needs to include an expansion of people’s freedom to do what they feel is the best for themselves and for their societies. This involves the broadening of people’s choices and the strengthening of their capabilities as economic, social and political actors. Moreover this approach calls for knowledge and resources to allow people to live long and healthy lives. As part of this analysis, it will be possible also to identify critical constraints, problematic issues and opportunities of intervention. This study hopefully can be utilised as a further tool in designing, implementing and evaluating pastoral livelihoods programmes, to improve not only the efficiency and the quality of the supply and the market chain performance, but also the position of the stakeholders, mainly the pastoralists. NGOs, humanitarian agencies and different branches of the government could be interested in reading the results of this research and promote some related interventions.

1.2 Pastoralism in Moyale area: more than mobility and livestock

Pastoralism is a production system that uses and exploits range resources, mostly associated with mobility and livestock. Markakis (2004) emphasises the double imperative of pastoralist mode of production, namely extensive land use and freedom of movement in order to (i) have access to dispersed, ecologically specialised and seasonally varied grazing lands and watering holes, (ii) provide forage for different livestock species, and (iii) afford a margin of safety against erratic rainfall. Pastoralism is traditionally linked to mobility: it is a system where people move from one place to another with their own animals, looking for water and rangelands, both in dry time and in rainy season. Pastoral people are not sedentary, but neither must they to be nomads in the strict sense of the term: pastoralists move to a certain number of areas, and even if this number could be quite large, the areas are often known by the reference pastoral group. Pastoralists, differentially than nomads, come periodically back to where they were before, because they follow already known pathways, ruled by traditions and communities agreements.

A high degree of resource utilisation mobility is important in order to respond to temporal and spatial variations in the distribution and quantity of rainfall and forage. The seasonality, together with the availability of water and rangelands, makes pastoralists move to a direction or to another one, by covering brief or long distances. Pastoralists move to match their needs based on the periodic supply of the nature, when the watering and grazing resources at that time in that area are insufficient, in order to expand their opportunities.

The positive effects of the mobility include an effective utilisation of the existing natural resources, by taking advantage of temporal and spatial variations in the distribution and quantity of rainfall and forage; a good nutritional status of the forage; an effective way of risk and disease management by evading drought conditions and potential diseases/pest outbreaks and avoiding known areas of infestation; a limit in the over exploitation of natural resources by reducing concentration of livestock and thus leading to conservation of the biodiversity.

The definition of pastoralism is strictly linked also with livestock, meaning that livestock is the main income source for pastoralists. Most of food, income, capital and living are deriving from animals and livestock products: at least the 50% of revenue (the total value of marketed production plus the estimated value of subsistence production consumed within the household) comes from livestock and related activities, and more than 15% of household food

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11 Pallottino Massimo, Intensive/extensive pastoral and agropastoral management, LV1A 2004.
energy consumption consists of milk or milk products formed by the household. A system is agro-pastoral when more than 50% of household gross revenue comes from farming and 10-50% from pastoralism (Swift 1988)\textsuperscript{12}.

Sandford states that a pure pastoral household receives at least 80% of its cash income through the sale of livestock and their products, and consumes at least 30% of its food intake in the form of meat, milk products or blood. An agro-pastoral household both has livestock herds and cultivates, but normally receives at least 75% of its cash income through the sale of livestock and their products. It normally (excluding years of the most acute stress) consumes most of its food in the form of self-grown crops, and is then left with few crop products to sell\textsuperscript{13}.

The food products coming from livestock are meat, fibres and milk, while the non food commodities are hides and wool. Moreover livestock may provide draft power and manure, then generating income for livestock owners. Livestock can also provide long-term security in epizootic case and droughts; finally it is considered an economical capital when some urgent and emergency expenses need to be done (funerals, payment of a debt, etc). Animals actually play an important role in determining the social status and the wealth of a household: the number of livestock owned determines important relationships among better-off and less well-off kin; and also in developing and maintaining social relationships and friendships with people in distant places through lending or exchanging stocks. Livestock and social ties engendered by livestock are fundamental to value systems also for people not owning anymore livestock. Livestock is therefore more than just a unit of production, because it is also a sign of social status, an access to insurance in time of stress, an indicator of relationships among members of communities. Animals are always present in economic and social negotiations, such as marriages\textsuperscript{14}.

This research has a socio-economic origin and even if it is stated that pastoralism is culturally based on livestock, this research is far away from the cattle complex, as it was defined by the American Anthropologist Journal\textsuperscript{15}. The argument was that the owning of large herds had

\begin{table}
\begin{tabular}{|c|c|c|}
\hline
| Year | Event | Description |
\hline
2007 | GL CRSP Pastoral Risk Management (PARIMA) | USAID-funded funded GL CRSP Pastoral Risk Management (PARIMA), 2007. |
2003 | Alessandro Dinucci and Zeremariam Fre | Understanding the indigenous knowledge and information systems of pastoralists, prepared by Alessandro Dinucci and Zeremariam Fre, Rome 2003. |
2000 | Morton & Meadows | Such a definition has the merit of de-emphasizing the concept of nomadism, long used as a term indicating a particular mobility strategy carried out by some pastoralists for obscure psychocultural reasons, which needed to be overcome in the name of civilization”. |
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\end{tabular}
\end{table}

\textsuperscript{12} This definition is quoted by a study of FAO – Natural Resources and Environment Department, entitled Understanding the indigenous knowledge and information systems of pastoralists, prepared by Alessandro Dinucci and Zeremariam Fre, Rome 2003. The study continues by saying “As highlighted in a recent study (Morton & Meadows, 2000), such a definition has the merit of de-emphasizing the concept of nomadism, long used as a term indicating a particular mobility strategy carried out by some pastoralists for obscure psychocultural reasons, which needed to be overcome in the name of civilization”.

\textsuperscript{13} Sandford Stephen, Too many people, too few livestock: the crisis affecting pastoralists in the Greater Horn of Africa, USAID-funded GL CRSP Pastoral Risk Management (PARIMA), 2007.

\textsuperscript{14} Cassini Rudi, Local Economy in Moyale Area - Pastoralism and Agro-pastoralism, LVIA 2003.

relatively little relation with their economic value and it was rather related to a cultural behaviour, common to people of East Africa, where most of the social rituals revolved around the possession of (mainly bovine) livestock. According to this view, the ownership of cattle among East African pastoralists fundamentally related to the cultural dimensions that influenced their behaviour independently from the economic rationality. East African pastoralists maximised the size of the herd because of these cultural reasons, even when the consciousness of impending climatic stresses advised for a timely selling out, in order to optimise the pressure on natural resources.

Later researches have however highlighted the economic dimension of East African pastoralism, underlining the complex institutional arrangements, the forms of labour specialisation, the differentiation that are at the base of the production as well as the livelihood systems, and the herd sizing strategies

Livestock has a cultural sense and expression: in Moyale area people are connected to a pastoral lifestyle by a cultural heritage. During the pastorialist Forum of Ethiopia in 2004, the definition of pastoralism by Baxter (1994) was quoted: “Pastoralism is an occupation and also a vocation, even for those who cannot successfully follow it. To be pastorialist could be a characteristic of an entire ethnic group, even if some members are not pastorialists by occupation. One pastorialist can be stockless as well as the owner of a large herder. The term pastorialist can be extended to individuals or households within groups holding such values who have been forced by destitution to depend on non-livestock livelihoods, but also wealthy households within such groups who have successfully diversified into trade, transport, agriculture and government employment. Pastoralists are who believe in the fundamental importance of livestock to their ways of life and self-perceptions”.

I decided to adopt this wider concept, when I refer to pastorialists in my research. This notion allows me to consider, in a more dynamic way, the impacts of climatic, social and political factors on pastorialists in Moyale area. If I was taking into consideration just people owning animals and moving with them at the time of this research, I would have been forced to exclude around 40% of people in Moyale area who are perceiving themselves as pastorialists. Moreover I would not have taken into consideration why they are defining themselves as pastorialists, and which are the salient aspects that make a person be a pastorialist in Moyale. Finally, I would also have disregarded what happened in the past years to justify people’s


choices to do not base their lives mainly on a mobile and livestock lifestyle. In this sense people living in Moyale area are pastoralists: this is the way they perceive themselves, the ownership of livestock is still one of the most important economic and social value and the relation with the environment is still based on a pastoral system. Only a small portion of land is due for agriculture, while the pathways of communication and trading are reproducing those one of animals’ migrations.

To face their increasing vulnerability to food insecurity, pastoralists started since long to diversify their income and food options. Many pastoralists left livestock-based livelihoods while others are continuing to pursue pastoralism through an array of adaptations. Daily labours, employment, petty trade, transport service, etc are complementary income sources for pastoralists living in Moyale area. Livestock is not anymore the only livelihood determinant of significance, and attention to other assets and resources is increasing within pastoral communities of Moyale. Although livestock ownership remains the backbone of pastoral economy, non-livestock options start to make up a significant proportion of households livelihoods. These include petty trade, the collection and sale of firewood, charcoal, poles and grass, the weaving of thatching materials for construction, etc. Livestock production has therefore become part of a broader household livelihood strategy. Livelihoods diversification has grown to be essential to avert the risk of food insecurity and cope with the changing nature of hazards in pastoral areas of Moyale. Otherwise if livestock is the main or the only income source, this dependency could put pastoral households in a serious situation of vulnerability, when some climatic stresses happen. The form of diversification practised in pastoral areas of Moyale is at the same time a sign of poverty and a strategy to face it.

In Moyale there are Government’s and NGO’s employees, traders and service transport providers, as well as daily labours and subsistence economy people, who are defining themselves pastoralists, even if they don’t move with their animals or they don’t own anymore some livestock. They are pastoralists, even if the concepts that collaborated to define pastoralism in the literature, such as mobility and livestock, don’t belong anymore to them. In Moyale pastoralism passed through different accidents that elaborated and made more complex its definition in this specific context. Pastoralism passed through the increasing scarcity of water and natural resources, due to climatic change and improved severity and frequency of droughts. This caused increasing conflicts on resources between different groups. Pastoralism in Moyale passed through livestock robbery, internal population

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18 Cassini Rudi, Local Economy in Moyale Area - Pastoralism and Agro-pastoralism, LVIA 2003.
movements, food and shelter humanitarian aid, development programs to improve infrastructures, Government settlements’ policies, allocation of resources to agriculture, etc.

During all those events, pastoralists in Moyale started to settle because they found an advantage the proximity to the markets, to allow children to attend schools, to get work in some humanitarian agencies. Some others lost their livestock because of the increasing of droughts’ frequency, robberies and conflicts, and they didn’t have enough time to recover their assets. Therefore they abandoned their lands and started to look for daily labour or they got into petty trade.

Pastoralists in Moyale started to rethink and adapt their coping strategies in order to survive at the changing conditions and minimise the risks to food insecurity. Traditional preventing and coping strategies were not found anymore sufficient. They mainly consist of keeping different livestock species, pasture surveying and migration, controlling mating of animals to coincide delivery with rainy season, culling of older animals to exchange for younger ones, selling livestock, change in food consumption and cutting expenditure, household splitting in dry seasons, moving animals closer to towns to increase milk sales, slaughter of newborn animals to save mother, etc.\(^\text{19}\).

Stephan Devereux and Ian Scoones reflect on the livestock ratio concept\(^\text{20}\). While in some pure pastoral systems based on consumption/sale, there may be some ideal minimum herd/flock size, this is not viable when the system is dependent on a wider economy and livelihood system. Classic studies on pastoralism were based on relatively closed structures, where the opportunities for trade, exchange and adding value to livestock production were limited\(^\text{21}\). They did not either account for the increasingly important interactions with cropping\(^\text{22}\). Contemporary livelihoods in pastoral areas are more diversified than before and integrated with the cash economy, as most of the households have access to sources of income, which are not derived from livestock production and marketing. An important source of household income is, for instance, the remittances from relatives living abroad, which sustain families through periods of crisis and may finance both livelihood diversification and the rebuilding of herds (through purchase), after a drought or disease outbreak\(^\text{23}\).

\(^{19}\) Riché Beatrice, Hachileka Excellent, Awuor Cynthia B., *Climate-related vulnerability and adaptive capacity in Ethiopia’s Borana and Somali*, International Institute for Sustainable Development, Save the Children, Care, USAID, ECHO, August 2009.

\(^{20}\) The ratio between the number of livestock and the number of households in the same area.


\(^{23}\) In this research, an assessment to calculate the remittances in pastoral household economy was not performed.
1.3 Pastoral livelihoods

1.3.1 Definition of livelihoods in this research

Livelihoods are all the strategies and ways used by people to survey or try to survey in normal and difficult periods, in order to reduce the risk and exposure to food insecurity and vulnerability. Livelihoods choices done by people, including the pastoral ones, are intended to maximise income and food sources. They can be affected by a big variety of natural, social, political factors as type of soil, natural resources availability, climate, markets and infrastructure access, conflicts, governments and external actor’s actions (Zamponi, 2005)\(^\text{24}\). Livelihoods choices affect the efficacity of the risk-minimising strategies, adopted prior the expected shocks in order to minimise the impact, and the coping strategies, steps taken after a problem occurred in order to reduce its impact, increase the capacity of people to face shocks and to react to them, and lose less assets as possible. Livelihoods diversification is an important strategy to decrease the risk to food insecurity, because if a strategy is not working, it is possible to try with another one and the combination of different options is by itself a coping strategy to protect the whole livelihoods’ system.

The key strategies in pastoral contexts aim to improve prospects for recovery by minimising the risk of unsustainable herd depletion, through sales or increased mortality during bad years. These practices include the accumulation and diversification of herd composition during years with good rainfall and the migration in search of water and pasture resources during bad years. At community level, informal mutual support network can serve as effective means of risk sharing within extended families, neighbourhood clans and ethnic groups, most of all if few members are in hardship. Funeral associations, such as Iddirs in Ethiopia, provide insurance for their members in the case of death or health risks\(^\text{25}\). The community-based risk management mechanisms depend on trust and reciprocity, but they are likely to break down in the face of large negative shocks affecting the whole community\(^\text{26}\).

\(^{24}\) Proceedings of the course History and Institutions of Africa, University of Bologna – Faculty of Political Sciences.

\(^{25}\) At the level of private sector, insurance is largely unavailable in Ethiopia to rural households, because of high delivery and premium costs, high risks faced by the population in terms of death, illness, agricultural production failure, job and asset loss, weak institutional and legal structures, inappropriateness of existing products, gaps of information about formal insurance mechanisms, etc. In particular agricultural production is especially hard to insure, since shocks are frequent and cannot be controlled, as well as production loss assessment is difficult.

A study of the Overseas Development Institute, funded by ECHO reveals which are the main coping strategies of pastoralists living in ASAL of North Kenya and South Ethiopia\(^\text{27}\). They include: increasing livestock and livestock products sales, slaughtering old/weak (also new born) livestock for consumption, labour migration to towns, household splitting (e.g. children sent to relatives), seeking agricultural labour/employment, increasing bush product collection and sale, livestock migration/herd splitting, minimising consumption, meals, expenses and gifts, wild food consumption, community funded water trucking to areas of good pasture, seeking relief assistance, storage of *ghee* (kind of butter) until dry season when prices are higher. The strategies to minimise the risk are identified as follows: mixing cropping and varieties (drought tolerant, early maturing), controlling breeding to coincide birth with the rainy season (mainly sheep), species diversification and splitting in dry season, water harvesting and conservation (birka, ponds, etc), grain/fodder storage, social support systems, increasing the pack of animals, increasing fodder production and conservation structures, as well as market facilities.

In 2009, Save the Children UK and USAID presented in Addis Ababa a livelihoods baseline survey, carried out in different regions of Ethiopia. The objective of the study was to trace the different livelihoods zones in Ethiopia\(^\text{28}\). The first classification done by the study was between highland and lowland. Livelihoods zones were identified within Ethiopian regions based on specific production and consumption patterns. Livelihood zone was defined as the area within people share broadly the same patterns of livelihoods, in terms of food, income source and market access. In order to establish livelihood zones, the following elements were mapped and analysed: markets, key natural resources, physical infrastructures, conflict areas, social services, seasons, income distribution, food sources, income sources (different exposure to risk is associated with different kind of income/food sources), expenditures patterns (a households food basket was analysed, including expenditures considered as essential, households priorities). The focus was to understand the resilience of people associated to the different livelihood zones. The identification of livelihoods zones aimed to reply to the following questions: how people live based on the shocks? How households in rural areas operate their economies and face shocks?

The study found that every livelihood zone is associated with different levels of vulnerability. Food purchases were minor in farming areas than in pastoral ones, because food and crop was

\(^{27}\) Chinogwenya Waddington and Hobson Matthew, *Understanding livelihoods to reduce the vulnerability of pastoral communities*, ODI April 2009.

produced also for own consumption. The quota within the income of food consumption decreased in healthy groups. In pastoral area, the livelihoods system was mainly based on livestock. More healthy groups sold camels and cattle during crisis periods, while the much poor sheep and goats. Poorest consumed less animal food than the wealthiest. Cash contribution from selling livestock was bigger in the healthiest than in the poorest groups.

Water was found to be an important element for all the livelihoods areas and in particular in lowlands, because of the specific kind of livelihoods, associated to pastoralism and livestock. When water decreased, the coping strategy was to move towards other areas. The contamination of water brought diseases and water losses for irrigation and other productive activities. Also the purchasing ability resulted negatively affected in the market as the scarcity of water could affect production and assets availability. Water-based conflicts were also observed, due to high competition over limited water resources, mainly in pastoral areas.

Moreover, the study found that non-livestock based livelihoods became very significant to pastoralists: non-livestock sources could be very important for the development of pastoral areas, mainly for pastoralists who abandoned pastoralism as occupation, included destitute pastoralists and poor pastoralists.

The study defines also the livelihoods protection threshold as the total food and income required to protect household livelihoods in medium/long term. One of the aim of food security programs, funded in Ethiopia mainly by USAID and the European Commission, is to build capacities and assets, by promoting income generating activities, as bee-keeping, crop production, livestock fattening, milk production, water irrigation, fruit production, wild products marketing, etc. The idea is to get a gain in the total income (food + cash) and using it to build and protect assets. The choice to adopt one livelihood strategy rather than another one is depending on surplus income rates, level of risk, turning of investments, maintenance cost, etc. Different livelihoods strategies were found by the study to be suitable for different livelihoods zone conditions.

Applying the household economy approach\textsuperscript{29} to their studies, Chinogwenya and Hobson find that in the Horn of Africa, included the studied area, it is possible to identify 4 dominant livelihood systems:

\begin{itemize}
  \item Livestock-based livelihoods are the most common, whereby households rely on rearing camels, cattle, sheep and goats. The survival, number and condition of livestock determine the household's wealth and the ability to continue its livelihood pattern.
\end{itemize}

\textsuperscript{29} The Food Economy Group – Save the Children, \textit{The practitioners’ guide to the household economy approach}, February 2004.
Mobility (usually within traditional migration routes) and the ability to access natural resources, like pasture and water, are fundamental to the continuation of this livelihoods.

- Agro-pastoral livelihoods combine extensive livestock rearing and rain-fed cereal production (sorghum, wheat, maize, barley, teff and other cereals) for household consumption. The area under agricultural cultivation is restricted mainly by the availability of labour within the household. Mobility remains important for these households and usually the women stay at home to follow agricultural activities.

- Sedentary farmers practice mixed farming, cultivating food crops along with modest sheep and goat herds. Wealth is determined by land holdings and oxen ownership.

- Ex-pastoralists have lost their livestock and depend largely on human labour. They are settled on the peripheries of major urban centres. Most remain on the margins of the economy, performing low-skilled labour intensive activities, including the collection and sale of bush products.

The poorest households in the first three livelihoods systems have a small productive asset base. Usually they try to combine meagre agro-based activities with petty trade and low value labour based activities, such as the collection and sale of firewood, charcoal, wild plants, poles, grass and weaving of thatching materials for construction. Given the increasing dependence on harvesting natural bush products, the environmental degradation is a serious risk. Dependence on own crop and livestock production is greater for the middle and better-off wealth groups, while the poorest wealth groups have lower dependence on livestock and higher one on multiple livelihood sources, as labour, gift, petty trade and bush products sales.

Stephen Devereux identifies in southern Ethiopia different livelihood pathways:

1. **Stepping up:** it is a commercial production system, where high value premiums (including from export opportunities) can be gained. This option requires capital, labour and inputs (notably veterinary care). This will only be available for a few. It can only be achieved by significant support, especially by meeting export requirements. Many current policies and interventions restrict this option – limits on mobility, for example, reduce productivity; taxation and market regulations restrict entrepreneurial opportunity; cross-border barriers limit trade to official (and often expensive) routes.

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30 Chinogwenya Waddington and Hobson Matthew, *Understanding livelihoods to reduce the vulnerability of pastoral communities*, ODI April 2009.
2. Stepping out: this is the most frequent pattern for the majority of people, characterised by cycles of accumulation and loss of herds and flocks, and incomes compensated by a variety of activities, including farming and off-farm activities. Diversification can happen over time (according to cycles), over space (with different enterprises in different areas) and between actors (within families and across communities). Strategies for diversification require both push (perhaps avoiding certain forms of relief) and pull (encouraging social protection measures that allow for building diverse livelihood portfolios; investing in infrastructure). The livelihoods so created may not be viable pastoralists in the old fashioned sense, but they will be viable alternative to destitution for many, and will definitely involve livestock as key productive asset. In the Somali region, many livelihood activities are related to livestock rearing and marketing of livestock by-products (pastoralism, agro-pastoralism, livestock trading), but many others are entirely independent by the livestock sector (selling clothes or charcoal, running a tea-stall, making mats, Koranic teachers).

3. Moving away: pastoral mobility decreased compared to the past. Once livestock are lost, restocking can become very difficult, and destitution, including movements to refugees’ camps, becomes an option. Large numbers of displaced pastoralists surviving in the camps don’t back into livestock-based livelihoods, if they are not supported by specific programs. This option is highly compatible with the diversification and it is reliant on the growth of urban sites for consumption. As a consequence of the above mentioned processes, Devereux identifies three key policy imperatives: the need of new market dynamics and the importance of linking market opportunities to local growth, the importance of diversification and expanding livelihood portfolios in ways that encourage local growth linkages, and the moving out as an option to establish new livelihoods outside pastoralism/livestock and avoid destitution.

**1.3.2 Pastoral livelihoods challenges**

Even if people having a pastoral or agro-pastoral livelihood constitute a good percentage of the overall population in Ethiopia, pastoral groups have been usually subjected to a multiple (political, economical and ecological) marginalization, which undermined their pastoral systems. Most pastoral areas are characterized by ethnic conflicts, erratic nature of rainfall,

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degraded rangeland areas, increasing internal pressure to control or privatize resources, scarcity of water and pasture, poor market and infrastructures, deterioration of livestock and production conditions, drought and floods, animal epidemics, general depletion of productive assets.

Pastoral livelihood is challenged by multiple factors that were summarized as the dilemma of the population growth. Within a given pastoral environment, the possibilities of increased productivity are limited to a slow pace, and normally lower than the natural demographic increment. The increase - or at least the upkeep - of the livelihood level of pastoral population can be ensured only by responding to different challenges, where the constraint is the rate of possible increase in productivity: either limiting the increase of the human population, or allowing an exit for the part of pastoral population exceeding the capacity of the system. The issue is made even more complicated as the resource base is not constant, but is shrinking overtime in terms of restriction to movements, subtraction of key resources, qualitative transformation (from grassland to bush, from woodland to degraded land) and immigration phenomena.

Livestock in ASAL and drought prone areas is subjected to decrease in quality and quantity during the dry season and mostly when a drought occurs. The livestock asset base of pastoralist decreases and the dependency on livestock alone makes the population more vulnerable to shocks and dependant on food aid. Moyale area is receiving since '90 a conspicuous amount of food aid, in particular in Somali side: up to 1999, 400.000 people received food aid. Following the climatic crisis of 2000, the population receiving food aid peaked at 40% of the total one inhabiting the Moyale Somali woreda, while it was around 25% in the following years.

In particular, Stephen Sandford highlights that:

- the pastoral human population is growing in East Africa at about 2.5% per year;
- a certain number of livestock is needed to support pastoralists. The minimum is about 5-6 cattle (or the equivalent in other species) per person in the case of pure pastoralists. For agro-pastoralists this minimum herd-size can be halved;
- the maximum total pastoral herd size (of all pastoralist animals taken together) is limited by the amount of livestock feed available. Where numbers temporarily exceed

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this limit, they soon die back. In many pastoral areas the present number of pastoralists multiplied by the minimum number of livestock required per pastoralist is already greater than this maximum total herd size (which is in fact declining because the surface area of rangelands available) and human population growth is continuously aggravating the imbalance;

- the area of land accessible for pastoral use cannot be significantly increased and it is shrinking, as a result of the expansion of cultivation and of wildlife conservation areas. Actually land for grazing and livestock production continues to be removed for cropping;

- overall herd productivity (yield per animal) cannot substantially improve unless the quantity and quality of feed is improved;

- the market prospects are not very favourable for increasing the unit value of pastoralists’ livestock: real prices of livestock products have not increased to compensate for lower numbers per household; moreover with small and decreasing herd/flock sizes, sales remain focused on immediate cash needs rather than on commercial off take;

- in East Africa the equivalence between different species is often expressed in terms of TLU (tropical livestock unit). A TLU is 250 kilograms live weight of any domestic herbivore. One head (averaged over sex and age) of Cattle = 0.7 TLU, Camel = 1.0 TLU, Sheep or goats = 0.1 TLU. Livestock ratios declined in pastoral households to a level below 3 TLUs/person;

- primary and secondary productivity, through range management, veterinary and other interventions, are not sufficient to make up the gap;

- pessimism about the future viability of livestock-based livelihoods is high, especially among women and young people;

- the recent series of droughts in Somali region, included Moyale area, caused widespread and sometimes irreversible losses of livestock in thousands of pastoralist households. Many of these households were forced out of livestock-based livelihoods and into urban areas or camps as a consequence, possibly permanently;

- for many the best option is exit, but in a way that does not involve destitution and displacement35.

The same author identifies different strategies in order to exit from this imbalance, as the emigration of part of pastoralists from pastoral areas, the shifting from cattle to camels and goats, better adapted to dry conditions, the reduction of livestock dependency, the development, within or near pastoral areas, of more productive and more sustainable rainfed or irrigated crop agriculture, the development of diversified income earning opportunities, the reduction of population growth, the promotion of range productivity, higher prices for pastoralists’ livestock products by reforming the internal marketing system and policy reforms (including land tenure).

Stephen Devereux and Ian Scoones state that the main source of vulnerability derives from the difficulty of pastoralism and related livelihoods to cope with a Malthusian crisis of pastoral areas, due to the government settlement policies, the hard climatic times and the frequent droughts. They clarify that the Thomas Malthus’ argument (1826) is indirectly relevant to the climate change debate: a geometrically expanding population would outstrip the expanding of the agricultural production, leading to starvation, conflict and war. Hardin (1969) state that the tragedy of the commons is the inescapable destiny of the open access arrangements in the management of natural resources, in all the cases where the positive utility of the individual’s access to the commons outweighs the cost paid by that individual. The herdsman, according to Hardin’s original argument, would have no reticence in adding one animal more to his herds. All the herdsman would behave following the same pattern, thus leading the commons to unavoidable destruction. The argument, strongly based on a Malthusian understanding of the relation between population and natural resources, endorses the view of private property as the only possible institutional outcome for the successful and sustainable exploitation of the available resources. With respect to climate change and conflict, James Lee argues that inter-state conflict will be in the coming years prevalent at higher latitudes, for the access over newly exposed resources. Intra-state tensions will be prevalent near the equator and they will concern scarce resources.

However the pastoral territory in the studied area is not a space regulated by an open access, rather by customary and ancient arrangements that made work the system since centuries, while preserving also the environment. Institutions at various levels were successful in regulating sustainable forms of access by concurrent users and cope with different challenges. Pastoralists across the Horn of Africa developed strategies to minimize the risks and cope

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37 Quoted by Pallottino in *Intensive/extensive pastoral and agropastoral management*, LVIA November 2004.
with predictable shocks in arid and semi-arid lands. Central to these has been the mobility and the herd management in order to seasonally access water and pasture. The ability of pastoralism in responding to their challenges is based on flexibility, in terms of herd size and composition, and also in the use of natural resources. By the way, a review of existing trends in the natural resource base of Moyale area highlights an increase of rigidity of the system. This is due to environmental transition towards bush climax in some portions of the territory and land degradation on others, to the encroachment of agriculture in plots of land with higher agro-ecological potential that are key resources for the viability of pastoral systems, and to the spreading of private rights based resource tenure patterns. Agriculture is at the same time competing for the most valuable resources utilised by pastoralism, but also it is working as a coping strategy for pastoralists who need to diversify their income. In Moyale area, farming practices are characterised by variability because of the uncertain climate, therefore they are mainly seen as a temporary complement to family livelihood. This pattern of agricultural activity is different from other kinds of tentatives, such as the permanent encroachment of the best resources that, if considerably expanded, can undermine the viability of the pastoral system in the area. The agricultural activities and more rigid tenure rights, based on the introduction of private ownership, concern at the moment only a limited part of the available natural resources in the area, but where this occurs, it includes mostly the key dry season grazing areas. Even if the droughts are becoming more frequent and the settlement phenomenon is more pervasive, this doesn’t mean that the expected output has to be the end of pastoralism. Rather it becomes more interesting to analyse how pastoralism is reacting to these changes and which strategies it is opportunistically adopting. The livelihoods diversification and the not livestock-based livelihoods analysis is an important step of this process. Pallottino adds that a possibility of expanding productivity would be to gain an income by diversifying into non livestock activities, only under the condition to maintain the pastoral resource base. Otherwise the improved productivity would be paid with the risk of endangering the viability of the system as a whole and therefore by a loss at medium term.

1.3.3 The vulnerability of pastoral communities and ways to cope with it in Moyale area
Pastoralism, as an economic and social system, is considered to operate effectively in dry lands areas, in low and highly variable rainfall conditions, managing the complex relationship

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40 Ibid.
between man and the natural environment. Pastoralist livelihood systems are resilient, but at the same time these systems are also very vulnerable\footnote{UN OCHA Pastoralist Communication Initiative, Proceedings of the Workshop The Future of Pastoralism in Ethiopia - Ethiopian representatives and leading international thinkers deliberate over the state of pastoralism, making a new analysis of potential futures, Addis Ababa 2006.}. During the workshop “The Future of Pastoralism in Ethiopia - Ethiopian representatives and leading international thinkers deliberate over the state of pastoralism, making a new analysis of potential futures”, it was discussed about the different kinds of risks faced by pastoralism in Ethiopia, nowadays\footnote{Ibid.}. The first kind of risk analysed was the socio-political one. The conflictive relations with formal state institutions were highlighted, and the causes of this were traced in the mobile nature of the pastoral territory. Customary arrangements were considered increasingly challenged by the modern institutions, within the process of state structures legitimisation and territorial control. At the same time, pastoralists were found in mobile and changing relations with neighbouring communities, be they of an agricultural or pastoral nature.

The second kind of risk was related to the economic aspects of the production system: pastoralists were found self-sufficient for almost all the subsistence goods but in need to rely on markets for carbohydrates (grains) and other goods. The third kind of risk was agro-ecological. Pastoralism developed in poorly endowed agro-ecological settings, where more intensive, agriculture based production systems were unfeasible. The extreme variability of weather conditions was a feature of the environment and pastoralism elaborated coping strategies to face those specific agro-ecological characteristics and their fluctuation. Such variability in the environment dictated the most salient features of the pastoral systems: flexibility and adaptability. In order to survive, pastoralists timely reacted to changes. By the way, the frequency and intensity of droughts increased, therefore the traditional coping strategies were considered not any more sufficient to face these climatic stresses.

Pastoralism follows cycles of expansion and contraction that, beside the typical infra-annual dry wet succession, have a longer rotational phase between richer periods, with more abundant rains and plenty of palatable vegetation, and drought periods, with a contracted base of natural resources and much smaller stock. Within the wider loss recovery cycle, the critical moments for the life of the herders are those at the minimum level that determines the asset quantity from which the recovery period will take-off. The recovery periods gradually lead the pastoral communities from a phase where the asset base is eroded in order to ensure survival, to the accumulation phase. The factors determining the cycles are very diverse:
• Agro-ecological elements, related to the rains and the quantity/quality of the vegetation.
• Socio-political factors that determine the resource base available for pastoralists.
• Endogenous and exogenous demographic trends.
• The accessibility to markets.
• The general institutional environment according to which pastoralists can be made able to receive more or less support during times of stress (including the relief).43

As come out by field work, pastoral households in Moyale area are vulnerable to:
1. Intra and inter-annual rainfall variations and low rainfall, resulting in pasture and water shortages. This worsens animal body conditions, reduces productivity, milk availability and livestock prices.
2. Conflicts and tensions among the different groups living in the area, causing displacements, livestock robberies, destitution, cutting off access to markets and other infrastructures, to grazing and water sources.
3. Livestock disease outbreaks with very limited veterinary services and access to drugs.
4. Reduced mobility across the Kenya-Ethiopian border, which shuts off the main livestock market for livestock.
5. Over dependence on livestock sales as the main source of income.
6. Weak and poor government structures, poor social services and shortage of qualified personnel.
7. Poor infrastructure, such as transport, communication and market.
8. Debts incurred in the dry season, which make uncertain for poor groups to pay back afterwards.

In order to monitor the risks faced by pastoralists in livelihoods protection, the indicators taken into consideration are: rainfall performance, timeliness and distribution; pasture and water availability; livestock prices, demand; type of animals in the market (breeding animals, pack animals, etc); milk production and prices; staple and non staple food commodity prices, especially maize and sugar; disease prevalence, both human and livestock; adopted coping strategies and their effectiveness; security situation.44

44 The humanitarian system working in Ethiopia included these indicators within the Early Warning System, in order to monitor the potential and the deepness of a dry period.
The capacity to cope with shocks depends on human skills and available resources. It reflects the settings that a household finds, but it is also a function of the assets held by the household and the returns to these assets. When faced with a shock, households adjust production, labour, assets, transfers and consumption. The households’ success in pursuing and attaining insurance against food-security risks play a large role in determining the outcome of the subsequent shocks. A threshold below looms a poverty trap when households face a difficult decision: whether or not to sell assets, which could lead to permanent income loss and reduced consumption, with potential health or life consequences.

In Moyale area, the risk minimising strategies to secure livestock-based livelihoods, as come out by the field work, are:

1. Diversification of herds and species - owning different types of animals. The shoats and cattle are considered as protection for the camel, which is the most valuable animal in the area, so shoats and cattle are sold before camels.

2. Seasonal surveying and migration, according to pasture and water availability, and based also on the different types of animals.

3. Castration - castrating livestock follows a faster growth and fattening process, becoming valuable and resistant to dry spells. Not castrated animals during wet seasons tend to spend some time in an excited state looking for mates, therefore do not eat as much as other animals. They become, then, weaker for the dry season.

4. Mating - mating for camels is sometimes controlled so births do not occur in the dry seasons, when the calves’ survival may be more precarious.

5. Exchanging animals - selling older and bigger and therefore more valuable animals and buying younger cheaper ones. The price difference will then be used to buy basic necessities without reducing the overall herd size.

6. Storing in trees when moving in order to decrease the travelling load.

In Moyale area, the coping strategies for facing shocks and protect livelihoods are:

1. Animal sales, in order to increase income and access food.

2. Changes in food consumption towards cheapest ones and cutting expenditure.

3. Splitting the household - men and older boys migrate with the herd, children are sent to urban relatives or richer pastoralists to reduce the expenses of the remaining household.

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4. Digging of roots – this happens for milking camels in dry times to increase their access to browse and therefore maintain milk production.
5. Increasing milk sales - It happens that pastoralists move some milking animals closer to town, in order to sell milk and buy cereals.
6. Slaughtering newborn animals, to get more milk and protect the mother in drought times.
7. Wild food consumption.
8. Social support - Gifts and loans will be increasingly sought in bad times. Gifts will mainly be from relatives and loans from shop owners and business men. Islamic requirement (in Moyale Somali area) is very important also for those affected by a shock.

1.3.4 The pastoral vulnerability as a dynamic and historical condition

When the capacity of households to cope is strengthened, the risk they could face is reduced. As the field experience demonstrates, the poor are very aware of the risks they face and have for generations employed communal strategies for risk management and risk coping. The vulnerable to food insecurity are inclined to seek a balance of outcomes through strategies that take into account a series of trade-off between long and short term concerns.

The risk to food insecurity faced by the population is dependent on hazard and vulnerability:

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\text{Risk} = f(\text{hazard, vulnerability})
\]

The risk is the extreme food or livelihoods insecurity, while the hazard is the location and the magnitude of the shock and the vulnerability context is the economic system at local and regional level. Part of the vulnerability is the coping strategy, the capacity of people to face shocks on their own. The vulnerability context is relatively stable, based on production/market system and wealth groups (economic structure) while hazard is changing year by year, season by season, as well as the risk. In the same zones, households have different incomes and food sources as well as consumption patterns. A shock has different effects on different wealth groups, consequently vulnerability is dynamic: different wealth groups are vulnerable at different levels and only a percentage of the population during shocks has a livelihoods protection deficit. Moreover, the most vulnerable are not always the poorest: during shocks, livestock production decreases, but the poor are not highly dependent on livestock because they don’t have it.\(^{46}\)

Pastoral conflict, for example in the form of cattle rustling, constitutes a critical test of the environmental scarcity. Access to water in particular has been governed by traditional use rights. “Water sources are usually owned by individuals or clans, but use rights traditionally

\(^{46}\) Ibid.

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override ownership rights. This means every pastoralist has the right to use a well, also on the land governed by a neighbouring ethnic group. During drought periods, the negotiation to access water increases. With the creation of boundaries and the demarcation of territories, it has been increasingly hard to maintain traditional arrangements of water and land sharing. In all the south of Ethiopia, water points were territorialized after the creation of new boundaries and traditional use rights were violated. This process, together with the scarce resources’ availability, increased the level of conflict and violence.

Governments regarded for many years pastoralism as backward, economically inefficient, environmentally destructive and not suitable to be easily recognized inside a stately structure. Particularly when states are in a process of development and consolidation, the movement of population poses a problem in the control of territory. Moreover the states have played a biased and limited role in establishing, protecting and recognizing property rights in Africa’s rangelands. Pastoral people occupy a large portion of territory and they have been uncomfortable with administrative and political boundaries that limit their historic movement ranges. Pastoral areas are often located far from the political centres of the modern state, and in the case of the studied area, they also stretch across international boundaries. Azarya discusses the implication for pastoralist peoples in Sub-Saharan Africa during the establishment of the nation states, in terms of marginalisation and pauperisation. He finds continuity between their implication in the wider social change during pre-colonial times and the contemporary developments. The relations of pastoralists with the modern nation states are often conflictive, as Blench points out: “Governments are usually controlled by settled populations who regard mobile pastoralists as a threat or as the location of famines and emergencies. As a consequence, both governments and food-aid providers have tended to characterise arid rangelands as basket cases, requiring assistance at regular intervals, but not as potential zones for livestock and commercial development. The consequence in turn is that pastoral peoples in rangelands feel they are neglected by government and are thus hostile to it.

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even when there is no larger conflict in progress. Relations between state and pastoralists thus tend to be confrontational at the best of times.\textsuperscript{51}

Governments are traditionally suspicious of nomadic societies, which in East Africa and in Ethiopia as well are mostly located around politically sensitive borderlands. Moyale area is at the border between 2 regional states of Ethiopia, that are Oromia and Somali, and between Ethiopia and Kenya. Any evidence suggesting that pastoralism is unsustainable can support efforts by governments to settle pastoralists, in order to pacify and control them. Pastoral areas in Ethiopia are the one with fewer investments in social services and infrastructures. According to the Pastoralist Forum of Ethiopia in 2007, the pastoral areas of Somali and Afar regions had the lowest rate of people able to read and write: 35.4% for men and 24.4% for women in Somali, while 24% and 19.1% in Afar region. Regarding access to health services, 65.5% of children under one year have been vaccinated against measles, compared to 35.7% in Afar and 19% in Somali. The proportion of under-five vaccinated against the six targeted diseases is 54% nationally, but 25.1% and 2.5% in Afar and Somali regions respectively.\textsuperscript{52}

Development policies also pushed agriculture production up to areas traditionally very important for pastoralists. Pastoralists had to move to less productive ones, reducing their ecological capacity to survive during difficult periods and losing their economic autonomy. The decreasing of mobility and flexibility, because of farming settings, conflicts on resources, legal restrictions, etc is another factor endangering the sustainability of pastoral system. Climatic change is also worsening the situation in pastoral areas, in terms of hardship of dry seasons and frequency of droughts. Weather changes, particularly droughts, affect resource availability and increase pastoral conflict. According to the World Meteorological Organization, climate is the statistical description (mean and variability) of conditions such as temperature, participation, and wind over a period of 30 years. Climate change is a statistically significant and persistent (decades or longer) variation in the mean or variability of climate (Cioffi-Revilla, 2010).\textsuperscript{53} Climate change is affecting the weather, and climate


\textsuperscript{53} Cioffi-Revilla Claudio, \textit{A Methodology for Complex Social Simulations}, Journal of Artificial Societies and Social Simulation Vol. 13 - 1, January 2010.
change, especially in a hotter and drier East Africa, is leading to more frequent drought\textsuperscript{54}. Different kinds of resources are affected by changes in weather at different levels.

A short-term shortage of water is different from a long-term drought. There is a minimum subsistence limit within pastoral systems. While facing droughts, traditional coping mechanisms, as migrations, selling stock animals, regulating access to lands near to the habitations only to certain types of animals (as lactating ones), can become inadequate and anymore insufficient, so the lack of a single rainy season can lead to major crisis. For this vulnerability in pastoral areas is becoming bigger.

The history of climatic disasters affecting Ethiopia and in particular lowlands inhabited by pastoralists is long, starting in 1973, when a big famine hit Ethiopia and gave the beginning to a cyclic climatic trend of droughts: 78/79, 83/84, 87/88, 90/91, 96/97, 99/00, 2004/2005, 2008. The immediate effects of a drought are the decline in per capita herd sizes for most pastoralists. The time between one drought and the other is intended to be a recovery phase of the normal cycle. Therefore, when the rainfall is from normal to good in most of the area, crops cultivation are quite good, price in the market are more stable, migrations with livestock follow the normal pathways, livestock capital could increase and be kept for the next difficult time. Generally, during this time livelihoods strategies are protected and assets are rebuilt. When a drought happens, it takes several seasons for herds to rebuild to a point of food security or at least before the occurring of the next drought. Until reaching this point, milk is scarce and the sale of stocks to obtain staple cereals is limited. The south of Ethiopia is very affected by droughts: they are lasting long with big impacts on humans and animals. The south of Ethiopia has been hit also by climatic opposite phenomena, which are floods, in 1998 and in March 2010.

1.4 Overview on the international programmes to face vulnerability in pastoral areas of Ethiopia

The humanitarian system in the studied area relies on cycles of assessment and response associated with rainfall seasons and vulnerability’s level. Assessment are made through the analysis of the Early warning Systems (EWS) indicators and disseminated by seasonal reports. Responses are developed through appeals to fund and then the assistance is delivered.

\textsuperscript{54} Christopher K. Butler and Scott Gates, \textit{African Range Wars: Climate, Conflict and Property Rights}, University of New Mexico, Norwegian University of Science and Technology (NTNU) and Centre for the Study of Civil War, 2010.
The identification of appropriate interventions passes through the consideration of four stages of drought cycle: normal or mitigation, alert or preparedness, emergency or relief assistance and recovery or reconstruction. For each stage, different kinds of interventions are adopted, in order to properly manage the risk of drought and protect livelihoods. In normal situation, the interventions are mainly focusing on infrastructures development and capacity building; during the alert time, the targets are the human and animal health, the stockpiling of cereals, the rehabilitation of important water systems, the livestock marketing and feeding. During the emergency there are direct interventions on animal and human health, emergency water supply systems, food aid; finally during the recovery time, the main activities are concerning natural resources management, restocking, rehabilitations of dams, capacity building, food or cash for work, etc. The livelihoods component is better promoted during the normal time, but it is possible to work on it also during preparedness phase and recovery. During my field work, I didn’t ever see Moyale area in the mitigation phase.

In pastoral areas of Moyale, different development programmes have been established to promote livelihoods and in particular the based-livestock ones. The livestock sector presents different constraints: shortage of animal feed and water, poor livestock husbandry practices and management, animal diseases, high rate of mortality and morbidity, scarce disease surveillance, poor livestock markets and infrastructures, lack of research and update of epidemiological information, inadequate policies and regulations, insufficient number of veterinarians, experts and veterinarian manpower, lack of setting standard and quality control, climate change, etc (Speech from Ismael Mohammed, Somali Region Agriculture Bureau). Therefore the development programmes were concentrating on improving the veterinary services, the animal health, the vaccination, the treatment, the capacity building of para-veterinarians. The aim was to improve animal conditions and make pastoralist able to reduce the number of livestock diseases and dying, in order to increase the production and the quality of livestock by-products, get a better price in the market, and keep livestock as an economical and social capital.

Recently, the programmes started to address complementary income sources, which could compensate the decreasing value of livestock during dry seasons and critical climatic periods. Promoting complementary income sources aims to face the vulnerability of pastoralists and

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56 Proceeding of the workshop Validation of Pastoral Atlas – Somali Region organized by LVIA, funded by European Commission, Jijiga, February 2010.
help in considering pastoralism as a viable and effective economic production system, able to adapt and to create viable alternative livelihoods, in order to face their challenges and to make a contribution to the economy of the country. Social protection, service provision and support of alternative livelihoods can enhance the resilience of households to the effects of climatic stressing periods.

1.5 Promoting livelihoods to sustain food security

The World Food Summit of 1996 defined food security as existing when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life. Commonly, the concept of food security is defined as including both physical and economic access to food, which meets people's dietary needs as well as their preferences. Food security is built on three pillars:

- Food availability: sufficient quantities of food for a correct nutrition, available on a consistent basis by means of internal production, importations and food aid.
- Food access: resources and capacities (physical, economic and social) to obtain (produce, buy, barter, give/receive gift, etc) appropriate food for a nutritious diet and the sufficient and safe stability of this access over time.
- Food use: use of food for an appropriate nutritional diet and energetic balance, based on knowledge of basic nutrition elements, as well as adequate water and sanitation.

These characteristics are determined by physical, economic, political and cultural conditions within communities, and they could be undermined by shocks such as natural disasters and conflicts.

58 On 2000, all the 192 United Nations members states and 23 international organizations agreed to achieve, by the year 2015, the 8 Millennium Development Goals (MDGs). The first of them was "eradicating extreme poverty and hunger". In particular the objective intended to halve the number of malnourished and to reach a figure of 410 millions. In 2002, with “Reaching the Rural Poor: A renewed Strategy for Rural Development”, the World Bank recognised the central role of agriculture and the entire rural space in rural development, to fight poverty. It identified 4 areas of main interest: agriculture, infrastructures, institutions and policies, natural resources managing.
59 Some risks can affect simultaneously many people in the same location, such as policy shocks (trade or taxation policies) or social instability and climate change, while other ones only some households or individuals within the same community, such as illness, accidents, disability, loss of property, etc. They can depend on gender, age, social status, occupation, geographic location. These shocks can catapult households deeper into poverty, making a recovery difficult or impossible. They emanate from physical (natural phenomena such as level and variability of rainfall, fertility of soils, distance and quality of infrastructures), social (existence of behavioural norms, social cohesion), political/legal (the set of rules) and economic (level, distribution and variability of returns on assets) settings in which households find themselves.
Food security is a complex sustainable development issue, linked to health through malnutrition, but also to sustainable economic development, environment and trade. The availability of food depends not only on internal production, but also on importations and external aid, mainly in African countries, as the case of Moyale area. Agricultural production and stock of commodities quantify the availability of food in a geographical area, while the demand and the access to food identify the wealth and the nutritional state of people. Food insecurity is the absence of food security and it applies to a wide range of phenomena, from famine to uncertain food supplies.

Food security in Europe is generally combined with hygienic-sanitary qualities and nutritional characteristics (food safety), but the studied area is classified by the OECD (Organization for Economic Cooperation and Development) as a least developed country. The expenses for food are ranging between 60% and 80% of the total income (both formal and informal), therefore food security concerns mainly the availability and the access to food. An adequate diet in this area depends on food prices, kind of food, family size and distance by market. In pastoral livelihoods zones, the market provides access to cereals and food. People are depending on the markets to sell their production, gaining an income and purchase what they need. In hard climatic periods, poor households consume less food and shift to even less-balanced diets.

It is possible to distinguish between chronic instability and transitory one, to define if the incapacity to meet food needs concerns a permanent condition or a temporary one. The last one is the case of droughts or cyclic times, when seasonal food deficits occur and stocks exhaust. The stability over time is linked to the risk of change of food security dimensions: if risks are frequent, states of food insecurity can last longer, more than seasonally, and create food emergencies. FAO (2006) classifies countries in long, medium and brief frequency of food security and it applies to a wide range of phenomena, from famine to uncertain food supplies.


The quota of income for food decreases when the income increases: nutritional needs change and they relatively decrease, because of the Engel law. It states the existence of a biological threshold to the consumption of food: the demand of food items increase less than proportionally to the increase of income. The elasticity of food to income is very low and the total demand is oriented towards the consumption of other kind of items, whose elasticity to income is higher.

Recent food price and economic shocks have further jeopardised the food security of developing countries, pushing the estimated number of undernourished people over one billion. The poor, depending on food purchases, are highly vulnerable to market risks such as high and volatile agricultural prices, which peaked in 2007-2008. The global financial crisis and economic recession in 2010 furthermore stressed the poor in developing countries, where the result is a decrease in economic growth, inflow of aid, remittances, job opportunities, credit, demand for agricultural commodities, etc.
food crisis. In Sub-saharian Africa, emergencies of long frequency lasting more than 15 years are in Ethiopia, Sudan, Congo, Angola and Somalia. Amartia Sen's work on entitlement theory inspired the livelihoods approach. The theory recognises that famines occur, not only from lack of food, but also from systematic inequalities that prevent some people from obtaining access to that food. While carrying out livelihoods programmes, different development organizations utilise the sustainable livelihoods frameworks (SLF), developed by the Department for International Development (DFID). They give emphasis on how and why starvation can develop for particular groups without a decline in food availability. Assets, institutions and processes enable households to make a living. The SLF has 5 components:

- **Capitals**: different assets provide the bases that people draw on to make a living (human, financial, physical, natural, social and political);
- **Policies, Institutions and Processes**: these influence and mediate the ways that households can use the assets available to them;
- **The Vulnerability Context**: it describes the external environment in which people exist but which they cannot control and refers to how long-term trends, seasonality, natural and man-made shocks that can affect livelihoods;
- **Livelihoods strategies**: based on the interaction of the above three set of factors, households are able to carry out different livelihoods strategies, such as farming, employment or trade;
- **Livelihood Outcomes**: these refer to how successful livelihood strategies have been in ensuring access to food, income or any other measures of welfare.

### 1.6 Pastoral development: strategies and approaches

Different approaches were developed for addressing the issues that were felt crucial within pastoral issues in different times. As in other fields of development aid, the World Bank played a key role in defining the mainstream approach. The main concern during the fifties and the sixties was the decolonisation process and the establishment of modern nation states.

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65 *The sustainable livelihoods approach*, British Department for International Development, 1997. Starting from 1997, DFID integrated this approach in its program for development cooperation. Livelihood thinking dates back to the work of Robert Chambers in the mid-1980s. Chambers developed the idea of Sustainable Livelihoods with the intention to enhance the efficiency of development cooperation. His concepts constitute the basics for the Sustainable Livelihoods Approach (SLA), as it was developed by the British Department for International Development (DFID).
Therefore, the focus was on the institutional development. Pastoral areas were considered in terms of economic investment potential. The evolving interest of the World Bank in the subsequent period was schematised by de Haan (1994) in four main phases:

(i) The Ranching Phase (mid sixties to early eighties), with the transfer of western ranching technology to arid tropical areas; this phase included heavy capital investments (fencing, water development, exotic breeds introduction, etc.) on ranches.

(ii) The Range/Livestock Project Phase (mid seventies to late eighties) focused on the development of communal areas through funding water schemes, roads, markets and other infrastructure. Projects in this category had a strong involvement in grazing and land rights adjudication (to pastoral groups). Key early examples of this category are the Bank-funded estern Senegal projects, the Somalia central rangeland projects, the Kenya group ranches and the communal area components of the Botswana livestock projects.

(iii) The Pastoral Association Phase gave emphasis on the development of pastoral organisations. This phase distinguishes itself from the previous categories in giving more attention to the overall policy framework and in recognizing the need of mobility and flexibility in grazing rights allocation. This phase is characterised also for a less rigid establishment of specific land tenure rights and grazing control, and more attention to the organisation of herder managed services such as animal health. For example, before any development of water points, a key condition has been the transfer to pastoral organisations of user rights and responsibility for their management and maintenance. This key condition has been an important part of the dialogue between the World Bank and the concerned governments.

(iv) The Integrated Natural Resource Management phase is evolving from pastoral association projects, to give more comprehensive attention to natural resource management and involve all the stakeholders (cultivators, traders, etc.) in the programmes. This phase is characterized by the support to private institutions for the provision of services, the management of resources and the development of incentive and institutional framework.

In the last 20 years the focus was on the pastoral governance development. This phase recognizes the importance of strengthening the national institutions specifically devoted to pastoral development, and then of embedding this attention into the wider decentralisation.

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processes. The acknowledgement of the existence of multiple stakeholders is reinforced within the framework of a re-legitimisation of the public sector.\footnote{Pallottino Massimo, *The Interplay of Power and Knowledge in Planned Social Change: From Policy Making to Project Planning: a Case from Southern Ethiopia*, Université de Genève, Institut universitaire d'études du développement, Thesis No. 19, March 2007.}
CHAPTER 2. Political representation of pastoralists in Ethiopia and effects on the pastoral system of Moyale area

2.1 Introduction

The focus of this chapter is mainly to identify the location of policy-decisions, the factors influencing pastoral policy and the effects on the pastoral system of Moyale.

Ethiopia is formed by central highlands, which gradually become lowlands. The expansion of centralised political power until the actual borders started from the central highlands since the middle of 19th century\(^\text{68}\). The lowlands are considered the most remote and peripheral areas of the country, geographically as well as politically. Pastoral lands cover Ethiopian lowlands, which are 78 million hectares, nearly 60% of the total land area of Ethiopia\(^\text{69}\). They are divided into five areas: north-eastern, eastern, southern, south-western and western.

The pastoral land in Ethiopia is generally classified as qolla, meaning dry lowland, characterised by an altitude of less than 1500 meters and an average yearly precipitation of 400-700 mm. The rainfall is low, erratic in distribution and varying from year to year, while the climate is generally hot. Using rainfall and temperature regimes, the climate of Ethiopian pastoral lowlands is broadly categorised as: arid (64%), semi-arid (21%) and sub-humid (15%)\(^\text{70}\). The pastoral land is further characterised by expansive and undulating plains, often in the proximity to perennial rivers, such as the Abbay, Tekeze, Omo, Wabeshebelle, Baro-Akobo and Ganale-Juba-Dawa rivers.

Around 8 million or 10% of the Ethiopian population, organized in diverse pastoral communities, live in the sparsely populated arid and semi-arid regions, and are highly mobile in response to seasonal water and animal graze requirements. Out of the total population

\(^{68}\) The history of the kingdoms of Ethiopia starts from a mythical foundation, as reported by the ancient Kebre Negast (The Book of Kings), anchored to Menelik I, son of the King Solomon and the Queen of Sheba (known in Ethiopia as Makeda). The historical Abyssinia corresponds to the central highlands located in the modern Tigray, Amhara and Northern Shewa. The highlands of Ethiopia, inhabited by peoples speaking similar languages (Tigrinya and Amharinya, both belonging to the family of semitic languages, and descending from their ancestor Ge’ez), represented a political centre that developed a relatively homogenous identity and socio-political system. This has been represented by the word habesha, used with a sense of unity. The tightly hierarchical socio-political system of Ethiopian highlands developed peculiar features and a feeling of insulation, also based on the fact of being a Christian kingdom, surrounded by other religions. It also entered in competition with all the people inhabiting neighbouring lowland regions.


inhabiting the lowland area, 93% are pastoralists and agro-pastoralists, while the remaining hunter-gatherers and cultivators.\footnote{Chinogwenya W. and Hobson M., \textit{Understanding livelihoods to reduce vulnerability of pastoral communities}, ODI April 2009.}

In Ethiopia pastoralists and agro-pastoralists are minorities made up of 29 different ethnic groups belonging to cuscitic and nilotic stock. The major ethnic groups who are occupying pastoral areas are Somali, Borana Oromo and Afar who have their own systems of election and controlling their own leaders, as well as of managing natural resources, such as water and grazing areas. They are living in the south eastern, southern and north eastern rangelands respectively. The \textit{heera} of The Somali, the \textit{gada} of the Borana and the \textit{finna} of the Afar are stable pastoral institutions and resilient organizations on which pastoral production systems have been self-sufficient for centuries. There are also smaller groups such as Nuer along the Baro river in the west and the Kereyu Oromo near the Awash National park in the central part of the country.\footnote{Yacob Arsano, \textit{Pastoralism in Ethiopia: the issues of viability}, in Proceedings of "National Conference on Pastoral Development in Ethiopia", Organised by the Pastoralist Forum Ethiopia, Wabi Shebelle Hotel, Addis Ababa, February 2000.}

The most common agro-pastoral system in pastoral areas of Ethiopia is sorghum/maize/livestock farming. In this system the sorghum and the maize stover (crop residue) is usually harvested by hand and stored for feeding valuable classes of animals such as milking cows. In the higher rainfall areas some agro-pastoralists grow more high value crops such as peppers, tomatoes, etc, using water harvesting and spreading. Small scale irrigation is increasingly used to establish private and groups farms for growing vegetables, fruit, grain and fodder. In agro-pastoralism, livestock herding and farming activities can compete on the same stock of resources in terms of land and water.\footnote{Bassi M., \textit{Enhancing equity in the relationship between protected areas and local communities in the context of global change - Horn of Africa and Kenya, Synthesis of lessons learned}, Consultancy paper, 2003.}

Changes in pastoral production systems, especially the practice of farming, started long ago, and a shifting from open range herding to privatised range enclosure was registered in several Somali pastoral areas, while mixed farming practices have emerged also in Oromia Region, as in Yabelo and Mega districts.\footnote{Pallottino Massimo, \textit{Intensive/extensive pastoral and agropastoral management}, LV1A November 2004.}

Pastoral areas with their high degree of climatic variability and unpredictability have required flexibility, mobility and adaptation to different opportunities, but nowadays income sources diversification seems to be a more relevant issue. The causes of this are traced by most of the
literature on settlement, population pressure, conflicts and the recurrent droughts\textsuperscript{75}. The settlement process involved also the studied area, mainly along the small villages on the main roads, as the one connecting Addis Ababa to Moyale, and increased the need of livelihoods’ diversification. It was promoted also by the system of the humanitarian aid and emergency relief, because the distributions usually happened in the main focal villages of the area. The settlements started also to facilitate the access to the few educational, medical and market infrastructures in the area. It also gave input to farming activities and allowed to be involved in petty trade, daily labour and labour employment\textsuperscript{76}.

The differentiation of livelihoods systems is mainly associated with the poorest pastoralists and poverty in pastoral areas is mainly connected with sedentary ex-pastoralists rather than with mobile herders\textsuperscript{77}. High rates of poverty reflect primarily the conditions of those not involved in pastoral production: in this sense poverty is not inherent in pastoralism, but it is present in pastoral areas. Poverty is present mainly in areas where pastoralism is the primary economic activity, but it belongs to stock-less people, ex-pastoralists and casual labourers in and around towns. Households who rely on livestock but are below a certain threshold of per capita livestock holdings find themselves unable to move out of poverty even in periods of relatively good pasture and rainfall conditions, since their stock are not enough to face their needs. The poor are often isolated from social networks based on livestock and they receive local assistance only in case hardship strikes.

In the studied area most pastoralist have too few animals to allow for a purely pastoral diet and only based livestock income, therefore livelihood diversification is very common: non-livestock forms of wealth may be as good as indicator of welfare as livestock ownership. With increased diversification into desirable assets and livelihoods, households can remain active in pastoral economy with both big and smaller herd sizes. People living in the studied area don’t abandon the livestock herding even when they get a good income from other sources\textsuperscript{78}. Families with a member engaged in salaried employment are likely to have food during a drought even when they have lost large numbers of their animals.

\textsuperscript{75} Little Peter D., Hussein Mahmoud, Coppock D. Layne, \emph{When deserts flood: risk management and climatic processes among East African pastoralists}, Climate Research Vol 19 December 2004.
\textsuperscript{76} Cassini Rudi, \emph{Local Economy in Moyale Area - Pastoralism and Agro-pastoralism}, LVIA 2003.
\textsuperscript{78} My Ethiopian colleagues in Moyale area were a very good example of this process, without any difference of occupation status and their contract length. I observed the same while interviewing local Government officials and businessmen.
Livestock production remains the core economic activity in the studied area, but it is only part of the income generation story, together with non-pastoral economic activities as trading, running a business, working for a daily wage or in salaried employment.

2.2 Political structure of Ethiopian government and implication for pastoral representation

2.2.1 The Ethiopian constitution

Ethiopian bureaucracy and state structures are not, as in other cases, a legacy of colonial history. The current regime in Ethiopia emerged after the overthrow in 1991 of the Derg, which pursued a centralised Marxist-Leninist system of government since 1974. It included a prolonged period of state terror, which peaked between 1975 and 1977\textsuperscript{79}. After a period of transitional statute, the power was taken by the Ethiopian People’s Revolutionary Democratic Front (EPRDF) dominated by the TPLF (Tigray People’s Liberation Front). This coalition justified its control of power by representing the interests of peasants, who provided its support-base during the conflict. It claimed to have liberated them from the economic exploitation and the ethnic suppression, suffered under previous regimes. The peasants were also considered as a homogenous group of interests and figured out as the ones living in the highlands\textsuperscript{80}.

A new constitution was adopted in December 1994 and a federation of nine national regional states and two provinces (Harari and Addis Ababa) was delineated in order to try of keeping together the diverse ethno-linguistic expressions of Ethiopian society. The borders were

\textsuperscript{79} The history of modern Ethiopia dates back to the rule of the emperor Tewodros II (1855-1868), who set up a process of reunification and nationalisation of the Ethiopian Empire. His successors, Yoannes IV and Menelik II, continued to accomplish his unfulfilled plans for unification, mainly trying to establish supremacy among the several local kings. The modern history of Ethiopia is marked by two elements: the resistance against the European colonial powers and the transformation of a social and political system until then based on feudal arrangements. The long reign (1930-1936; 1941-1974) of the Emperor Haile Selassie (in ge'ez this name means the Power of the Trinity, while the true name of the last Emperor was Tafari Maconnen) coincided with the attempt, not completely successful, to put in place a modernised state organisation, and a more visible centralisation of power around Amhara elites. This implied, among other, a certain degree of marginalisation of northern regions of the country (mainly Eritrea and Tigray) and in fuelling the nationalistic claims that brought to the Eritrean liberation/secession war in the '80. Important structural changes took place after the end of the Empire and the beginning of the Derg regime, in 1974 (the meaning in Amharic language is committee and it is the name that the group of army officers who overthrew Haile Sellassie gave to themselves. Out of this group, Mengistu Haile Mariam soon acquired the leadership). The transformation of the Derg regime into a Marxism-inspired dictatorship coincided with the enforcement of severe social and political repression, and with the long war with the Eritrean-Tigrynean army. In 1991, with the downfall of the Derg, a process of democratisation began, with the adoption of the federal constitution, and the first free, although controversial, elections (May 1995).

generally designed to give to particular ethnic groups control over areas they claimed as historic homelands. It has been talked for this of ethnic federalism (Sara Vaughan, School of Social & Political Sciences, Politics and International Relations – University of Edinburgh). In this way, the constitution has somehow exacerbated the need for clear ethnic boundaries, and made the ethno-linguistic affiliation one of the elements that play a role in the present day political process in Ethiopia.

The CIA World Factbook gives the following figures, concerning the ethnic population in Ethiopia: 40% Oromo, Amhara 27%, Tigre 5%, Sidamo 9%, Shankella 6%, Somali 6%, Afar 4%, Gurage 2%, other 1%. The Amhara have traditionally controlled most of the bureaucracy as the ruling class, while the present-day leadership has emerged from the war led by the northern people against the Amhara-based Derg regime, and is, consequently, mostly an expression of the Tigrean elite. Other ethno-linguistic groups have historically felt somehow compressed by the cultural and political dominance of the Amhara. Mention should be made to the claims of the Oromo, who feel themselves as systematically marginalized in the political process while representing the relative majority of the population of the country, inhabiting most of the areas of prime agricultural value. Oromo are the largest ethnic group in the Horn of Africa, and claim a remarkable cultural unity and a long history (Forrest 2004). Oromo cultural identity finds an expression also in the Journal of Oromo Studies, edited in the USA with the cooperation of scholars from different universities.


Regional states are divided into zones, woreda and kebele, that were structures initially developed under the Derg, and in some peripheral areas of the country in pastoral associations, PAs. The constitution provides for a democratic structure of governance, following a modern western model of democracy, including a division of powers and the protection of human rights. The constitution follows a parliamentary model and vests both legislative and oversight functions in a House of Peoples’ Representatives (lower house of the bicameral Federal Parliamentary Assembly of Ethiopia). The House of Federation (upper house) plays a constitutional role in safeguarding the interests of the nations and nationalities of Ethiopia.

The kebele is formed by a group of villages. Each kebele has an office with government representatives, who are usually defined as chairman, vice-chairman, secretary and simply members of the kebele committee. The office is usually located in the major village of the kebele area. At woreda level the political administration is supported by line departments, which are technical bodies concerned with different development fields such as water development, veterinary service, agriculture extension, education and human health. The zone has a role of coordination and general planning, while the regional states are the main administrative units under the federal government.

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passing the legislation which defines the powers of government, as well as controlling important sources of revenue. Both the federal and regional governments have their own legislative, judicial and executive powers and the right to levy taxes and allocate budgets.\(^{86}\)

The federal constitution of 1994 sets out elements that, although not specifically referred to pastoralists, are important reference points in advocating for pastoralists’ rights. Most of these elements are included in article 40, about property rights:

1. Every Ethiopian citizen has the right to the ownership of private property. Unless prescribed otherwise by law on account of public interest, this right shall include the right to acquire, to use and, in a manner compatible with the rights of other citizens, to dispose of such property by sale or bequest or to transfer it otherwise.

3. The right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the state and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange.

4. Ethiopian peasants have right to obtain land without payment and the protection against eviction from their possession. The implementation of this provision shall be specified by law.

5. Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own lands. The implementation shall be specified by law.

6. Without prejudice to the right of Ethiopian Nations, Nationalities and Peoples to the ownership of land, government shall ensure the right of private investors to the use of land on the basis of payment arrangements established by law. Particulars shall be determined by law.

According to article 52 (d), the powers of the NRS include, “[a]dminister[ing] land and natural resources in accordance with federal laws.” Some NRSs have already issued legislation on land administration, while others are still in the process of finalising it. Article 41 speaks about economic, social and cultural rights:

1. Every Ethiopian has the right to engage freely in economic activity and to pursue a livelihood of his choice anywhere within the national territory.

8. Ethiopian farmers and pastoralists have the right to receive fair price for their products, that would lead to improvement in their conditions of life and to enable them to obtain an equitable share of the national wealth commensurate with their contribution. This objective shall guide the state in the formulation of economic, social and development policies.

9. The state has the responsibility to protect and preserve historical and cultural legacies. Furthermore, article 43 contains a provision for the right to development in a way that may support the existence of advocacy work in favour of pastoralists:

1. The peoples of Ethiopia as a whole, and each nation, nationality and people in Ethiopia in particular have the right to improved living standards and to sustainable development.
2. Nationals have the right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community.
4. The basic aim of development activities shall be to enhance the capacity of citizens for development and to meet their basic needs.

To be noted in article 43 is the recognition of a collective right to development, as well as of the right to participate in the policy process as nationals. However, no specific provision is made in the constitution to provide legal recognition to customary institutions.

Concerning minorities and vulnerable groups, constitutionally, every individual has the freedom to run for office at all levels. However, the marginalised and stigmatised groups, often called occupational castes and found in every ethnic group, are traditionally excluded from the political arena. This pattern is repeated at governmental stage, both at regional and lower levels, where they are supposed to be represented by the dominant group in the area in which they live\(^87\).

### 2.2.2 Parties and political representation

Political parties exist and elections take place. There are three types of political parties in Ethiopia. The first are those parties belonging to the EPRDF. The dominant party is the TPLF, followed by the Amhara National Democratic Movement (ANDM)\(^88\). The Oromo People’s Democratic Organisation (OPDO) and the Southern Ethiopian People’s Democratic Front (SEPDF) for the Southern Nations, Nationalities and Peoples Regional State (SNNPRS) are weaker members of the Front\(^89\). The second type of party is EPRDF-affiliated parties which operate with somewhat looser ties in the more peripheral areas in Ethiopia: Afar, Somali, 

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\(^{88}\) The EPRDF was founded in 1989 by the Tigray Peoples Liberation Front (TPLF), which has until now been playing a hegemonic role in it, and by the Amhara National Democratic Movement (ANDM), in order to boost the armed struggle against the Derg regime.

\(^{89}\) The OPDO was basically formed by prisoners of war in the hands of the EPRDF. In the south-western part of the country, selected prisoners of war from ethno-linguistic groups were actually organised, trained and promptly moved to the southern areas during the days of the power change (1991-2), in order to promote peace and stability committees that afterwards evolved into local political parties, as for example the Oromo People’s Democratic Organisations. In 1994, the OPDOs merged into the Southern Ethiopian People’s Democratic Front (SEPDF) and joined the EPRDF as the fourth member.
Harari, Benishangul-Gumuz and Gambella. Thirdly, there are opposition parties. These are mostly very weak in organisational capacity, suffering from considerable resource constraints, and have shown little ability to coordinate amongst themselves to put pressure on the government. Many of them are also registered as regional parties and look to a single ethnic group for their support, which further limits their ability to coordinate.

Beside the historically recognised opposition parties, there is a range of diaspora groups and other opposition groups. They claim that Ethiopia is run by a dictatorship and the minimal conditions for ordinary political competition are still lacking. The most important armed opposition to the EPRDF is represented by the Oromo Liberation Front (OLF) that claims to enjoy widespread popular support in the Oromia Region. The Ogaden National Liberation Front (ONLF) is also conducting its struggle against the central government, with sporadic military activities, related to the presence of the Ethiopian army in the regions neighbouring Somalia.

Pausewang (2002) reports that elections at all levels were affected by government interference and manipulation. In the federal elections of 2000 there were numerous electoral irregularities: candidates were often imposed by the EPRDF and many pressures, included violence towards opposition, were undertaken to influence the public vote. In some areas there was doubt if elections were held at all. A similar situation happened during federal elections of 2005 and 2010.

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90 The integration of these areas into the country was less smooth and implied in some cases military activities against local groups, such as in the case of the Somali Region (Khalif and Doornboos, 2002).
92 Main opposition parties used to join the Southern Ethiopian Peoples’ Democratic Coalition (SEPDC) that was thrown out from the EPRDF’s government in 1993 after signing a statement against puppet ethnic parties. Later they supported the Council of Alternative Forces for Peace and Democracy in Ethiopia (CAFPDE) in the 2000 elections.
93 Other parties are the All Amhara People’s Organisation (AAPO), mainly representing urban Amhara, that in 2002 was re-constituted as the All-Ethiopia Unity Party (AEUP); the Oromo National Congress (ONC); the Ethiopian Democratic Party (EDP), that in September 2004 merged with the Ethiopian Medhin Democratic Party, thus forming the Ethiopian United Democratic Party (EUDP).
94 The OLF, after an initial phase of cooperation with the EPRDF, decided to boycott the first elections after the downfall of Derg in 1995, thus entering into clandestine existence in order to carry on its armed struggle against the newly formed government. The political platform of the OLF is directed towards the establishment of an independent state in Oromia and always strongly contested to the OPDO popular legitimacy in Oromo areas. The attitude of the Ethiopian government is to label the OLF as a terrorist group, which, in the context of post 11th September may have relevant implications in the support the government expects at international level.
95 Originated in 1984 in Mogadishu, the ONLF played the main role in ruling Somali Region between 1991 and 1994. In 1997, a part of ONLF merged with the Ethiopian Somali Democratic League, thus giving birth to the Somali National Congress (Hagmann and Khalif, 2005).
Lister observes that elections in Ethiopia didn’t serve to provide either a mandate or a mechanism of accountability and representation. This affected the position and perceived legitimacy of individual elected representatives, because while there is a formal structure of democratic institutions, the dominant party still keeps tight control at all levels and ensures that the democratic institutions cannot challenge its power. The dominant party has exclusive access to state resources, while material interests keep individuals loyal to that party. Nearly all officials in the state administration from kebele to the federal government are EPRDF members, having joined the party before or soon after election. Government business is discussed and decisions are made in party meetings that precede meetings of state bodies.

Following a deep political crisis and the splits in the TPLF (Tigray Peoples Liberation Front) in spring 2001, the EPRDF (Ethiopian People’s Revolutionary Democratic Front) announced a renewal process (tehadso), including reforms intended to separate powers between different branches of government. Four new “super-ministries” – the Ministries of Capacity Building, Infrastructure, Rural Development and Federal Affairs – were established which removed a number of coordinating functions previously carried out by political advisers or by the prime minister’s office. The establishment of these ministries institutionalised state structures and strengthened a civil service, removing a number of areas from personalised control. A core of key ministries and agencies is still controlled however by those loyal to the prime minister.

Vaughan and Tronvoll report that the proposed measures are in line with a classic package of centralised bureaucratic reforms. They find the present ideological framework of the ruling elites consistent with the Ethiopian historical political tradition, based on a hierarchical understanding of political and social order, which sets great value on the inviolability and unity of leadership. Some continuity can be detected in the Ethiopian political process, with elements crossing the time of the empire, the different phases of the Derg until the present day. The federal constitution designs a strong premiership system, with relatively weak counterweight and guarantee powers; at the same time, it recognises a wide autonomy for the regions, upgrading them to the status of national regional states. However the effective decentralisation of powers to the lower administrative layers is low and a number of legal and

paralegal mechanisms have contributed to ensure the unity of the state and the position of the ruling elite\textsuperscript{101}. Lister adds that in a number of other African countries where these reforms took place, they resulted in the retention of a clientelist system and the centralisation of power in an executive presidency, which stands above factional politics and manipulates through control of financial and military resources. Therefore, these changes might not necessarily strengthen other representative institutions and broaden political representation more widely\textsuperscript{102}. The ruling party’s conception of democracy was shaped by the marxist-leninist ideology and by the EPRDF’s practical experience of mass political mobilisation during its struggle for power\textsuperscript{103}. EPRDF conceptions of state power are based on democratic centralism, communal collective participation and representation based on consensus. The EPRDF changed its marxist rhetoric in 1989/90 during the last phase of the struggle against the Derg regime, and opened up for multi-party democracy and market economy. However Pausewang argues that the change was only in rhetoric and not in substance and still remains a substantial legacy of marxist thinking among powerful members of the EPRDF\textsuperscript{104}.

This historical legacy has three significant and related implications for EPRDF views about pastoralist representation. Firstly, the EPRDF’s focus was generally on the peasantry, historically regarded as a homogeneous mass with common needs, interests and political outlook. The need for a government responsive to the interests of different groups was not traditionally acknowledged. Secondly, this legacy affects how the policy process is understood. Agenda setting and policy formulation are seen to be the responsibility of the executive with a dominant role of the ruling party. Policy should be discussed behind closed doors, with the input of experts, as a neutral and technical affair, so not subject to questioning. There is little of a perceived role for broader public participation in policy formulation. Despite a stated commitment to decentralised government, the federal level is seen as responsible for policy formulation, with the role of the regions limited to implementation. While there is an understanding that parliament has a constitutionally assigned role in the

\textsuperscript{101} Vaughan, S. and K. Tronvoll (2003) state also that in coherence with the wider ideological framework, the ruling elite gives to the term democracy a meaning of ‘revolutionary democracy’ based on collectivism and consensus, while the international partners would assume an idea of ‘liberal democracy’, representation-based and pluralistic. This could be seen as a form of tactics in relation with powerful counterparts that expect the Ethiopian government to adhere to globally set standards and values.


legislative process, it is widely acknowledged that parliamentarians rarely influence the formulation of legislation or other policy statements.

Thirdly, the marxist legacy has caused what Vaughan and Tronvoll describe as an ideological unwillingness to engage with alternative political perspectives, a sense that “if you are not with us, you are against us”\textsuperscript{105}. Within the EPRDF there is a dominant view that disagreements in policy should generate political competition from outside, rather than dialogue. Instead of seeing representation as a means of aggregating and mediating different interests, representation is perceived as contributing towards the building of consensus amongst decision-makers. In Ethiopia, parliament is dominated by EPRDF members and affiliates. It has been widely criticised for merely rubber-stamping the decisions of the executive and being a body with little authority or power. Although it initiated a number of relatively minor bills, all legislation has originated from the executive\textsuperscript{106}. In the Ethiopian context, officials at all levels are perceived to act primarily as party representatives. The system of party nominations for candidates strengthens the incentives to prioritise representing their parties when there is a potential conflict of interest. Parliamentarians have a limited knowledge of their constituents and they visit them infrequently. In a number of areas people vote on the basis of party instructions\textsuperscript{107}.

Lister (2004) reports on the weak accountability relation between the parliamentarians and their constituencies: the real competition does not take place during polls, but rather when the ruling party selects the candidates. Elected parliamentarians feel a stronger link to those who nominated them, rather than to the constituencies. Lister is therefore dismissive of the role of parliamentarians, because their selection is on the basis of party loyalty, rather than skills or expertise. This situation weakens the incentive for them to put forward their constituents’ interests effectively, as their re-appointment is not perceived to be in the hands of their constituents. Furthermore, appointment to other political or parliamentary posts is also seen as dependent on political favour. The pervasive nature of the party structure in the regions, the complex interlinking between the EPRDF and regional parties, as well as the democratic weakness of many regional parties, create a similar set of incentives for parliamentarians from EPRDF-affiliated parties. In addition, parliamentarians representing pastoral constituencies in many cases come from elite groups, a totally different social setting from those they are

\textsuperscript{106} Ibid.
supposed to represent, and they are not familiar with those they claim to represent. As Lister points out: “Ironically, some of those who are perceived to be closer to their constituents are criticised for being insufficiently educated to be able to contribute appropriately in parliament.” This comment highlights the issue of the dualism between the pastoralist communities living in the most remote areas, and the relatively well educated urban elites. From a social point of view, urbanised pastoralists often lose the contacts with their original communities, and the urban population in the southern lowlands is also composed by a high proportion of outsiders. Based on the definition of Hannah Pitkin (1967), quoted by Lister108, “political representation is acting in the interests of the represented and includes the processes mediating between citizen interests and policy outcomes”. Finally, pastoral policies have not been developed yet, and no independent ministry has been established, nor is there a strong division in the Ministry of Agriculture.

2.3 Regional governments

The constitution grants regions substantive autonomy, including allowing them to enact their own parallel constitutions and the right to secede. The legislative branches of the nine regional states were assigned important functions in the 1995 regional constitutions, which referred to them as the highest political authority in the region. However, although states enjoy residual powers under the constitution, several articles provide the federal government with considerable powers over policy, including the right of veto over national regional states (NRS) policy decisions and the possibility to withhold a federal subsidy from a locality administered by an alternative party109.

Piguet and Pankhurst question how the federal organisation of Ethiopia is able to guarantee the interests of the ruling elite, while ensuring the co-existence of many ethnic groups within a unitary framework110. Although there is a strong formal commitment to decentralised power through the regions, this has been questioned. A World Bank study concluded that the system is characterised by administrative deconcentration, not devolution of powers to elected bodies, which is normally provided for in federal and regional constitutions111. All regional

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108 Ibid.
Parliaments are overwhelmingly dominated by the EPRDF and its affiliates, as are the Somali People’s Democratic Party (SPDP) and Oromo People’s Democratic Organisation (OPDO). Aside from numerical control of parliaments, the party exercises other means of control in the regions: the party structure of cadres, officers and local cells remains strong throughout the country. This implies a sort of a central control of regional and lower levels of governments; therefore regional autonomy is much less than prescribed under the constitution. As Aalen commented, the most prevalent political development, in the period 1991–2000, is the consolidation of a centralised party rule along with the formalisation of a federal system, a development which implies an apparent paradox. According to fundamental federal theory, centralised party rule and genuine federalism are incompatible because the presence of an all-powerful party inevitably centralises power and undermines regional autonomy.

One particularly significant area of reform was an attempt to facilitate a separation of powers at the regional state level. The blurring of executive and legislative functions was recognised to be unsatisfactory, hindering the ability of the legislature to provide oversight. By the end of 2002, all NRSs (with the exception of Harari) amended their constitutions to ensure that a separate speaker and deputy speaker were elected. NRSs started to establish offices and staff of their regional parliaments separated from the executive branch, and new systems and procedures. The potential influence of regional parliaments was enhanced by other measures. Provisions were made to allow regional parliaments to form standing committees. In Somali NRS, for example, a regional Pastoralist Development Standing Committee was formed in February 2003. Polhemus notices the more open debate in the regional councils, even if all of them suffer from severe human and other resource constraints, which affect their abilities to carry out functions effectively. Furthermore, party control of regional governments restricts the extent to which these institutions are able to mediate between citizen interests and policy outcomes, since decisions are often made outside the formal structures of representation. Although regional officials are outspoken in their assertions that policy is made at regional level, in practice most over-arching policies are determined in the centre and citizen interests funnelled through regional structures do not influence it. Although policy implementation

matters including budget allocations are decided at regional and sub-regional levels, regional parliaments appear to have little influence in these processes\textsuperscript{115}.

2.4 Brief introduction to the regions targeted by this research

2.4.1 The Oromia NRS

Borana zone is part of Oromia NRS, whose capital city is Nazareth. Oromo are the largest ethnic group in the Horn of Africa, and claim a remarkable cultural unity and a long history\textsuperscript{116}. Oromia was formally incorporated into Ethiopia by Amharic-speaking Christian highlanders, during the Abyssinian monarchy under Menelik II in the late nineteenth century. From the Ethiopian revolution of 1974, Oromo were forced to use Amharic in administration and in the schools. Borana in 1987 became a separate administrative region and large numbers of educated young people were given positions in the local party and administrative structures. The increased employment opportunities solidified support for the Derg and this new layer of civil servants mediated between the Borana and the state. When the EPRDF came to power, these civil servants were seen as politically suspect and wider suspicions affected the whole Borana group\textsuperscript{117}.

The political context in Oromia is affected by the existence of the Oromo Liberation Front (OLF). The OLF is an armed movement which claims that it is the only legitimate political representative for all the Oromo people\textsuperscript{118}. It has military capacity and it is responsible for different military activities in Oromia Region and Borana Zone as well.

The \textit{Gada} is the name of the core traditional institution within Oromo and Borana society and it serves political, judicial and ritual functions. Borana rule is based on a system in which decisions are made by consensus and different institutions balance the power of different groups. Power is shared across generations and age groups. Each age group has distinct tasks and responsibilities, and chooses its leaders by election, although there is some hereditary principle. Leaders are accountable to the people through a variety of mechanisms and can be removed from office if they do not perform adequately. Thus the \textit{Gada} system structurally

limits the amount of power exercised by any individual both through its year cycles and by balancing power and position with countervailing institutions\textsuperscript{119}.

The highest authority rests in the open national assembly which takes place every eight years, in which all \textit{Gada} councils and assemblies participate. There is no concept of a majority that can impose will on a minority, but, as in all assemblies, debates continue until the councillors reach an agreement. Almost all ritual leaders are men, and women are also excluded from judicial activities.

\textbf{2.4.2 The Somali NRS}

The capital city of Somali region is Jijiga. Although the Somali people were officially incorporated into Ethiopia at around the same time as the Borana, the reach of the state was much less in Somali region, due to its inaccessibility and harsh terrain. For centuries, Somalis lived under decentralised, clan-based political systems, with few ties to any centralised state. The Somali people are divided into six clan-families, each divided into sub-clans and extended families. The sub clan consists of close kinsmen united by a specific contractual alliance, whose terms stipulate that they should pay and receive blood compensation. The \textit{Xeer} is the name of the clan law and customary system of the Somali. It is based on tribe, while tribe is understood as both territorial and political unit. Authority is delegated from the smallest structural unit (the \textit{rer}, a group of people united by a certain object or activity, such as a river area) up to the highest office, the tribal chief, through a series of councils\textsuperscript{120}.

The Somali suffered repression and human rights abuses under the regimes of both Haile Selassie and the Derg, including aerial bombardment. This repression stimulated the formation of a number of opposition groups, including the Western Somali Liberation Front (WSLF) and the Ogaden National Liberation Front (ONLF). The ONLF’s initial policy statement defined the Ogaden (a dominant Somali clan) as an oppressed nation colonised by Ethiopia and pledged to establish an independent Ogaden state with full sovereignty in line with the aspirations of its people. It initially collaborated with EPRDF, participating in the transitional government; however trust broke down, and for a second time it moved towards a


continuation of armed struggle. The Somali region remains perhaps the most problematic among the peripheral regions, in a state of chronic insecurity\textsuperscript{121}.

There is a widespread political, organisational and financial disorganisation within different branches of the regional government. There have been endless rounds of political fighting, sacking and imprisoning of politicians. There is a high turnover of political authorities and for nine months during the financial year 2001/02 no budget was agreed by the regional government\textsuperscript{122}.

### 2.5 Sub-regional levels

The system to divide the local government by zones, woreda and kebele was established under the Derg and continued to be in place under the EPRDF. From 1995, different elections were held at sub-regional levels, but they were extremely problematic in many regions, including areas of Oromia and Somali. However changes are also underway at these levels of government and there have been considerable attempts to clean up local administrations. In most regions, elected councils at woreda and kebele level are now run by a cabinet consisting of officials who are locally elected\textsuperscript{123}. Vaughan and Tronvoll (2003) registered also a significant increase in the educational levels of local administrative officials. Zones usually have only coordinating functions and their officials are often appointed rather than elected.

In the Borana zone, the articulation of local interests at woreda and kebele levels seems to be working: people take issues of concern to the kebele council, or directly to the woreda or zone. Nonetheless the party continues to play a strong and controlling role in the election of officials, therefore the influence of kebele and woreda officials and councils on policy outcomes can result to be limited. There is the perception by citizens of a serious lack of connection between the kebele/woreda structures and higher levels of government. Despite the strong official rhetoric about decentralisation from the centre, policy formulation decisions are perceived to emanate from levels higher than the woreda\textsuperscript{124}. In the Borana zone, two particular crucial issues were managed at federal level. The first related to the granting of land including wells along the border with Somali clans, and the second to conflict and security in the region. This became a very deep-seated grievance and some elders perceived

\textsuperscript{123} Ibid.
that there were not adequate systems through which they might influence the outcome of decisions\textsuperscript{125}. Relations between communities and state authorities vary across and within regions. Different ethnic groups relate differently to structures of government depending on a variety of local ethnic and political issues. For example, in the Borana zone, Bassi argues that the Gabra tribe was generally well-treated by the EPRDF in order to create a counter-force to the Borana. They benefited with increased numbers of political positions. This tended to make Gabra relationships with state authorities more cooperative and collaborative, while further alienating the Borana, both from the state and from the Gabra\textsuperscript{126}. In the Somali region the influence of woreda and kebele is perceived to be more limited. No local elections have taken place, although they have been planned and constantly postponed. Officials have been appointed to woreda and kebele, but they are expected to implement decisions taken either at zone or regional level\textsuperscript{127}. Changes in regional/central relations are likely to be brought by the move of block grants to woreda, and the devolution of budgeting, expenditure and accounting. The speed of this policy implementation can depend on the desire of the federal government to restrict the influence of higher levels of government (regional and zone) on woreda levels\textsuperscript{128}.

\textbf{2.6 The central government and the pastoralists in Moyale area}

The integration of the southern lowlands into the political and administrative dynamics of Ethiopia initiated between the end of the 19\textsuperscript{th} and the beginning of 20\textsuperscript{th} century, with the reign of Menelik. In spite of the subordination of traditional powers to the state, the Menelik regime had set up a somewhat respectful form of administration. Prominent elders were appointed as \textit{balabhat} and \textit{qoros}, charged with performing administrative duties (especially tax collection) and the traditional values of \textit{adaa seera Booran} (the customary law of the Borana) was taken


into account\textsuperscript{129}. During the whole imperial period, the interaction between the traditional institutions and the administrative structures set up by the government was much less\textsuperscript{130}. Physical marginality of pastoral lands finds itself closely related to other dimensions of marginality, as cultural, social and political ones. From the Emperor Haile Selassie to the current government, successive regimes have swung between neglecting the country’s pastoralists, and trying to exploit them and their lands. Policymakers from different regimes were predominately highlanders and coming from farming or urban backgrounds, so they didn’t have the will of understanding and recognising the needs and the dynamics of the pastoral system\textsuperscript{131}. In particular, an overarching state-lordist form of land policy was in place for centuries up to 1974 and the initial attention paid to pastoral areas was only concentrated on their potential in terms of increasing the fiscal base\textsuperscript{132}. The impression is that central states didn’t make really an effort to understand the pastoral interests and to address resources in their areas; rather they preferred to prioritise other interest groups at the expenses of the pastoralists. Pastoralism was instead perceived as a reality that could be overcome. Under the Ethiopian ancient regimes the pastoralists were conceived as a challenge for the state administration in the peripheries as well as for the border security of the nation. Pastoralism was perceived as an outdated and backward way of life and a production system ill-adapted to modern contingencies. The name of pastoral land was known in Amharic as \textit{zalan}: the term refers to nomad and it means literally wanderer, embodying the concept of mobile lifestyle. The term of \textit{zalan}, used to identify the pastoralists, implied also being uncultured, aimless and vulgar\textsuperscript{133}. Academic literature has described the tensions between the centrifugal ideology of nomads seeking autonomy and mobility, and the centripetal ideology of the sedentary state that strives for dominance and encapsulation\textsuperscript{134}. States attempted to impose institutions developed for a sedentary population, while pastoral institutions have come under strain and pastoralist/state

\begin{itemize}
\item \textsuperscript{129} Oba G., \textit{Where the bulls fight, it is the grass that suffers: impact of border administration on drought coping strategies of the Obbu Booran during the 20th Century}, Journal of Oromo Studies, Vol. 7, No. 1, 2000.
\item \textsuperscript{130} Bassi M., \textit{Power's Ambiguity or the Political Significance of Gada’}, in \textit{Being and becoming Oromo. Historical and Anthropological Enquiries}, Baxter P.T.W., Hultin J., Triulzi A., Uppsala, Nordiska Afrikainstitutet 1996.
\end{itemize}
relations have often been tense\textsuperscript{135}. This is true also in the case of Moyale area, where the migration’s pathways of pastoralists cross the borders with Kenya and Somalia. The Moyale area is along the border of the country, where different kinds of conflict are present. The tensions are mainly between the central state and the pastoralists living there and also among the different pastoral groups for access to resources, such as water and pastures. The area is also subjected to prolonged droughts, whose frequency is increasing. The conflicts are the result of a long history where Moyale area has been targeted by settlement programs, repatriation, establishment of state administration and overlapping with the traditional ones, and food relief. All those processes were grafted within the pastoral dynamics of different groups and their traditional management of the territory.

In the Moyale area, where a certain number of secessionist movements are organised, mainly Oromo, but also Somali, the issue is complicated by the fact that the population feels the presence of the central state as an external actor, almost as a colonial power, who speaks a language that they don’t use at home or learn at school\textsuperscript{136}. During the different regimes, the institutions representing the central state also started to overlap the functions of traditional bodies, by covering some roles already carried on by them that were structures legitimised by the population. The central state tried also to involve the local authorities, by assigning them new functions, as tax collection, and paying them for this new role. This has been felt as interference; also because these institutions are demanding taxation and the pastoralists don’t see any improvement in their living conditions to justify this payment. The central state has interfered in the access to water and lands, fixing the rights in terms of property and individual-ownership, and historically promoted the migration of settlers and farmers in important pastoral areas\textsuperscript{137}.

Together with the creation of settlements, pastoralists started to be engaged in farming activities, where the land was suitable for this, maybe splitting the work of the family\textsuperscript{138}. In Moyale area, only in Oromia it is possible to carry on some farming activities. In other parts of Ethiopia, large state-farms emerged at the expenses of the pastoral herders for example in


\textsuperscript{136} In order to protect the different ethnic and linguistic groups, the current federal government decided that each region could officially use the local languages, both for example in the schools and in the public offices. On the other side, the access to federal governmental bodies and important universities is made more difficult for people who don’t speak Amharic, that is the official language of Ethiopia and the one used at federal level.


\textsuperscript{138} Usually this process involves also a gender differentiation within the family: the women remain at home with children and small herds to take care of farming activities, while the men migrate with livestock, as camels and cattle.
the Rift Valley Region, along the main rivers Awash and Wabe Shebelle that are suitable for irrigation development and some pocket areas for cropping. These interventions and resettlement implied displacement of pastoralist and hunter-gatherer pastoralists\textsuperscript{139}.

Since its creation in 2001, the Ministry of Federal Affairs (MoFA) has gained a pivotal role in the political interplay around the pastoral areas, mainly in the several cases where there are controversies about the demarcation of political and administrative borderlines between regions. This includes the case of the southern lowlands, where these sorts of issues were dealt with by a specific office within the MoFA, called the Office for Border Affairs. Decentralised branches of this office were opened at regional, zone and woreda level. They had the immediate task of negotiating territorial claims and their functions have been expanded also in facilitating the negotiations between international investors and local populations.

The interest towards the pastoral areas showed a consistent orientation, not only on the push for settlement and controlling the borders, but also on the exploitation of the potential in terms of livestock production. The importance of the economic potential of the livestock chain is acknowledged in the second (1957-1961) and third (1963-1967) Five-Year Development Plan, which indicated the priority of developing livestock production for export markets and promoting support services in animal health. The first institution seriously charged with dealing with pastoral areas development was the Imperial Meat Board, in 1964. It was the government agency supposed to cope with all the issues related to the development of pastoral areas. It also commissioned the first big survey on pastoral areas at the beginning of the seventies\textsuperscript{140}. Better soils and lands however continued to be assigned to farming and pastoralists suffered for the decreased access to land.

The intensification and the control of the livestock resources was considered the precondition for pastoral development. The assumption was that the southern lowlands were lacking in water and transport/communication infrastructure. The improved availability of water was supposed to lead to an increase in livestock production and a decrease of the pressure on dry grazing resources. The enhanced infrastructures would have then paved the way for an improved commercialisation towards the highlands and the export markets. This economic

\textsuperscript{139} In other areas best range lands were de-marked and enclosed for national parks and state forests, outlawing the pastoralists from using them from grazing. Some pastoral areas are in fact characterised to be rich in natural resources, surface and underground water, metallic and non-metallic minerals, fishery and energy, natural gas, geothermal energy, variety of flora and fauna. Also some pastotal areas are under interest of archeological and socio-anthropological studies.

development strategy was backed by the assumption of the progressive settlement of pastoral populations. Proclamation No. 31 of 1975 had the purpose of improving the grazing areas, digging wells, and settling the nomadic peoples for farming. A Settlement Authority was also established in 1976 with the responsibility of settling the nomads who wanted to be settled.

Under the post-Derg regime, policies combining agricultural activities with soil and water conservation, industry, mining, energy and construction in an integrated manner, were called for. The shift that occurred in Amharic from the use of the word zalan to pastoralist (referring to one whose livelihood is gained through livestock) was important and indicative of a change in approach. The settlement perspective was not put into discussion: past policies were judged not to have been conducive to this end. In 1991, a proclamation recognized a special consideration for the economic development of areas affected by war and drought. In 1992, it established the decentralization of power and the formation of regional governments to empower each nationality; in 1992 a proclamation allowed regions to utilise part of their revenues and to formulate their own rules. The 1994 Ethiopian Constitution provided for pastoralists not to be displaced against their wishes, but there was not any by-law to effect this constitutional provision, as forecast. In 1995 under the definitions of powers and duties of the executive organ, it stated: “The Ministry of Agriculture shall have the powers and duties to cause the provision of assistance in necessary extension services to pastoralist people”, and a pastoral development team within this ministry was established.

The poverty in pastoral areas became an issue when external factors started to reorganize the pastoral lands in terms of promoting agriculture and settlement. Otherwise, often in the past, pastoral people in the studied area were representing themselves and were perceived by their neighbours as rich, known for their wealth and their fortunate living conditions. The book “The Poor Are Not Us” highlights how East African pastoralists often build their self-perception on an assumption of wealth and egalitarianism. Nowadays, pastoralist...
communities are increasingly aware of the deep changes that their societies underwent and they have started to cope with poverty issues. Pastoralism reacted by diversification of livelihoods and coping strategies, therefore I find it interesting to look at pastoral areas mainly as evolving processes and at the outcomes of this evolution.

Pastoralist issues and policies in Moyale area are affected by processes and changes at different levels, international, federal, regional and sub-regional. They include the relation between federal and regional governments, in terms of what is practically under the power of regional government rather than the federal one, the stability of the federation and concern about secessionist tendencies, inter and intra-ethnic conflicts which frequently act as a considerable drain on state resources and concern border security, the willingness to modernise Ethiopia and bring it into global markets, land issues and property/access rights, pastoralist cross-border trade/contraband and also donor interests, as Ethiopia is a strongly aid-dependent state.\(^\text{146}\)

### 2.7 Land issues for pastoral people in Moyale area

Prior to the 1975 land reform that nationalised all rural lands, pastoral lands were already under the direct state ownership. All the unsettled and uncultivated lands in Ethiopia were claimed as state property.\(^\text{147}\) The 1931 Constitution declared that all the pastoral areas were state domain, so people originally living there were denied their land rights and the land was given to people serving obediently the government and the Coptic Church. This concept was reinforced in Proclamation No.70 of 1944, in the 1955 Revised Constitution of Ethiopia\(^\text{148}\) and in the Ethiopian Civil Code of 1960. Article 1168 stated that “no person who had not paid land tax for the last 15 years could possess any plot of land”. Under the imperial Ethiopian government the zalan land was classified in two: nomadic herders and nomadic hunter-cultivators. A special taxation law was proclaimed in 1950 for the zalan areas. The tax assessment was based on type and number of animals owned by pastoral herders.\(^\text{149}\) However,

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\(^{146}\) In broad terms Ethiopia is considered one of the good pupils of the World Bank and the Fund (IMF). Stiglitz Joseph E. (2002) accounts that Ethiopian rulers share most of the northern economic rationality and apply it better than the IMF (The IMF ravages developing countries - Ethiopia is the proof, Le Monde diplomatique, April 26, 2002).


\(^{148}\) Article 130: “all forests and all grazing lands, water sources, lakes and territorial waters are state domain.” The article reserves to the State Domain “all property not held or possessed in the name of any person, including all grazing land.”

\(^{149}\) Accordingly: 0.50 ETB for each camel, 0.25 for each cattle/horse/mule, 0.10 for each donkey, 0.05 on goat/sheep.
the state was often unsuccessful in collecting taxes from pastoral herders, because some communities were crossing the international borders during the tax assessment period. Only two typologies of land’s rights were conceived: state ownership and private ownership, without any consideration of customary and traditional management of land’s access by different groups. The understanding of traditional land management was not a priority of the central government, which was rather engaged to get the consensus from population of the highlands, from where state and army officials were coming too.

During the 20th century, the government started to assign southern portions of land to farmers from the highlands. This was done as a form of compensation for having served the state in the Army, to reduce the pressure on the highlands’ soils and generally as a means to get and maintain the consensus from the rural sector of highlands. Before this process, in Moyale area the access to land and water was not based on property rights, but on a system of rules that regulated the access for different members of the same ethnic groups and also for different groups, based on affiliation mechanisms, contributions in the past to the rehabilitation of water points, seasonal conditions, herds’ dimensions, etc. The property rights were not applicable in this context, because the pastoral production system was flexible and highly mobile, therefore different pastures were utilised in different periods of the year, for different kinds of herds and cyclically by different groups. This system guaranteed the access of different groups and a type of equilibrium, even if the negotiating process occurred sometimes in a tense way.

In 1975, the Derg proclaimed the land reform that expanded the power of the state on pastoral lands. The state monopoly of ownership of land was reaffirmed and Article 24 recognised to nomadic peoples “possessory rights over the lands they customarily use for grazing or other purposes related to agriculture”. These rights were however limited to some degree of usufruct, subject to the acceptance of the land use patterns imposed by the newly established pastoral associations (PAs), modelled on the highlands’ peasant associations. Pastoralists were given the status of authorized users, while the management rights were reserved to the PAs, as well as those of alienation. The obligations to the traditional leaders were annulled and the state was entitled to be the only one to get payment and taxations from pastoralists. The PAs were strictly correlated with government administrations, as vehicle for political control and taxation by state authorities. The PAs represented also the first territory based administration system and they were supposed to supply all sorts of development services, to

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take over the control of water sources, and even to grant permission for the pastoralists to cross the administrative boundaries.

The introduction of property rights and the promotion by the Government of the immigration of highland’s farmers in the south, including Moyale area, introduced new elements in the pastoral dynamics. Farming implies that the soils devoted to agriculture have to be exclusively used for this purpose and they are occupied for the most part of the year. If few livestock enter in a farmed portion of land, they can damage it and a long and labour intense work can be lost forever or at least until the next farming season. Some portions of lands were therefore closed and the access denied to pastoralists. Most of the time, the lands used for farming were traditionally very important for pastoral purposes, for example, the ones used during dry times for calves. The subtracted lands were also part of a system of pathways and migrations, which needed therefore to be reorganised as a consequence of the inaccessibility to some parts of it. Finally the quantity of resources available for pastoralists decreased and this exacerbated the tensions between the state and the pastoralists and also among the different pastoral groups: they actually needed to find equilibrium on a reduced number of resources.

Currently in Moyale area, there is still a double level of authority, the one representing the government and the customary one. Moreover going around in the different kebele, it is still possible to trace the PAs, which are nowadays governmental bodies, managing with pastoral issues at kebele level. Tentative to integrate the traditional leaders within the governmental structures is ongoing and the access to land, which is still mostly owned by the state, is not increased for the local population, compared to the previous regimes. What I observed is that the attention and the support provided by the central government in the pastoral areas are not concerning the land’s rights. Rather the governmental efforts are mainly towards asking donors’ support to get food relief in time of emergency, construction of infrastructures, improvement of animal services, rehabilitation of water points and rangelands, increasing educational and medical services for the population. All these elements have considerable positive effects, and at the same time they call, implicitly or not, for settlement.

Pastoral issues, as land’s rights, are discussed more often within the civil society, both the national and the international one, which is not by the way hampered in this by the central government. During the debates, one of the most contested aspects of pastoralist policy is whether its eventual goal should be to settle pastoralists. However, it is not clear the extent to which pastoralist people should and can be involved in determining this and other critical issues.
Settlement and lands’ rights issues are strictly correlated. Pastoralists in the studied area started to settle when portion of lands were subtracted by their control, reducing their mobility’s options. When the pastoral mobility was reduced and settlement increased, new livelihoods options were looked for, other than livestock, because it became more difficult to put in practice the mobile livestock herding. Settlement is a comfortable option for all the external actors in the area, as the central Government and the humanitarian agencies. The ownership of lands by the central government keeps the settlement process going on in Moyale area, together with the interventions of humanitarian agencies that promote schooling for children, access to medical care and to markets. The state property of the land could be seen as a strategy used by the government to push for settlement. Until the central state can dispose of pastoral lands, pastoral populations will find quite difficult to freely choose how use those lands and if living on them on settled or mobile base.

2.8 The recent federal efforts to include the pastoral interests in the political agenda

The key constraint to effective political representation of pastoralists could be identified in the broader political environment, including a lack of political competition and an absence of a real institutionalised democratic process. There is some evidence however that the government is beginning to position itself as champion of pastoralists. This change in attitude could be a result of the ruling party’s recognition of the need to exert greater control in pastoralist areas. Whereas military force was the chosen method in the past, development projects are a more cost-effective way today to extend control into the so-called emerging areas, particularly when such initiatives are largely funded from international sources\(^\text{151}\). The recent changes in the government’s attitude can be attributed to a variety of internal and external factors including:

• A recognition of past policy failure with regard to pastoralists.
• International pressure, such as bi-lateral, multi-lateral organisations and international NGOs.
• A recognised need for stronger linkages with the emerging areas, including a fear of instability.
• The split within TPLF which created a need for consolidation of the ruling party’s position\(^\text{152}\).


There have been recent changes in the structure of government concerning pastoralist policy. Following the reorganisation in government structure which took place in 2001, an inter-ministerial board was established within the Ministry of Federal Affairs (MoFA). This unit was intended to serve as a secretariat for an inter-ministerial board on pastoral issues. While the establishment of this structure was heralded as a sign that government was taking pastoral issues seriously, its institutional location could be interpreted as an effort for controlling the issue at a centralised level. Furthermore, there is concern about the extent to which ministers with broad mandates will be able to give sufficient attention to pastoralist issues, as well as the extent to which the board will be able to coordinate the pastoralist units in different ministries. There is also a call for a separate pastoralist ministry or commission. This is currently resisted by the federal government, mainly on the grounds that it is the responsibility of regional governments to oversee pastoral issues, and the technical weakness at this level should be addressed.

After a national consultation workshop in Dire Dawa in 2002, a statement about pastoral development was issued, which is the first official declaration of this sort ever issued by the Ethiopian government. The position expressed by this document was in favour of long-term voluntary settlement of pastoral population.

Another recent change is within the parliament, where a number of new standing committees were established with the mandate to oversee government bodies. One of these is the Parliamentary Standing Committee on Pastoralist Affairs (PSC), established in mid-2002. The roots of the PSC can be traced back to a workshop held in Kenya in 1999. It brought together pastoralists from the Horn of Africa, including Ethiopia, and also donors, traders, NGOs, activists and others interested in pastoral issues. During the workshop it was highlighted the exclusion of pastoralist voices from policy as a significant cause for concern. In particular, Ethiopian pastoralists learnt from the experience of Kenyan ones on political organising. The Pastoralist Communication Initiative (PCI) was subsequently formed in Ethiopia and started to meet with pastoral parliamentarians, initially individually and then by region. International academics, Kenyan pastoralist leaders and others participated in further discussions with the

153 A Pastoral Development Team (PDT) was established in the early nineties within the Ministry of Agriculture (MoA) as the first policy response to the growing concern arising in the debates around pastoral development. No statement or policy position was issued by this structure, which was supposed to offer technical assistance to corresponding offices within the different regional administrations. At present, the PDT has a permanent staff of less than 15 people. Most of the people that were animating the PDT at the beginning of the nineties, are currently still working on pastoral development issues, but have left the PTD and found employment in the NGO sector.


pastoral parliamentarians about the establishment of a parliamentary group. The pastoral parliamentarians proposed a small subcommittee of eight people tasked with setting up a standing committee. The membership of this interim committee was decided at region level and it was chaired by a Somali person. The interim committee embarked on the task of establishing a standing committee, with the support of the PCI. After a period of negotiation, the establishment of the PSC was allowed. Five particular factors contributed to the successful establishment of the PSC. Firstly, the increased political attention to pastoralist issues, within the context of broader political changes and moves towards political pluralism, provided an open space for changes to occur. Secondly, a concurrent restructuring of parliament which reflected changes in the structure of government and the establishment of new ministries provided a specific political opportunity for structural change. Three new standing committees were created at this time. Thirdly, the support of the Speaker of the House was essential. He accepted from the outset that a critical constituency was historically marginalized and structures needed to be put in place to give greater voice to that constituency. Fourthly, the mobilisation of ninety parliamentarians, including strong pressure and lobbying from some individuals, was very important. Finally, PCI provided the catalyst for change through external information, including access to international experience and experts, mobilisation of the parliamentarians and a variety of other resources and support for lobbying.\textsuperscript{156} The legislative function of the PSC is laid out in the constitution and resulting legislation, including proclamation No. 271/2002, and in provisions applicable to all the twelve standing committees in the House of People’s Representatives. Bills, which may be initiated by the House or drafted by the executive, are referred to the committees after preliminary readings. Having received a bill relevant to its mandate, a committee arranges a public hearing where relevant parties and individuals are invited to present their views and opinions. The dates and times of the public hearing and the agenda are announced in broadcast and print media, and contributions by letter or telephone are also invited. After the public hearing, when all views have been collected, the committee submits its report and recommendations to the Speaker of the House so that it can be added to the agenda for the next regular meeting of the House.

The general mandate of the PSC consists in performing all activities that are needed in order to ensure better inclusion of pastoralist views into national policies, at a formulation as well as at an implemental level. These functions are supposed to be articulated in terms of

supervision on other government institutions that deal with issues of concern, with the right to provide oversight of the pastoralist sectors established in other ministries: primarily the Livestock Marketing Authority, but also at least eight different ministries and other institutions such as the Ethiopian Agricultural Research Organization, and the Disaster Preparedness and Prevention Commission. The PSC is composed of 13 members, 5 of which belonging to non-pastoral constituencies, and made to participate by parliament because the issue of pastoral policy is considered of urgent national interest. The PSC engages with nine ministries, including the Ministry of Agriculture, the Ministry of Water Resources and the Ministry of Education. There is clearly vigorous debate within the committee on a number of critical issues, including the need for a separate Ministry for Pastoral Affairs and the issue of settlement. However, the constraints of the broader political context are likely seriously to limit the overall ability of the PSC to influence government policy and provide effective oversight. The influence of the EPRDF in the appointment of members undermines the claims to autonomy of all parliamentary standing committees, with most of the prominent positions reserved for those who have been most active in the EPRDF157.

On the one hand the PSC is useful to ensure representation of pastoralist regions, with non-pastoralist members included, in order to integrate pastoralists further into national policymaking. On the other hand the management and appointment of PSC can be utilised to ensure sufficient EPRDF input and control on pastoral issues. There are also questions about potential conflicts of interest between members of the committee and their business and humanitarian activities. Additional constraints to the influence of the PSC include: the political nature and sensitivity of pastoralist policy; the lack of formal mechanisms for relationships with broader body of parliamentarians; the ability to influence other government institutions, a relatively limited formal mandate; resistance from some ministries and other standing committees; and overall capacity levels. The PSC also promotes the voluntary settlement in the pastoral areas and most of the reservations expressed by its members concern the need for complementary measures to be taken in order to successfully implement it158.

Despite the many constraints, the establishment of the PSC was an important achievement for pastoralists, and it contributed to change views about representation. It provided an example

157 Ibid.
of how representatives of poor and marginalised groups can come together to work through formal political structures in favour of those they represent. In particular, it recognised the legitimacy of the demand for a separate consideration of pastoralist needs, embodying a move away from the peasant approaches to development. The PSC can become a space in which genuine debate about pastoralist policy takes place, a forum in which the interests of different groups of pastoralists are aggregated and formed into a more coherent voice with greater potential for policy influence. Moreover, the process of negotiation as the one in PSC may itself contribute to enlarge the political space\textsuperscript{159}.

Another institution that does not have a specific mandate for pastoral policies but plays an important role in all disaster prone areas is the Disaster Prevention and Preparedness Commission, DPPC\textsuperscript{160}. This institution was established during the famine of 1984-85, under the name Relief and Rehabilitation Commission. It was originally conceived as a sort of coordination body to interact with all the external organisations intending to operate in Ethiopia, and acquired a direct implication in the management of all relief and development organisations’ activities. At present, NGOs need a general permission to work in the country that is awarded by the Ministry of Justice and renewed annually. They need to reach an agreement with the DPPC (and its regional articulations) in order to be allowed to carry on their interventions. Another important element of the function played by the DPPC comes from its close association with donors’ organisations, especially the WFP. The WFP has embarked a capacity development programme in order to strengthen the role of the DPPC in early response to climatic crisis and potential famine events. Through this programme, DPPC developed skills in assessing emergency and controlling subsequent relief operations. Considering that southern lowlands are among those frequently hit by humanitarian catastrophes, the role of the DPPC is very important in these areas and in official pastoral development projects, generally.

Regional administrations are also establishing institutions specifically intended to deal with pastoral development issues, such as Regional Pastoral Commissions. The Oromia Pastoral Commission (OPC) was established in August 2002, and it appeared as a dynamic and relatively well staffed unit with a detailed knowledge of the interventions taking place in the pastoral areas of the region\textsuperscript{161}. Positions expressed by OPC officials were quite critical towards highland perspectives on pastoralism. Strong cases were made concerning

\textsuperscript{160} Currently transformed into Disaster Preparedness and Prevention Agency (DPPA).
\textsuperscript{161} A corresponding institution is also operating in Somali NRS.

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inappropriate extension packages, settlement oriented policies and threats posed by inappropriate agricultural practices. They were described as one of the key elements undermining pastoral livelihoods in southern Ethiopia.

2.9 Interaction between state and traditional structures of representations

Another process which mediates between citizen interests and policy influence in the Ethiopian context is the interaction between state and traditional structures of representation. There are potential differences in the conceptualisation of representation between state and traditional powers. There are also different conceptions of the role and practice of representation among different groups in Ethiopia. Traditional or customary views of representation mean different things for different groups in Ethiopia with diverse ethnicities, histories and cultures. There is also diversity within ethnic groups, based on age, gender, status and other factors. It is possible nonetheless to consider how aspects of customary systems might affect the conceptualisation and practice of representation and how this might clash with the views of the government majority highlanders.

Many traditional systems in Ethiopia share similarities with the Gada system of Borana, especially in principles and practices around decision-making. For example, age is often given a high value within traditional socio-political structures. Elders serve in both formal and informal structures, and councils of elders are frequently used to solve inter- and intra-community disputes, as well as domestic issues. Elder councils are usually male and the occupational castes are often excluded. Decisions are usually consensus based\textsuperscript{162}. Vaughan and Tronvoll argue that a consensual, egalitarian-based approach contrasts with the trends of the dominant political culture in Ethiopia. They suggest that patterns of social interaction within Abyssinian traditions demonstrate a hierarchical stratification, with a social classification in which people are not perceived to be equal. This pattern of social interaction would facilitate the continued dominance of the central government in the political agenda and decision-making\textsuperscript{163}.

Despite the difference in the conceptual understanding of representation, there are interactions between traditional structures of representation and state bodies, at all levels. In many instances, this takes place through different positions being held by the same person. For


example, a number of federal parliamentarians are also high-ranking elders. Traditional representatives are encouraged to be engaged within formal political systems. This filling of both traditional and state roles is particularly frequent at lower levels. In Borana, about 20 per cent of the kebele council have been also elders, and the consensus in every meeting has been facilitated by this fact. There is a quite strong concern from the local government structures to respect traditional bodies. At the same time an effort has been done to share the responsibilities and not interfere with matters which should be dealt with by traditional elders. Government also sometimes provides financial and other support to customary celebrations. The situation is relatively different than under the Derg, when customary councils had simply issued orders and expected them to be obeyed\(^\text{164}\). Woreda and kebele officials started to consult with elders about a wide range of issues including natural resource management and community mobilisation. On the surface it does not appear to be a big split or excessive levels of conflict between kebele/woreda officials and traditional elders in the same area. Conflicts between the state administrations and the peripheries is concerning more the central state and the traditional leaders, where the distance of concerns is bigger, while at local level the government authorities and the traditional elders can more easily discuss and support each others. The relation between state and pastoral areas in the southern lowlands is made more complex by these different levels within the federal governmental administration.

In particular, the prevalent orientation among Borana prevents traditional leaders from assuming formal modern offices in the administrative structure: the political system is intermingled with the social and religious order, and Borana leaders feel a strong contradiction between the idea of serving the *adaa seraa Borana* and the state interest (which is mostly felt as being extraneous to Borana people). Thus the identification of elders as part of the administration should be cautionary, meaning to not assume that all the elders (seen from a strictly age point of view) are to be considered traditional leaders\(^\text{165}\). When traditional leaders are co-opted into state decision making procedures, this may encourage rent-seeking behaviour and undermine customary self-governance arrangements. The situation among Somali appears to be different, and the case of traditional leaders that assume a visibility in


modern formal institutions is not unusual, in a context, however, where the formal state structures are felt as remote and absent from daily interactions\textsuperscript{166}. Based on a system established in the Afar region, in the Somali NRS there is a constitutional provision for an assembly of elders and ethnic leaders. The proclamation necessary for its establishment had not yet been drafted, but the system is already operating and is intended to bring traditional conflict management mechanisms into government\textsuperscript{167}. A number of elders, known as amakari, receive a salary to advise the government at regional, zone and woreda level on matters relating customary issues, and also to be involved in conflict resolution. The question is if this structure is an effective means of mediating interests and how it is possible to be sure on their independence and accountability towards pastoral communities. The involvement of amakari can be critical because they are paid by the government, therefore they could be easily pressed to take into account also administrative concerns and in this way they risk to not properly support the communities they claim to represent. On the other hand, they are also in the position to play a useful role, particularly in terms of conflict resolution.

The amakari were firstly appointed before the elections of 2000 and many openly worked for the Somali People’s Democratic Party (SPDP). Some amakari openly admitted to have brought people into the party and persuaded individuals to stand as SPDP candidates, most of the times judging that the SPDP was the most likely party to bring benefits to their communities. The amakari exercised considerable control over the voting habits of their communities. At the same time, the SPDP was careful to not allow their influence grow too significantly, therefore their position was not institutionalised, neither were any autonomous resources provided to them\textsuperscript{168}.

There are three particular issues that emerged in the studied area in several sites and occasions, as sources of grievance between elders and political authorities. Firstly, in Borana, there was a widespread alarm concerning the granting to farmers by woreda officials of land traditionally reserved for vulnerable flocks. This was seen as a significant problem by pastoralists, as it would have undermined their livelihoods as well as their traditional systems of flock management\textsuperscript{169}. Secondly, some elders who were used to their decisions being final, found that their rulings were not considered binding. In particular, the relative youth of the


council chairs was also a source of grievance. Finally, there was occasionally conflict between state and traditional systems of justice. On occasions, individuals convicted by traditional courts appealed to the police and had their convictions and penalties overturned by the state system\textsuperscript{170}. Lister (2004) reports that, within its complexity, the interaction between formal and traditional systems fulfils a representation function. However, three sets of questions about this mediation emerge. Firstly, is the extent to which elders have been co-opted by the government. Elders who participate in political systems at all levels benefit financially. Even those who hold no formal position but attend various consultations receive some financial compensation for their participation. The financial and other ties to the state or party could affect their ability to put forward an independent articulation of interests within their community. This is likely to vary from region to region, community to community and individual to individual. Secondly, when those making decisions are not themselves elders, there are questions about the extent to which the views articulated by elders are influential in policy decisions, at the kebele and woreda levels. Furthermore, the lack of connection between these levels of government and higher levels has been noted.

Decisions on a number of matters could be motivated by political issues and elders could face challenges to intervene on that. For example, access to food and water could be related to allegiance to the central state, while clans and individuals suspected of disloyalty could be denied the right to use wells and receive food aid. Even when consultations were held by the government, there was the perception that policy on important issues, such as land and security, was made at a federal level. Thirdly, the process of interest aggregation by elders and the extent to which elders are able to put forward a position which reflects the diversity of views within their communities can be questioned. Their traditional systems are based on consensus reached by adult males, and both women and outcast groups are usually excluded from these processes\textsuperscript{171}.

2.10 Pastoral representation and conflict resolution in the southern lowlands

Traditional institutions that have been at the base of decision making processes for centuries in the target area seem nowadays to be challenged by the introduction of modern institutions. The question is whether and how they are able to adapt to changed conditions and establish effective ways of communication within them. Tache and Irwin explore this issue by asking


\textsuperscript{171} Ibid
in what measure natural resources management can be sustainably ensured through common property arrangements. The common property perspective, which was effectively adopted for centuries and lays at the heart of the traditional tenure systems, is overlooked in the normative articulations. As a consequence of this, the idea of dynamism and flexibility has been challenged also\textsuperscript{172}. Wilding recognises a history of innovation, rapid adaptation and social flexibility. For example, the kalloos, previously unknown to the Borana culture, have been recently introduced and this proves that they can be an effective regulatory model\textsuperscript{173}. Many traditional leaders share the idea that the influence of modernisation processes has been noxious for customary institutions. The presence of the state, as an external and new actor, has much complicated the relations among the different groups in the area, making more difficult the system of local governance that previously was regulating the pastoral system. The central state has been perceived as a further actor competing with groups already in the area, for the same set of resources. This fact is in my view more relevant of what was highlighted by Jacob, which remains pertinent. He stated that in the case of the southern lowlands, the attempt to build up a structure of formal modern institutions led to a progressive erosion of the importance of customary institutions. This process took place through three distinct mechanisms, which determined various dimensions of the effectiveness of local institutions\textsuperscript{174}:

1) The loss of pertinence and capacity of customary institutions to effectively regulate issues of public relevance. This is mostly related to the introduction of innovations, such as the spreading of agricultural practices and the construction of modern water schemes. The last one implies also the payment of money for their maintenance and introduces a previously unknown dimension of water as a marketable commodity, which also hinders the allocation of rights under the customary system.

2) The loss of legitimisation, through the competition with the modern institutional set up and the erosion of the governance space of traditional bodies. Particularly at grassroots level, PAs have functions that often overlap customary arrangements. Some cases include PA councils


allowing the privatisation of plots of land, under pretext of intensive development, which
dispossessed pastoral communities of their prime grazing areas.  

3) The loss of will of function holders in performing regulatory tasks within the reference of
the customary institutional framework. Both the Borana and Somali systems are based on a
complex set of counterbalances, whereby the exercise of authority is mitigated by counter-
weighting mechanisms, and thus made less discretionary. The outcome in nowadays situation
can be that specific institutions keep their regulatory role, but within a progressively less
constrained environment, potentially leading to the privatisation of functions. An example of
this sort is that of the abba ella (literally the well’s watcher), whose role is crucial in
regulating the access to water. A level of discretional power in playing this function is
effectively counterbalanced within the customary system by several rules linked to different
forms of structured alliance between clans, the obligation to allow access to water to any
Borana and potentially to any other person in need, and by a supervisory role of the pan-
Borana institutions. Cases were reported where the abba ellas asked for money to allow
access water sources. This habit is severely sanctioned as by customary law (aada sera
Borana) but even protests raised at higher level, they couldn’t, at least in some cases, lead to
any correction.

However Tache and Irwin (2003) highlight also cases in which formal and customary
institutions are cooperating and cases where the negotiation of PAs representatives on the
definition of equitable access to dry and wet season for pastoralists living in the different
locations was endorsed and given legitimacy by the presence of Gadaa representatives.
Conflict has been a constant feature of socio-political interaction in the southern lowlands, in
order to regulate the access to resources among different groups. While conflicts within clans
seem to be still effectively dealt with by customary institutions, this is not the case of inter-
ethnic clans conflicts. The radicalisation of the inter-ethnic confrontation developed after the
adoption of the new federal constitution. The nature of the conflicts has roots in the
competition over resources, but it has also a clear link to issues related to the political control
of the territory. Conflict resolution is therefore a key node in the social and political processes
of the area, as well as the responsibility for all needed mediation and conciliation
mechanisms. Conflicts in lowlands are the reactions of communities seeking to secure what

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they perceive to be their interests in the context of current circumstances, where ethnic difference has been rendered constitutionally salient, and on the basis of the information at their disposal. As Vaughan and Tronvoll argue, ethnicity was not introduced in Ethiopia by the EPRDF, but the federal constitutional arrangements offered room for the materialization of latent ethnic conflicts, sometimes involving neighbouring NRSs, such as the case of Borana/Garri conflict\textsuperscript{177}. The legitimacy of conflict resolution within the regions is linked to a delicate trade-off between the large autonomy of the NRS and the need for the federal government to legitimise its control on the territory, mainly in the most peripheral areas of the country. Instead when the conflict takes place between two distinct NRSs, the Federal government can fully exert its powers, and the recent creation of a bureau for border affairs within the Ministry of Federal Affairs goes in that direction.

In the area of the southern lowlands, the conflict is on the border between Oromia and the Somali NRS and attempts by the government were promoted in facilitating the conciliation of conflicts, especially those between Garri and Borana. The failure of these attempts is explained by Getachew (2002) as the perceived limited legitimacy of participants to the peace conference in representing their respective groups and due to the neglecting of traditional mechanisms for conciliation. A further factor is the perception that the central government is a player rather than the referee\textsuperscript{178}. An alternative approach to conflict resolution is leaving the task to local and customary arrangements. Looking at the case of the ethiopian lowlands, the present day conflict cannot be de-linked from the complex relations that determined interaction between the different groups. In the contested areas of Dire and Liban, the attitude of the different social groups is motivated by claims based either on the actual occupation of pieces of territory, or by historical rights.

The success of local peace building efforts is linked also to a much wider territorial space, in that the southern lowlands cover a very large area stretching across both ethiopian and kenyan territories. The competition between formal and customary institutions can be therefore present also at the level of conflict resolution, while it would be interesting to evaluate how


the possibility that the agreement eventually reached by the parties negotiating at the local level may result in effective governance arrangements\textsuperscript{179}.

2.11 Development interventions in pastoral areas
The interventions on pastoralism implemented by the government were initially based on the perceptions that the livestock production system was backward and there was the need to introduce new productive techniques. With the financial support of USAID, African Development Bank and the World Bank, series of livestock projects were launched from the 1960s to the 1980s. In 1964 a national authoritative body, known as Livestock and Meat Bureau (LMB) was established to coordinate different livestock activities (livestock production, marketing of livestock and livestock products). The first planned intervention, a USAID pilot project, was aimed to develop the Borana rangelands, through the introduction of range management. The project focused on provision of watering points, demarcation of grazing areas into paddocks and providing ponds in each paddock. The project was not compatible with the traditional Borana communal grazing-land ownership system and it was not possible to accommodate a large number of animals into each paddock. A second livestock project was initiated in 1973, with a loan from the World Bank. It focused on developing a stock route system and the establishing slaughter facilities in major towns, but most of them were not used, since the project didn’t take into account the traditional stock routes. Furthermore, many of those facilities were destroyed during the Ethio-Somali War in 1977. The third Livestock Development Project (TLDP) was the first large-scale pastoral development intervention in Ethiopia. It was launched in 1976 and was aimed to rehabilitate three lowland areas: the southern (SORDU), the North-Eastern (NERDU) and the Eastern (JIRDU). The activities were mainly the water development as ponds construction in wet season grazing areas, the provision of veterinary service, irrigation/water spreading, ranching and marketing, infrastructure as buildings, roads, centres and range management. Also joint research on Borana was carried out by CARE and ILCA. The project was able to build infrastructures, but did not involve pastoralists, their perception of development and their culture during the planning and implementing stages and therefore, the infrastructures were simply not utilised.

The Fourth Livestock Development Project (1988-1993) used a participatory approach in order to involve pastoralist knowledge during the planning and implementing stages. It focused on Borana pastoralist social organization in order to initiate service cooperatives and organize them into traditional system. The activities of the project were severely disrupted as a result of civil unrest in the area, after the overthrow of the government in May 1991.

In 1990 the South-East Rangelands Project (SERP) was initiated on a 245,000 km² area, in almost all the Somali Region. The project started in 1990 focusing on institutional development, land use and range management, animal production and health, livestock marketing and infrastructure development. Under this project, it was implemented the community-based participatory approach, but with some difficulties: the project staff were still adapted to use the top-down approach and the beneficiaries had to organise themselves in order to accomplish the projects’ objectives. Major policy initiatives like the Sustainable Development Poverty Reduction Programme, the Safety Nets Programme and the Lowland Food Security Strategy were carried out in the following years in order to reduce dependency and increase food security in the target areas.

A National Five Year Development Plan on pastoralism (2000-2004) was established, focusing on the need for strengthening agricultural development activities in pastoral areas to raise the standard of living, strengthening foreign exchange earnings, and improving nomadic livelihoods. The plan admitted a certain knowledge gap concerning pastoral area development and recommended the following interventions:

- Natural resources conservation
- Introduction of new varieties of grasses and vegetables
- Provision of water and introduction of livestock extension programme
- Development of markets for dairy products

As part of improving the nomadic lifestyle, the plan recommended sustainable settlement with the introduction of small-scale irrigation and the improved provision of water was identified as the main strategy to overcome the unbalanced seasonal availability of grazing pastures. The importance of traditional knowledge and practices was recognized, and the need to understand those before proposing innovations was stated. In addition, the need for specialised extension packages was acknowledged and planned for. The analysis was based

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180 Ibid.
181 “Although in the short-run and to some extent in the medium term periods, there is no alternative for agricultural development movement other than improving the nomadic livestock husbandry, in the long-term this cannot be a guarantee for a rapid and sustainable regional development. It is impossible to provide efficient service of socio-economic infrastructure for nomadic people. Sustainable and rapid development can be achieved only if the people are settled.” (Federal Democratic Republic of Ethiopia - FDRE, 2001).
on the recognition of the economic potential of pastoralism, with some stereotyped representations\textsuperscript{182}.

The Sustainable Development and Poverty Reduction Program (SDPRP) was completed in Ethiopia in July 2002. After an Interim PRSP in November 2000, the Ethiopian government issued its final SDPRP, receiving the endorsement of the International Financial Institutions, IFIs, in November 2002. The International Monetary Fund, IMF, member countries prepared the SDPRP in consultation with stakeholders and development partners including the staff of the World Bank and the IMF. The SDPRP is updated every three years with annual progress reports that describe the country's macroeconomic, structural, and social policies in support of growth and poverty reduction, as well as the external financing needs and the major sources of financing\textsuperscript{183}. The content of the SDPRP reflects an approach based on the idea of centralised control and oriented toward economic growth, to be realised through the industrialization of agriculture and the improvement of exports. Concerning pastoralism, it states that "Pastoralists have considerable expertise and know-how developed over many years of practical experience. Ignoring this reality would lead to failure. Introducing new techniques to the pastoral communities should be preceded by a detailed assessment of traditional practices and identify their merits and demerits. There is a need for developing technology packages, which help to strengthen the useful traditional practices and do away with harmful ones" (FDRE, 2002).

The implementation of the settlement plans for the pastoralists is considered to be more complicated as it implies a change "...in their cultural life. This complicates the sedentarisation programmes, and requires training and initiation works. It would also require a significant cultural transformation. The objective is to settle the pastoral population. However the cultural transformation and the required persuasion work would take quite a while, perhaps decades".

Settlement programmes have become part and parcel of the national economic and social development programme. The task was supposed to be carried over through the participation of the people concerned via the leadership of regional administrations. The settlement of pastoralists acquired the status of national priority, together with the orientation towards


\textsuperscript{183} UN-OCHA, \textit{New thinking on food security by the Pastoral Communication Initiative}, 2011.
production issues. The two objectives of the pastoral development strategy are expressed in the SDPRP as follows:

"a) To improve livestock productivity through irrigated pasture, environmental rehabilitation, and improved animal health services,

b) Explore market outlets and integrate livestock production into the national economy."

In February 2004, the government of Ethiopia and its donor partners held a joint mission to design a national Safety Net Program. It was initially planned for five million chronically food-insecure people in 214 woreda over the next three years and it is still ongoing. The Safety Net Program is based on the idea that predictably vulnerable require predictable assistance to protect or rebuild assets, and that providing consistent, multi-year assistance to vulnerable households to strengthen them and their communities' coping abilities is necessary to re-attain and maintain food security in the long-term. The safety net programme could and should replace food aid and support households before adopting other strategies that undermine their livelihoods. The safety net programme is designed around three basic mechanisms of resources’ transfer: unconditional transfers, conditional transfers and public works. Labour intensive public works are meant to provide resource transfers to chronically food insecure families capable of providing labour. Conditional transfers are meant to provide resources that support or enable positive behaviours (education, skills transfer, training, health practices). Unconditional transfers are meant to provide resources to labour-poor chronically vulnerable households, unlikely to benefit from conditional transfer activities.

2.12 Pastoral voices

In the last years, a series of different forums were organized, with the general objective of increasing and facilitating the participation of pastoralists in public life. Diverse factors have contributed to this. Firstly, the ongoing democratisation process has led to a much more positive attitude towards an open discussion on policy issues. As previously stated, policy options about the pastoral areas of the countries are linked to crucial national interest issues. The pressure of the international community pushed the government authorities to


acknowledge the importance of the pastoral debate in order to legitimise the decision making process. Thirdly, the idea of an assembly of pastoralists is consistent with a somewhat representation, stereotypical, of pastoral traditional governance models.\textsuperscript{186} Organised civil society in Ethiopia has promoted various national forums to discuss pastoral development issues on different occasions. The first important meeting of this sort was organised in 1993 with the support of the newly established Pastoral Development Team, the Ministry of Agriculture and with the participation of a wide range of scholars and activists interested in a renewed understanding of pastoral development.\textsuperscript{187} From 2000, the Pastoralist Forum of Ethiopia has organised national events almost every year. Participation at these conferences was open to academics, NGO representatives, government officials, and international organisation officers. The participation of pastoral community representatives was somehow limited and the recommendations were mostly avoiding hotter political implications.

The government has also taken the initiative of convening pastoral forums in order to discuss and define strategies and long-term visions. One of the first acts of the newly established Pastoral Development Unit in the Ministry of Federal Affairs was to organise a conference in Dire Dawa, in April 2002, where the development option of voluntary settlement for pastoralists was presented. Over 300 participants from the four major pastoral regions participated in the conference: Somali, Afar, Oromia (Borana, Bale and Karayu zones) and SNNPR (South Omo Zone). Representatives from the Oromia Region did not share the vision for settlement, claiming that the relative scarcity of streams in the pastoral areas of the region made the idea of settlement along the river banks impractical. Participants from outside governments appeared to have diverse views about settlement and short and medium-term strategies for development in pastoral areas. The Dire Dawa conference was repeatedly quoted by the government as an example of its openness in discussing long-term strategies.

Mention should also be made of the Ethiopian Pastoralist Days (EPD), initially promoted in 1999 by the NGO PCAE, in Filtu (Somali Region) with participants from the neighbouring woreda. It was replicated every year since then within an increasingly ambitious perspective of territorial coverage. During the EPD, an increasingly tight cooperation between civil society and government organisations (namely, the PDU in the MoFA) was registered, conflicts among pastoralists were barely mentioned, in a context where the celebration of the


EPD is an occasion to gather together ethnic rivals and start a process of reconciliation, an emphasis was placed on organisational issues related to the importance of sharing and networking. Finally one of the key arguments was the importance of the rationality of the pastoral livelihood and production system, while governmental policies were only slightly mentioned\(^{188}\).

In June 2004, the PCI, under its general mission of improving communication between the pastoralists and the government of Ethiopia, organised an Oromo meeting. The preparation process was quite closely controlled by government officials, who participated also to the meeting itself, while the selection of the delegates was managed by the woreda. The attempt to involve legitimate representatives from Borana leadership in the organising committee failed: the person that played the most important role during the workshop did not enjoy any particular status in Borana society and had familiar connections with those who organised the meeting. Things were somewhat different for Gabbra (Migo), as their leaders were more directly involved\(^{189}\). The meeting took place in Yabelo for a week and was attended by several representatives of the communities, including the elders. The final declarations identified the major problems as per the perceptions of different communities (Borana, Gabbra Migo, Guji). They included the shrinking of the natural resource base due to disorderly development of agriculture and of privatised plots, the interethnic conflict, the visible degradation of the environment, the degradation of the moral integrity (khat chewing, alcohol abuse, pregnancy of girls, the spread of HIV/AIDS), the scarcity of services for pastoralists, such as human and animal health, education, water, banking services.

Further issues were raised as the expression of Government and NGOs. These include the following:

- The different communities participating at the meeting, shared the common sense to be Oromo, however there was not a mention of other ethnic groups present in the area, such as the Garri.
- All the processes leading to the shrinking of grazing land and the practice of privatised kalloo were repeatedly framed as dangerous to the pastoral way of life
- The issue of conflict is felt by the different stakeholders, but its roots need to be further analysed in a wider political context, in order to consider the border issue


(between Somali and Oromo NRS) and the increased government control on the areas (including the process of border demarcation). The problem of territorial losses due to arbitrary and unfair demarcation of regional borders was mentioned several times during the first two days of the meeting.

- An environmental and territorial sensitivity was revealed as strictly interlinked with livelihood but also linked to cultural and institutional issues.
- All the groups insisted on the danger of weakening customary institutions, under both a moral and a local governance perspective.
- The final resolution of the meeting highlighted the following points:
  - Peace is the cornerstone on which development must be built and this requires the commitment of everybody.
  - Livestock is the basis of livelihood, and also the main resource.
  - The importance of education.
  - The threats posed by the expansion of agriculture, which increasingly constrains the availability of land for farming, and the danger posed by the individually owned enclosures.
  - The threats posed by the spreading of HIV/AIDS: this raises an issue in avoiding dangerous behaviours, but also calls for support in organising awareness raising activities.
  - The threats posed by the degradation of the forests and wildlife. The traditional institutions are invoked in order to have support for the measures needed on these issues.
  - The need for different services: marketing facilities, financial, health, veterinary and water.
  - The need for an improved cooperation between government, NGOs and communities.
  - The weakening of traditional institutions in order to give an effective contribution to development.
  - The request to traditional institutional bodies to endorse and support the decisions adopted during the Yabello meeting.
  - Acknowledgement of the work done by the OPDC (Oromia Pastoral Development Commission).
  - The need for encouraging the involvement of women at all stages of development, and the defence of women’s rights.
This declaration was read on behalf of the groups participating in the meeting: Borana, Gabra, Guji, but also Marrehed (a Somali group), and Arsi (Oromo agro-pastoral group, living at the northern edge of the southern lowlands).
CHAPTER 3. Dynamic ethnography of the studied area

3.1 General presentation of the area

This chapter will describe, after a very short presentation of the geographical aspects, the characteristics of the different groups living in the studied area and their dynamic relations over the course of history, while they attempted to access water and rangelands. The research doesn't privilege one particular group and the livelihoods analysed in the value chains is performed by all of them. The people met during fieldwork are mainly Garri and Borana, but there are also other groups described in this chapter.

The studied area is located in southern Ethiopia, across the Somali and the Oromo national regional states. The western part of the southern lowlands in Ethiopia is known as the Borana Plateau, while the eastern side extends to the area between the Dawa and Genale rivers. The area is between 750 and 1,700 m a.s.l., with a highly variable bimodal rainfall pattern, concentrated in two rainy seasons: the long rains between April and June known by the Borana as gaana rains and gu among the Somali and the hagaya rains (the short rain) between October and November, or deyr in Somali. Total rainfall ranges between 350 mm and 900 mm with a coefficient of rainfall variability between 21% and 68%\textsuperscript{190}. The spatial distribution of the rainfall is highly unpredictable, and areas where rainfall is less than 200 mm are not uncommon, mainly on the Somali side, while on the Oromia side, pockets of better endowed patches make agriculture a possibility.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.jpg}
\caption{The Southern Lowlands of Ethiopia\textsuperscript{191}}
\end{figure}


\textsuperscript{191} All borderlines are unofficial. In most of the cartography previously available, the territory south of Dawa and Filtu were attributed to Oromia Region, which included Moyale and Liben Woreda in Somali Region. Somali
The studied area was limited to 4 woreda: Moyale Somali woreda in Liben zone – Somali regional state; Moyale Oromia, Dhas and Dire woreda in Borana zone (where Yabelo is the capital town) – Oromia regional state. Referring to the Moyale area in this research, it is intended to mean all these 4 woreda, that have been found interlinked while carrying on the value chain of resins and gum in the area. In particular on the map, the town of Moyale is the woreda capital city of both Oromia (west side) and Somali (east side), while Mega is the woreda capital city of Dire.

From these 4 woreda, gum and resins are produced and the first two steps of the analysed value chains are placed in the villages of these 4 woreda. Then while the value chains continue, by meeting well-identified markets and stocking points, the chains go beyond these 4 woreda, until reaching Yabelo and finally, Addis Ababa. The focus of this research was mainly on these 4 woreda in order to identify strategies and livelihood options of pastoral people living there. Moyale town is around 780 kilometers south of Addis Ababa. The studied woreda border each other and Moyale is found at the most southern point. The town of Moyale is at the centre of an ample pastoral area, and, at the same time, is at the meeting point of two border lines: the border which separates Ethiopia and Kenya and the border which separates two Ethiopian Regional States: Somali and Oromia.

The southern lowlands border the Kenyan districts of Marsabit, Moyale, Wajir and Mandera in the south, from west to east, respectively. The north-east part borders with the Dawa river. On the other side of the river there are Filtu and Dollo woreda of Liben zone, Somali regional state. North to Moyale towards Negele Borana there is Hudet woreda, a Somali region territory, which recently became an autonomous woreda. Again to the north, proceeding from east to west, the studied area is bordering Arero, Yabelo and Teltele woreda of Borana zone.

In Moyale area, the ethiopian and kenyan sides are economically well integrated and movements from one side to the other are usually frequent and smooth. The people of both sides generally call the other one gambo which means the other side in Swahili, the language spoken in Kenya and also by some people of the target area. This study is concentrated on the ethiopian side, but I will refer to gambo, for some specific products like Agarsu and when mentioning the contraband phenomena.
Moyale in Ethiopia is divided into two areas with separate administrations and territories. They are also inhabited mainly by two different ethnic groups: the Garri, a Somali group, on the east side and the Borana, an Oromo group, on the west side. Other Somali people (as the Marehan and Digodia) inhabit the area, as well as other pastoral groups such as the Gabbra, a Borana speaking group whose livelihoods are based on camels. A large number of immigrants from the surrounding agricultural areas have also settled, especially in the urban centres (Guji, Arussi, Konso, and others). After the sedentarization process started, it has been possible to differentiate in the target area a small portion of urban population and a larger portion of rural population.

The size of the villages in the area varies in both area and estimated population. They resemble on one side the small towns (El Leh in Somali side, or Hidilola, Dubluk, Bokuluboma and Tuka in Oromo side) and on the other to very small temporary encampments of nomadic people (generally composed of around 15-20 households).

The small towns are the consequence of settlement, a quite recent phenomenon among pastoralists. In recent time the phenomenon is becoming more intensive, so in the last 20 years many small villages increased in dimension. This is the case for example of Bokuluboma and Dubluk on the Oromia side and the case of El Leh on the Somali side. Only a few years ago these villages were composed mostly of traditional pastoral houses and a small number of mud houses (chica house), while now it is possible to find many mud houses refined by cement plastering and covered by iron sheets, shops and some restaurants. In all the 3 cited cases, the villages are also in a favourable position along the major and commercial roads, close to infrastructures and services, and in a strategic position during food relief distributions\(^{192}\).

### 3.2 Human population and ethnic composition

#### 3.2.1 Introduction

The study area is characterized by a dynamic interaction between different groups. Southern lowlands are actually inhabited by a mosaic of ethnic groups, with differentiated and complex livelihood styles. The identification of these groups is not easy due to overlapping identities at different levels of segmentation (family, lineage, clan, ethnic group or tribe, nation), classificatory criteria (genealogical, linguistic, religious, insiders/outsiders) and social stratification (subsistence pastoralists/peasants, traders and investor, various elites, educated

Youths, administrators. The way all these elements contributed in shaping identities and relations are described in the following paragraphs.

The main and flexible articulation is between Oromo people, living in the western part of the southern lowlands, and Somali peoples, living in the eastern part. We can refer to a number of primary identities – such as Borana, Gabra, Garri, Digodia – defining different local pastoral and agro-pastoral groups, but keeping in mind that in the above mentioned urban and peri-urban contexts there are also relevant actors not bound to the customary institutions. They are the immigrants of various ethnic backgrounds, immigrated subsistence farmers, national and international investors, and businessmen.

The development of urban centres in the area of the Southern Lowlands such as Dubluk, Bokuluboma and El-Leh, is a process that has been taking place since the end of the 19th century, when soldiers of the Ethiopian army, the neftegna, were granted rights on land plots (and in neighbouring pastoral communities as well). Small villages composed of few houses have now the aspect of small towns, able to offer different services and access to infrastructure such as school, market, clinic, etc. Later, people belonging to the traditional ruling class, mainly of Amhara origin, assured local administration while other people from the highlands were attracted by trading or for agricultural activities (mainly highland Oromo, such as the Gujji, the Konso or the Arsi). Some pastoralists also immigrated to the towns, in most cases loosing their ethnic affiliation and developing urban-based activities, as petty trade and carpentry. The historical events linked to the cyclical political instability provided a further important contribution to the creation of urban areas, also worsened by the careless availability of relief, especially since the famine of the mid-seventies.

As most of the urban conglomerates were located in or around the most favorable areas (under the agro-ecological point of view), urbanization became an entry point for the erosion of pastoral territory. The strengthening of urban centers in demographic terms, but also as centers of political/administrative power and as economic/commercial hubs, is weakly related to the endogenous demographic dynamics. Rural populations remained in most cases rather isolated and segregated from all those processes that took place in the towns.

In a pastoral setting, ethnic identities are easily used to represent the main differences between human groups, livelihoods and production systems. Taking ethnic identities as the basis for

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193 Ibid.
social analysis may however also bear the risk of oversimplification: ethnic boundaries are not rigid demarcation lines that divide human groups, unchanged since the beginning of life in societies. Identities are rather mobile, and are not exclusively based on ethnicity. Elements that would contradict a plain and coherent representation of human societies based on ethnicity are common, but risk to be overlooked especially in a time when ethnic boundaries are taken as the basis for political stakes. Ethnic demarcation could follow a sort of conventional construction rather than a genealogical one, which makes it possible to overcome ethnic boundaries by including members of other ethnic groups into clanic mechanisms, giving them access to key resources. Mechanisms for adoption/affiliation are known among the Borana as well as among different Somali groups, and ethnic transmigration had some importance in different historical periods. Equally, the boundaries between different ethnic groups are sometimes fuzzy because of the existence of common lineages, and inter-ethnic clans.

The increasing importance of other identity markers such as the religion warrants mention. In principle the religious differences closely reflect the ethnic ones, with Borana following their traditional religion and all Somali adhering to Islam. Traditional beliefs are however increasingly challenged by Christianity and, largely, by the expansion of Islam among the Borana as well. This expansion has roots in the history of the second part of the 20th century, but it also represents a rather contemporary issue, especially in urban centres.

The groups in the study area can be classified also along linguistic lines. The prevailing local languages are Oromo and Somali, both Cushitic. The Borana, Guji, Gabra and Arsi speak Oromo. The Ogadeni, Mareexaan, Digodia speak Somali. The Garri are linguistically heterogeneous, with most members being able to speak both Oromo and Somali. The Garri are eastern lowland Cushitic speakers encompassing the Oromo dialect related to the Borana one and two Rahanwiin Somali-related dialects called Afan-Darawa and Afan-Kofar. They live on both sides of ethiopia-kenya border and a small number in southern Somalia.

The western part of the area is called Borana Plateau, and is mostly inhabited by Borana, Oromo pastoralists that have been ruling the area for the last six centuries. While most of the Borana people are currently living in Ethiopian territory and most of their important ritual

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areas are also in Ethiopia\textsuperscript{199}, there are a number of influential Borana living on the Kenyan side of the border (Sololo), or in areas further away such as Marsabit, and between Isiolo and Merti. These groups still maintain a strong Borana identity, but their connection with the main branches is made increasingly difficult by the distance and by the socio-political conditions obstructing their movement.

Garri (Somali) and Borana (Oromo) are therefore the main ethnic groups met during the fieldwork. Their specific characteristics are described in the following paragraphs.

\subsection*{3.2.2 The Borana}

The Borana are part of the Oromo group. The Oromo people comprise the largest ethnic group in eastern Africa. In the southern pastoral or agro-pastoral lowlands, the Oromo territorial sub-division is between Guji and Borana. The Borana system is considered prototypical among the Oromo due to the senior (\textit{angaafa}) position of the Borana in Oromo myths of origin. The Borana \textit{gadaa} system (a governance structure) is also the best preserved through the modern times and as a result, the Borana are often seen as the custodians of the core traditions of all Oromo people. Oromo are said to have two moieties: the Barentu, highland agriculturalists and the Borana, the agro-pastoralists living in the Southern Lowlands. Borana are in turn divided into two esogamic moieties: \textit{Gona} and \textit{Sabbo}, which represent the basic articulation of Borana society\textsuperscript{200}. Other Oromo pastoral people of Ethiopia, such as the Karrayu, claim being originally connected to Borana\textsuperscript{201}.


\textsuperscript{201} One of the Borana clans of the \textit{Sabbo} moiety is actually called Karayu. Ayelew (2001) clarifies the terms of the connection, stating that the Karrayu originated in Borana area, and they have one of the four ethnic components still among the Borana.
The Borana branch of Oromo (or Galla) are peoples whose language belongs to the Cushitic subfamily, common to most of north-eastern Africa. They live in the southern area of Ethiopia and in the neighbouring areas of northern Kenya. In Ethiopia they are mainly in the southern sections of Guji and Borana Zones. Being scattered over a large and diverse territory, the Oromo have established various gadaa centers in Ethiopia, each providing the governance structure of certain territory. Also the Borana social system is based on a complex set of rules that are known as the gadaa system.

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202 From Bassi (1996): The genealogy is here reported up to clans for the Gona moiety and up to lineage subgroups for the Sabbo moiety. The further subdivision is, for both cases, at the lineage level. Where for the Gona moiety, the Fuleelle and the Harore are classified as submoieties, in the case of Sabbo this level does not exist, and the next level after the Sabbo moiety (Diigalu, Mataarri and Karayu) is said to be a group of lineages. For Gona, the clans are directly divided into lineages, while for the Sabbo between clans and lineages there are groups and (only for the Karayu) sub-groups of lineages.

and are the base to manage natural resources. The Borana *gadaa* system is characterized by generational classes and five *qaalluu*. The complexity of traditional Borana law (aada sera Borana) is based on a set of different and intermingled rules and regulations, pointing to the maintenance of the peace of Borana (*nagaa Borana*). To the Borana, this expression signifies a balanced and consensual livelihood, with mechanisms suitable to manage both internal conflicts, and relations with their neighbouring people within a basically peaceful framework.

The main element of the *gadaa* system is a mobile centre (yaa’*a gadaa* or *caffee*) whose responsibility is entrusted to a new generational class every 8 years (*gadaa* period). The generational class is represented by elected leaders, representing the main segments of a larger political unit organized under a single *gadaa* center. During this period, the generational class is known as *gadaa* or *luba*, referring to a central stage of the *gadaa* life-cycle, with overall responsibility for the political community at large.

The *qaalluu* constitutes the second ideological pole of Oromo and Borana governance, complementary to the *gadaa*. *Qaalluu* is a hereditary office whose sacredness is expressed by the myths of origin. Myths are also the source of the legitimacy of the *gadaa* centers, expressed by mythical narrations and rituals. There are several *qaalluu* among the Borana. Two out of the five *qaalluu* have higher relevance, being associated with each of the moieties. During each *gadaa* period (8 year ceremonial cycle) the *gadaa* officers belonging to the Gona moiety go to *qaalluu* of the Odiitu clan. The members of the Sabbo moiety go to the *qaalluu* of the Karrayu clan. In addition both *qaalluu* have their own independent *yaa’a* and *hayyu garbaa*, renovated at each *gadaa* period.

To know each other, the Oromo people engaged in different pilgrimages, as did the Borana: by crossing the Oromo country, individuals were maintaining an awareness of the Oromo nation. The pilgrimages were interrupted after the Abyssinian conquest of the Oromo country, which began during the second half of the 19th century, and the British conquest of Kenya.

There are basically three different sets of rules and instances of the regulation and decision-making system:

- The first one is based on the age set system, the *gadaa*: place and duties in the society for each individual is associated to its specific age set grade. Each grade lasts 8 years, and the

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204 *Gada* system is widespread among Oromo, but Borana *Gada* is widely considered as a sort of ‘archetype’. Neighbouring ethnic groups, such as Gabbra and to a certain extent also the Garri have developed similar social structures (Bassi 1996).


206 Ibid.

central and most important of these grades is called gadaa. The chairman of the gadaa council is called abba gadaa, and his office lasts for 8 years. The name of the abba gadaa identifies the period, and the succession of these names is the basis of Borana oral history.

- The second one is based on clans. The Borana are divided into two moieties (Sabbo and Gona), articulated into clans (gosa), sub-clan and lineage. The fact of belonging to a clan is the key condition for being considered a Borana, but the ethnic demarcation is made flexible through several mechanisms of adoption/affiliation/alliance. Borana clans are not linked to a specific territory, and therefore a clan assembly (kora gosa) may require the gathering of people living all over the Borana nation. The basic rights to water sources are on the basis of clan affiliation.

- The third one is the territorial governance system, where the smallest social unit is the olla, the encampment to which a variable number of houses makes reference, and not always belonging to the same clan. Other territorial articulations are the ardha, including ollas that make reference to a common grazing area; deeda, that usually group more ardhas, and madda, which literally means source of water, and it is sometimes used to indicate all the grazing area that refer to one source of water.

The generational classes of the Borana are ritually represented by 6 hayyu adulaa who lead the yaa’a. They are selected when they are young within their own gosa (clan), with a balance among the moieties (Sabbo and Gona) and the main clans of the Borana. The first to be nominated is known as the arboora. The entire generational class is known after his personal name. The second and the third are known as kontoma. The 6 adulaa go through a long ritual process when they are kuusa, raaba and raaba doorii (different grades of the gadaa system). When they reach the gadaa stage, the first three become the three abbaa gadaa (literally “the father” of the 8 years gadaa period). They lead three different villages that together form the yaa’a gadaa. The yaa’a arboraa is the senior one, led by the abbaa gadaa arboraa. The other two are the yaa kontoma, led by the abbaa gadaa kontoma. The three villages are often not far from each other, but they remain physically separated during certain ceremonial occasions. The unity of the 6 hayyu adulaa (three of them are the abbaa gadaa) and the careful execution of the rituals are considered crucial to the well being of all the Borana. The entire

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period of 8 years (gadaa) will historically be recalled after the name of the generational class, hence the name of the abbaa gadaa arbooraa. Borana social and economic life is regulated by a wide range of different types of meetings, implemented according to specific procedures and referring to a highly articulated set of laws (seera) and norms (aadaa). The most engaging ones for the Borana are the koraa gosaa (assembly of the clan), organized yearly by each clan and lasting about a month, and the Gumii Gaayoo, the general assembly organized every 8 years by the yaa’a arbooraa. Decisions are formally made by general consensus during meetings and assemblies, with the retired gadaa officers acting as competent facilitators. When the abbaa gadaa, the other hayyu and their assistants terminate their service at the yaa’a, they are free to go back to their local community, but retain political authority. Particularly, the oldest retired abbaa gadaa is known as the abbaa seera, the “father of the law”, responsible for formally proclaiming the law during the Gumii Gaayoo.

In Borana, descent is recognized only through the male line. Borana men are traditionally the heads of the households and make the major decisions regarding production strategies and disposal of major livestock. Recently however the number of woman headed households is increasing (estimated around 20%). As for the majority of other pastoral societies, as among the Borana, women’s role is limited to the management of the house and the small animals kept near the house. The majority of the Borana continue to follow indigenous religious beliefs, despite the fact that Islam is becoming increasingly popular and gaining more followers.

Borana is a cattle-based pastoral society. Borana livelihood is traditionally based on cattle, and therefore closely linked to the availability of sources of water: a cow must be watered in a three day cycle, that means that cattle usually graze within a radius of about 20-25 kilometers from a water point (the maximum distance that can be covered in 1-2 days). For optimal use of the grazing resources, cattle are split between the warra herds (lactating and productive calves), and forra herds (the dry herds). Warra herds are kept within the best pastures close to the encampment, while forra herds are sent to the most remote and less accessible dry season pastures.

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Small stock (sheep and goats) are also kept, as well as camels, which are increasingly adopted by the Borana. Camel herding is not traditionally a practice of the Borana, but they have learned to herd them mainly from the neighbour, the Garri. The Borana usually do not drink camel milk nor do they eat camel meat. The main use of camel among Borana is as packing animals and for sale purposes. The use of camels among Borana is said to go back to the Gada of Abayyi Orro (1552-60) although for a long time breeding was forbidden and the circulation of camels restricted\textsuperscript{212}. The tradition reports that for a long time Borana lacked the capacity to herd camels and they would instead entrust them to their Gabbra allies. Until the present day, misconceptions about camels as a vehicle of tick infestation and as a cause of bush encroachment (the increased prevalence of woody permanent species over grassy species) are still prevalent among the Borana.

3.2.3 Other ethnic groups living in Oromia side, but sharing Somali characteristics

In addition to the Borana, there are other small ethnic groups living on the Oromia side. The major one is the Gabbra. They have two main territorial divisions and sub-identities, the Gabra Malbee, whose territory is mostly in Kenya, in the arid lowlands to the east of Lake Turkana; and the Gabra Miigoo, customarily living among the Borana in Ethiopia and sharing pastoral resources with them. In Ethiopia, Gabbra inhabit mainly the area near Moyale town and along the border between the Somali and Oromia Regions. In total, the estimated population of the Gabbra in Ethiopia is approximately 20,000 in urban and peri-urban areas and 10,000 rural areas.

The Gabbra are an Oromo-speaking and camel pastoralist group with a sophisticated land-use management system and high social co-operation\textsuperscript{213}. Their livelihood is based on camel herding, and they have always maintained relations (sometimes good, sometimes less so) with neighbours the Borana, who are however outnumbering them. The relation with Borana can be seen as a sort of patronage: Borana guaranteed the peaceful access of Gabbra to water sources in exchange for the recognition of the authority of Borana aada sera, especially concerning the natural resources management system. The ability of the Gabbra in camel herding represented historically a resource for the Borana, especially in times of droughts\textsuperscript{214}.

\textsuperscript{212} Oba, G. Assessment of indigenous range management knowledge of the Borana pastoralists of Southern Ethiopia, Borana lowland pastoral development program/GTZ Consultancy paper Negelle/Borana, May 1998.


They also developed a social system with many Borana elements, including their own gada system.

The Gabra Malbee are subdivided into 5 phratries, the five drums (dibbee shanan): Gara, Galbo, Alganna, Odola and Sharbana. Each of these phratries tends to be associated with a separate rangeland, has its own self-governing council or yaa’a, its own independently operating – but mutually coordinated - system of generation sets and grades, and its own holy grounds where pilgrimage and transition rites take place. This territorial sub-division, with separate gadaa centers, has only one qaalluu. Each phratry has its own senior qaalluu, leading member of the yaa’a with the power to legitimize two hayyu from each generation set (luba) entering the gadaa stage. The senior hayyu is called adulaa. Additional officers of the yaa’a are the custodians of the sacred drum. Inter-phratry coordination takes place by periodical meetings of the 5 drums, but there is not a permanent body or officer, nor an office corresponding to the abbaa gadaa of the Borana.

The institutions of the Gabra Malbee appeared to be highly co-ordinated with those of the Borana in pre-colonial time. The Borana were prevalently cattle-pastoralists and transhumant, while the Gabra were camel-pastoralists and highly mobile. Probably in pre-colonial times, the joint use of the same territory on a seasonal basis was more extensive. Aneesa Kassam notes that the actual delimitation of the grazing areas corresponds with the tribal reserves imposed by the British Colonial Administration. Previously Gabra were accessing a wider territory and most of the sacred sites to which Gabra make pilgrimages are located in what is normally considered Borana territory.

The ethnography of the Gabra Miigoo is not well known. They are supposed to own a sixth drum, but there is no evidence of coordination and inter-action with the Gabra Malbee. The Gabra Miigoo used to have their own recognized yaa’a, close to the ritual centers of the Borana. The practice was abandoned after their conversion to Islam. During the phase of Somali irredentism, the Gabra Miigoo sided with the Somali and most of them were forced to seek refuge in Somalia when the Somali were defeated in 1978. Some families remained in Ethiopia and continued their pastoral life among the Borana. After the Somali crisis in 1989,

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217 Ibid.

218 Ibid.
many Gabra began to return with the status of returnees, and very recently they have re-established their own yaa’a in Weebi area, with the consent of the yaa’a of the Borana\textsuperscript{219}. Institutionally some of the Gabra Miigoo belong to the Oromia Region, and others to the Somali Region. This ambiguous position helped them to survive during the clashes between the Garri and the Borana. The Oromo origin and identity of the Gabra was questioned following Gunther Schlee’s hypothesis of a Proto-Rendille-Somali origin of the Gabra. Tracing cross-ethnic clan links and analyzing some common ritual features across a number of camel-keeping groups in Northern Kenya, Schlee hypothesized a common origin of Somali, Rendille, Gabra, Garri, Ajuran and Sakuye. The Gabra would have later adopted the Oromo language and the gadaa system to avoid being victimized by the Borana\textsuperscript{220}.

The Guji are agro-pastoralists and live to the north of Borana areas. The Guji have several gadaa centers (yaa’a gadaa). Each of them has its own set of classes, structural features and terminology very similar to the Borana system. The major difference is that each gadaa center corresponds with an autonomous territorial section. The unifying factor of Guji polity is represented by a single qaalluu, that is the legitimizing factor of all gadaa centers. The Qaalluu mediate among the various abbaa gadaa when inter-section disputes arises.

Digodia is a group living in a small area inside the Oromia territory and institutionally belonging to the Oromia Region. They are along the tarmac road, 20 kilometers far from Moyale. The Digodia are also the main inhabitants of Filtu district of the Somali Region and found as well in Kenya. They expanded in the lowlands of Ethiopia since the early 20\textsuperscript{th} century. They are usually considered part of the Hawiya clan family and in particular is identified in Saamale the original ancestor, while the mother of the Digodia is said to belong to the Hawiya clan family. He describes the internal articulation into ten sub-clans, further grouped into four clusters of almost equal numerical weight. They are customarily rather than genealogically constructed through a system of fictitious brotherhood, to avoid the hegemony of larger sub-clans and to strengthen internally the cohesion of the Digodia. In comparison to other Somali groups, the Digodia have two differences: firstly they don't have an organised clan presence in Somalia; secondly, they have a more structured political organisation than other Somali clans, with an autocratic leader, called Wabar or Ugas, that plays a key role in overall Digodia decision making processes. Also their political standpoint was different from


that of the other Somali groups: Digodia have supported their Borana neighbours against other Somali clans in Liban.

3.2.4 The Somali groups

Different Somali groups increasingly inhabit the eastern part of the southern lowlands: mostly the Garri, but also the Digodia and the Marehan. The Marehan belong to the Daarod clan family. They established themselves in the territory of Liban at first, during the Italian occupation (1936-41), and later during the Ethio-Somali war, as Siad Barre’s soldiers. In the early seventies, their paramount chief, the Boqor, was reported to live in Negele. Their identity is closely related to the original Arab and Muslim root of all the Somali. This is a source of pride for them, but implies a derogatory connotation among their neighbours.

The Somali social and political system is based on segmental lineages strongly determined by clan affiliation (tol), complemented by a number of contractual obligations. The basic social unit is the reer, a close family group that is composed of several qoys (nuclear families). The reer is split into nomadic camps (reer guuraa) and wider ranging camel camps (geel jire). Herds are divided between nugul (ships/goats, milking, weak and young animals), that remain with the core family around the home area, and ishkin (larger stock – camels and cattle), that travel far for pasture and water in dry seasons and even further in bad season, such as in drought conditions. A group of reer form a reero, while the tuulo (village) and the magaaalo (town) are often the basis for the formal administrative structures, kebele and woreda. The clan is called beelo and is headed by a sultan or ugas or waber. The clan heads accept the decisions of elders known as bokorky, of which there are presently four, even if in the past they were much larger in number.

The strongest political solidarity is found within the dia-paying group, literally the blood price, meaning the lineage group that is called to share the payment of the dia, the compensation in case one of the clans’ members kills anyone outside of the group.

Somali groups production system is mostly based on camels, but also on cattle, sheep and goats, while cropping is increasing. Camels are less vulnerable to drought than cattle, as they only require watering every 10-15 days. Therefore they can exploit wider areas where water

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sources are rare. The camel-based production system is able to exploit bushy and shrubby areas, while cattle need herbaceous pastures.

The Somali kinship is therefore going from the *dia*-paying groups to lineages, clans, clan families (a purely symbolic reference) of two moieties of Somali, referred to as the two mythical ancestors. The following figure shows the Somali genealogy, with details of the clans of the southern lowlands:

![Somali Genealogy Diagram]

*Figure 4. The Somali Genealogy*

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3.2.5 The Garri

Garri are the prevalent Somali ethnic group in the target area, directly neighbouring the Borana territory. Besides several Somali dialects, they speak *af aan* Oromo, and in some cases they have developed social structures which resemble those of the Borana. The Garri make use of both Somali and Borana terms in order to indicate elements of the social institutions. They are descendants from the clan family of Hawiya and often related to the Rahanwein clan family. The Garri consist of two moieties which are the ritual and political origin of the social organisation. Each one is further subdivided and segmented in clan and sub-clans:

![Garri Moieties and Clans](image)

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Schlee G., *Gada Systems on the Meta-Ethnic Level: Gabbra/Boran/Garre Interactions in the Kenyan/Ethiopian Borderland, in Conflict, Age and Power in North East Africa*, Kurimoto E., Simonse S. Eds, Oxford - Nairobi - Athens, James Currey - EAEP - Ohio University Press, 1998. Garri genealogical affiliation is however not very well defined. According to Bottego (1895) they are known as “Garra Livin”, “Garra Ganana” and “Garra Badia”, and their movement is from their basis in the southern Somalia to the north-west. According to Barile (1937), the “Gherra” belong to the Hawiya; their origin is in Somaliland; from there, a migration would have brought them to Galwesh and Audegle (near Merca), where most of them find their base. Colucci (1924) classifies them as “pre-Hawyia”, originally coming from Arabia, and then passing through Jart Adali (Tajura Gulf) to the lands of Livin and Hawyia. He also mentions a big presence of Gherra among the Rahanwein, as federated, or ‘halifa’ clans. Garri originally belonged to Hawyia or pre-Hawia groups, and were later assimilated to Rahanwein, by adopting their language (quoted by Pallottino 2007).
Garri are more closely related ethnically, culturally and linguistically to the Somali ethnic groups of southern Ethiopia and northern Kenya, than to Oromo speakers. They share strong economic, social, cultural, genealogical and linguistic ties with Somali groups, which are evident in the similarities of their oral tradition, history, language and the camel-based economy.

The socio-political organization of Garri is patriarchal and the descent is traced through the father’s line. Ownership and inheritance of propriety, residence rules, political and religious leadership are dominated by the patriarchal structure. The concept of gender is related to role division: domestic activities are predominantly the sphere of women, while non-domestic ones are carried out by men\textsuperscript{227}.

In many cases the names of the social institutions, as well as the names of other important aspects of daily life, such as for example those for identifying the succession of the rainy-dry seasons, or for identifying the titles of people responsible for the management of water resources, are those used by the Borana\textsuperscript{228}. In the area around Moyale, the traditional leader of the Garri, the *Sultaan*, plays a somewhat representational role for other Somali tribes. Under the Sultaan, there are four *Boqorgi*, residing in Wachile, Arero, Negele and Moyale that help settle controversies concerning different clans.

### 3.2.6 The presence of other identities

Historical confrontation among a limited number of main ethnic groups has almost completely overshadowed the complexity of a social interplay where a number of minorities play a role. Garrимarro are settled agriculturalists, traditionally living at the confluence of Genale and Dawa, which are closely related to Garri but with a distinct identity. Also the presence of the Adjuran, a Somali group belonging to the Hawiya clan family\textsuperscript{229}, in the area on the border between Ethiopia and Kenya, is rarely acknowledged\textsuperscript{230}. Another group that


\textsuperscript{230} *Life In The Shadow Of Bandit Attacks*, The Daily Nation, Nairobi, 14/01/01, described clashes around Kadaduma in terms of an alliance of Ajuran with OLF elements, against the Garri who were expanding in areas in Kenya commonly used by Ajuran, thanks to the support of local authorities, and fellow tribesmen in Ethiopia. Clashes in Kadaduma revamped (Clash at Ethiopia, Kenya Border Kills One - Kenyan President Coming Today, The Daily Monitor, Addis Ababa, 09/03/05).
once played an important role in the past is the Gurra: they are still present in the area, and do not declare a definite ethno-linguistic identity between the ones of Somali and Oromo\textsuperscript{231}.

Other smaller groups are the Wata, hunters/gatherers linked to Borana society, who traditionally played an important role due to their crafting skills. The importance of craftsmen skills may have decreased with the diffusion of modern artefacts and this may have undermined the accepted social role of groups engaged in those activities\textsuperscript{232}. On the side of Somali-related groups, the Bon and the Migdan can also be mentioned among the smaller ethnic groups present in the area\textsuperscript{233}.

### 3.3 Customary institutions in modern governance

There is an ongoing discourse in Ethiopia related to traditional systems and state structures, mainly in areas that were subjected by the central power, acting as a colonialist power. Customary institutions are formal from the point of view of local actors, who very often don't recognize other forms of power, if not legitimated by these institutions.

Custom is a culturally grounded pattern of behaviors. It has a historical dimension, since culture is rooted in the past through the notion of tradition. By definition custom can change through adaptation and re-interpretation of traditional features in new contexts. Institutions can be understood as a complex set of norms, notions, and behavioral patterns regulating social life. They are clearly perceived by the social actors and are often identified through specific names (for instance the \textit{gadaa} and \textit{qaallu} institutions). They are embedded in cultural codes, often expressed through ritual, symbolism, procedures and other visible manifestations. Customary institutions are therefore key knots of ideas, beliefs and behaviors regulating social life, having a root in the specific tradition of each people. Customary institutions are therefore key knots of ideas, beliefs and behaviors regulating social life and rooted in the specific tradition of each people. Customary institutions change over time, but there must be mechanisms by which the change is socialized and accepted by the larger community\textsuperscript{234}.

\textsuperscript{231} Global IDP (2005) “There are reports that for example the Gurra call themselves Oromos in Mada Wolabo, one of their places of origin, while they claim to be Somalis in Filtu and Haya-Sufitu.”


\textsuperscript{233} The Bon and the Migdan, together with the Tumaal and the Yibir, are mentioned among the low castes of Sab. The Migdan were hunters, and the Bon were craftsmen or servants, and they have an outcast status in Somali society. They are probably the survivors of proto-somali groups (Steiner, 1994).

Customary identity doesn't refer only to ethnic issues in Ethiopia. For instance religious identity was a key factor during the Somali irredentism, when Muslim Oromo and Somali both sided with the Somali front. National identities (such as Oromo and Somali) have instead been prevailing during the struggle against the Derg and in the current ethnic federalism. The Oromo and the Somali have for many centuries interacted along a 1000 kilometre line. From the political point of view they are internally segmented, but explicit national identities slowly grew in relation to the construction and developments of the modern state, during the colonial and post-colonial experiences. The referendum held in 2004 was designed to institutionally address the competition developed over the demarcation between the Somali Regional State of Ethiopia (Region 5) and Oromia (Region 4). The national and local fabrication of ethnic discourse pointed to the collocation of primary identities within the national identities (Oromo, Somali, etc), focusing on origin, language, religious or cultural affinity. These primary identities have existed from the pre-colonial time through the modern period.

There is a direct correlation between the persistence of primary identities and customary institutions. Any society must convey to its member a sense of continuity over time. The long-term survival of a pastoral or agro-pastoral group must be combined with the immediate need of the productive units (families, lineages, etc) to have access to the natural resources for their livelihoods. The interaction with the environment determines the definition of groupings co-operating in productive activities and defines norms of access to and exclusion from accessing natural resources. Therefore full-fledged systems of governance develop\textsuperscript{235}. In the study area each primary identity gathers a number of productive units with its own sets of rules, norms, myths, decisional procedures and enforcing mechanisms. Primary identities provide the aggregative principle to form a unit of resource management with its own governance mechanisms and customary institutions. The group must have access to a number of complementary resources for the viable survival of its members. It may enter either into competitive relations with similar groups, engaging in territorial disputes and conflicts, or in complementary relations, such as in the case of pastoralists and hunter-gatherers sharing diverse resources of the same territory. From the individual’s point of view, having a primary identity and customary institutions is a matter of survival. At the collective level, customary leaders have the responsibility to assure access to the natural resources required for livelihoods and survival, in the case of pastoralists enough grazing land and water sources.

\textsuperscript{235} Ibid.
Boranaland was incorporated into the Ethiopian Empire at the end of the 19th century. The armed settlers slowly built an administrative structure by co-opting Borana elders to the position of balabat. The balabat were acting as a bridge between the Ethiopian imperial structure and the local community. They were State-appointed traditional elders, but not customary leaders. The two major qaalluu were offered the highest positions but they refused the appointment and transferred it to one of their closer family members. They perceived a contradiction between the old religious role of assuring the well-being, fertility and prosperity of their own people and the new duty of supervising the collection of taxes and the transmission of orders from above, reinforcing the exploitation by the Ethiopian State. By rejecting the accumulation of titles, the qaalluu were protecting the internal social processes from external domination.

In western Oromia the gadaa system was tolerated during imperial times, while repressed during the Derg at the beginning and then tolerated again, with an informal but reciprocally acknowledged division of competences between the administrative and the customary structures. Customary institutions were managing the natural resources asset and livestock production. In addition, they continued to regulate family and interpersonal relations in the rural areas. Governmental institutions and laws were regulating trade, including cattle commerce, tax, military conscription and inter-ethnic social relations, mainly in towns. Gadaa represented a crucial governance factor in Ethiopia, although not formally recognized by the Ethiopian State.

Since the turn of the millennium there was a theoretically grounded attempt to systematically co-opt customary institutions in modern governance. This is taking shape in different fields, including both discourse on poverty and development promoted by the World Bank and the IMF, and in relation to advocacy and policy making, or more informally, in management of conflict and electoral processes. In relation to poverty and development, the issue is specifically addressed in the IFAD-commissioned international report to support the PCDP (Pastoral Community Development Project), based in the Ministry of Federal Affairs and financed by the World Bank, IFAD, and the Government of Ethiopia. According to the report, “the PCDP is based on the assumption that pastoral livelihoods can be improved by strengthening the self-management capabilities of indigenous institutions”. The report focuses on local level social-institutional issues (both governmental and indigenous) among Somali,

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Afar, Borana, and various ethnic groups of South Omo, and on the types of capacity building needed to support them. The post-Derg governments of Ethiopia were aware of the potential of indigenous mechanisms of conflict resolution. Attempts to institutionalize the contribution of elders in this field had already been made in Oromia before the year 1992. More structured attempts to involve elders with advisory roles were established in Afar and in the Somali regions, and a conference to resolve the Somali-Oromo conflict in Borana Zone was held in September 2000 at Addis Ababa University and attended by several elders.

The metaphor of customary institutions as a bridge to the community informs other propositions directly related to the political field. At the operational level, the Pastoralists Communication Initiative (PCI) was established. It was originally born in connection to the attempt to obtain a chapter dedicated to pastoralism in the national poverty reduction paper (PRSP). In line with the poverty reduction strategy of ensuring citizen’s voice and institutional responsiveness, PCI was established in Ethiopia with funding from DFID, expertise from IDS (University of Sussex) and in coordination with UN Agencies in Addis Ababa. PCI supported the efforts to improve dialogue between the pastoralists and the Government of Ethiopia attempting to work through the customary institutions and involve the customary leaders. From February 2004 PCI paid attention to the Oromo speaking pastoralists as a result of a policy formulated and adopted by the Oromia Pastoral Development Commission (OPDC), explicitly referring to the need to integrate the customary institutions of the pastoralists. In 2004 PCI, aside from various initiatives in the formal political sector, facilitated a number of local scale meetings between the Borana, the Gabra Miigoo and the Guji Oromo pastoralists with representatives of the government of Ethiopia. A larger meeting was held in Yabelo, the administrative center of Borana Zone, in June. Later PCI escalated its activity by facilitating the Global Pastoralists Gathering in Turmi (South Omo, Ethiopia) in 2005 and the Horn of Africa Regional Pastoralists Gathering, held in Qarsaa Dambii from July 11th to 18th 2006, again in Borana Zone. The PCI team systematically tried to involve the customary leaders of Borana, Guji and Gabra.

The self-expression of pastoralists’ needs and priorities was also promoted in Ethiopia in connection to Pastoralist Day, from 1998 onwards. The initiative began with local meetings organized by civil society and with the participation of governmental officers. In 2002 a large gathering was organized in Dire Dawa under the leading role of the Ministry of Federal Affairs, with the participation of several customary leaders, including gadaa leaders. Whatever efforts were made, the practical outcomes may deeply differ from the theoretical assumptions and propositions. For instance, The Indigenous World 2006 was very critical in regards to the role taken on by the Ministry of Federal Affairs during the Pastoralist day of 2005. The official policy documentation showed contradictory statements by different governmental institutions and weak or generic predicaments, and the practice, displayed gaps with the policy statements. Lister (2004) mentions the nature of elders’ co-option in the governmental structure. She refers to the practice to compensate collaborative elders, well established in Somali Region, in order to receive advise on matters relating to customary issues and conflict resolution. Criticism is raised about the elders’ capacity to put forward an independent articulation of interests within their own community. Rather, they have extensively been utilized to mobilize political and electoral support for the leading party. Secondly, there are doubts about the real incorporation of the elders’ views in official decision-making. Lister is also overconfident about the overlapping of customary offices with administrative positions at lower administrative levels, such as the kebele.

3.4 The history of movements and territorial spaces among people living in the target area

3.4.1 Tracing the roots of the present situation starting from the 17th century until the 20th century

The southern lowlands of Ethiopia are a mosaic of diverse societies and ethnic groups that evolved over the course of history. A quick look at this history is motivated by the need to trace the roots of the present situation: present-day territorial claims and complexities of the distribution of groups on the territory makes this an issue of contemporary rather than purely historic and ethnographic interest. Available sources state that during the 17th century, the Oromo Borana expanded from Liban, their original homeland located in the area between the rivers Dawa and Genale in the East, to

the western bank of Dawa, displacing the previous inhabitants, the Wardai (Orma Oromo). As reported by Pallottino, “Italian travellers exploring the area between the end of the 19th century and the beginning of the 20th century gave evidence of the presence of the Borana: the map drawn by Bottego (1895), and substantially confirmed by the observations of Citerni (1913) accounts for the presence of Borana in all the area between Dawa and Genale. Vannutelli and Citerni (1899) during their travels from the confluence of Dawa and Genale to the west in search of the Omo river, witness rich commercial and political dynamics linking the peoples in the area in a wide territorial network. The complex inter-ethnic relations resulting from this interaction sometimes led to conflictive outcomes, sometimes established the ground for alliances and cooperation.”

Bassi and Pallottino reconstruct the history of the movements in the area and I have extrapolated the information reported in these paragraphs from their research. At the verge of the colonial time the Oromo-Borana were extending their political influence and rangeland over large sectors of northern Kenya. They were permanently established in Saaku (Marsabit), Waasoo (Isiolo) and in several other localities served by permanent water points. They were also seasonally using other wet-season pastures jointly with other Oromo and Cushitic speaking pastoral groups allied to the Borana. Several of these groups, including the Garri, the Gabra Miigoo and the Gabra Malbee, were also enjoying access to certain permanent water points in the homelands of Borana and the associated rangelands. The arrangements for joint use of pastoral resources were common in east African pastoralism. There were no physical boundaries, but zones mainly associated with certain groups. Flexibility and negotiation of resource use took place through recognised traditional institutions. At that time, the presence of Somali groups was confined to the area beyond the Genale river with the only exception of the area at the confluence of Dawa and Genale, inhabited by the Garra-Marro.

The pre-colonial times are already characterized by a south and westward movement of several Somali clans in the north-eastern part of current Kenya. This pressure affected the local groups, allied to Oromo-Borana. A movement west and southward of the Borana also took place, pushed by the migration of Somali people gradually occupying the area

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245 Oromo was the language commonly spoken in Lugh, a town a few kilometres downstream Genale from Dolo, currently in Somalia.
corresponding to the present-day Dolo Oddo district. Piguet (1998) reports on the expansion of the Daarod and Hawyia/Adjuran at the expense of the Borana by the end of 19th century. The different modalities of this expansion, as emerging from local oral historians, came out of the military confrontation that uprooted the Borana from the Gedo area in Southern Somalia, until a peaceful gradual withdrawal from Liban. Digodia expanded in the arid pastures of Liban, which were exploited by Borana cattle only during prolonged wet seasons, and therefore they could be easily occupied by camel-rearing Somali pastoralists. The Somali push became more effective at the time of the scramble for Africa, when the British and the Abyssinian introduced firearms in the region.

The relations between the Borana and both the Garri and the Gabbra were however regulated by a form of tribute-based alliance, which guaranteed a mutual respect in the overlapping use of some resources, namely the water sources and consequently the pastures. The Borana were considered the customary owners of the water sources, and they used to grant access to other peoples according to their aada sera. The southern Somali (Garri) once considered the Digodia, the Somali from the north, and the Amhara, to be their worst enemies.

Already at the end of the 19th century, before formal incorporation into the Ethiopian Empire, some territories of Borana, as Liban and Dire, were affected by the activities of a group of armed northerners, the Tigre, bringing about insecurity and displacement. This is the time when a group of Digodia, a Somali clan, managed to establish itself in the south-eastern part of Liban, in the area between Dolo and Boqqol Mayo.

The relation of Borana territory with the Ethiopian highlands has become increasingly organic since the end of ninetieth century, when the Emperor Menelik implemented a policy to control the peripheries, largely in competition with the colonial ambitions of British and Italians. By that time, the term used in Amharic in order to indicate interest towards the pastoral lowlands was Aqanna, which can be roughly translated with the word colonisation. This period was marked by the immigration of former soldiers, the neftegna, who were given portions of fertile land in the lowlands, thus initiating the process of erosion of the pastoral

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space that continues to this day\textsuperscript{251}. Helland puts forward the idea that Abyssinian domination of the Southern lowlands was carried out through a swift and not particularly violent military action\textsuperscript{252}. The main objective of the Ethiopians may have been to set a borderline able to counter British expansion from the south. However, as Hoben reminds, the conquest of the southern part of the country by the northern Ethiopians, as of the last decades of the nineteenth century, brought profound modifications to the land use patterns and new pressure to the environment, as their economic strategy was oriented more to short term extraction than to longer term investments\textsuperscript{253}.

Conflicts became more frequent during this period and already in 1907 there were claims by Garri for pastures located in the area of Galgaloo, immediately south of Dawa river\textsuperscript{254}. A factor that markedly changed the situation was the demarcation of colonial borders, which was done along ethnic lines. Borana were appointed under the sovereignty of Ethiopian government, the Gabbra and the Garri under the British rule of Kenya colony, and the eastern Somali groups under the influence of the Italians, to attract the local commercial flows towards Italian Somalia\textsuperscript{255}. The Garri however found themselves in a crucial position: as the majority of them could speak both Somali and the Oromo/Borana language, they could gradually enter into Ethiopian territory, escaping the exclusive British rule and expanding into areas, that were much better endowed with water sources than their current locations. As Bassi notes, the demarcation between British Kenya and Abyssinian territory meant a deep wound in Borana territory, undermined the relation between the Gabbra and the Borana, and exposed the Borana to an expansion of the Garri in the eastern part of Dire, the key territory endowed with deep wells on the western banks of the Dawa river\textsuperscript{256}.

In 1923, the Garri penetrated into Dire and established good relations with the Ethiopian authorities. In 1932 the Mareexaan also penetrated into the Oddo area in south-eastern Liban.


\textsuperscript{254} While, at the same time, Borana were claiming the access to pastures at least 50 km east from Kadaduma, in full Kenyan territory.

\textsuperscript{255} See the narrations by Bottego (1895), Citerni (1913), but also by Cerulli (1957), concerning the events taking place in Dolo. There Italians founded a town just facing the British Dolo, and in the city of Lugh they found an important commercial centre not far from Dolo (downstream of the Genale) ruled by local Sheks and raided by Somali. Citerni was the head of the Italian delegation in the joint Abyssino-Italian commission set for the demarcation of the borderline between Italian Somalia and Ethiopian Government rule.

and then moved to the area around today’s Filtu, in eastern Liban. Recurrent feuds of these Muslim groups with the Borana and among themselves for grazing and water resources are reported since these early colonial times. Most of this expansion took place between 1924 and 1945, from Kadaduma (about 50 kilometers east from Moyale) continuing north to Wachille, gaining control of some important water sources such as El Der, while other Somali groups (Digodia and Marrihan) were expanding into Liban. The demarcation of the borderline made the movement of pastoralists, who were until then freely grazing, increasingly difficult on both sides.

Getachew Kassa reports an attempt to arbitrate territorial claims between the Borana and the Garri during a meeting in Mega in 1933. At that meeting, the Borana were represented by non-Borana speakers, and the outcome was that a very large portion of the contested territory was attributed to the Garri: the entire area south and east from Wachile. The results of the arbitration could not be enforced and the meeting had no practical effect other than, probably for the first time, to assert (and somehow to legitimise) claims by Garri on a very wide portion of Borana territory. "The agreement [of 1933] was not effective because, firstly the Borana were represented in Mega town meeting by non-Borana delegates, and were against the decision on the grounds that it failed to respect their traditional rights". The attitude of the Abyssinian government that instigated the meeting was relatively pro-Garri during those years.

The expansion of the Garri in Ethiopia was probably largely due to an anti-British alliance between the Garri and the Ethiopian administration. They wanted to expand trade by building a road linking the area progressively occupied by the Garri with the town of Negele. The short period of Italian occupation (1936-41) is said by Getachew (2000) to have promoted anti-Borana and pro-Garri policies. The invading Italian army employed Somali irregulars called banda, who were traditionally in conflict with the Borana for grazing lands. During the Italian time, Somali soldiers were utilised in the territory of Borana. This gave new opportunities to

259 Bassi (1997) describes these processes, quoting sources that witness that at least in 1908, Kadaduma was under the control of the Borana.
260 Getachew Kassa, An Overview of Government Policy Interventions in Pastoral Areas: Achievements, Constraints and Prospects, in National Conference on Pastoral Development in Ethiopia, Proceedings of the conference, Wabi Shebelle Hotel, Organised by the Pastoralist Forum Ethiopia, Addis Ababa, February 2000. Also in other cases, the interests of the Borana in conflict resolution processes were not safeguarded. For example, during the arbitration of 1962, an agreement was reached but afterwards Borana leaders refuted the mediation of their delegates, as “…the mediators were not neutral and sided with one of the groups with the result that their judgements were not accepted by both parties” (Getachew, 2002).
the clans already in the area, in line with the trend outlined by Sbacchi: “the Ethiopian Muslims gave the Italians unconditional help in return for the Italian government”\textsuperscript{261}. The local Somali groups managed to join the \textit{askari}, so they were armed by the Italians, and tried to depict the Borana as supporters of the Ethiopian resistance. The Italians favoured the settlement of both the local clans and the detribalized soldiers in these areas, to avoid a possible return by the Amhara. The Borana later joined the Ethiopian resistance in Kenya and fought back the Italians and the \textit{askari}\textsuperscript{262}.

With the defeat of the Italians, the Somali were left with weapons that contributed to increasing tensions between them and the Borana. The post Italian period was characterized by intensive ethnic warfare until 1943, especially instigated by \textit{ex-askari} who came from Somalia and Kenya, locally known as \textit{Jigheer}. They took up banditry that soon escalated by involving members of local Muslim communities. The Borana and Gabra were the main targets in Liban, and later, when armed by the government, indiscriminately reacted against all Muslim communities in the area\textsuperscript{263}.

In the subsequent period, the trend of political alliances took a pro-Borana turn. Once back in power, the Ethiopian administration forced part of the looted livestock to be returned, as well as part of the grazing areas that had been seized over time\textsuperscript{264}. Getachew Kassa reports that in 1941 the dispute over El Leh was settled in favour of the Borana thanks to the role played by Ras Mengesha Seyoum (governor of Sidamo \textit{Awraja}). The expansion of the Garri was slowed down, and in 1944 Garri Hassan Gababa was appointed administrator of the Wachile sub-district by the new governor of Sidamo, Ras Desta Demtew. Following this, the Garri were let into the territory of Wachile and Waiena, previously excluded to them.

\textbf{3.4.2 The territorial dynamics after the second world war and until the defeat of the Great Somalia}

The developments during the first part of 20\textsuperscript{th} century brought a reduced freedom of movement for all pastoralists in the area. They were mainly an increased presence of Somali groups (more skilled than Borana in gaining fruitful alliances with powerful outsiders) and an increased interference of external powers in the resolution of local disputes. The attempts to

\textsuperscript{263} Ibid.
\textsuperscript{264} Oba, G., \textit{Assessment of indigenous range management knowledge of the Borana pastoralists of Southern Ethiopia}, Borana lowland pastoral development program/GTZ Consultancy paper, Negele Borana, May 1998.
settle the controversies on disputed territories continued after the end of the second world war. The Ethiopian Government carried out a diplomatic activity, by sponsoring inter-tribal treaties (1952) aimed at settling the disputes over grazing areas. The entire traditional territory of Borana (the whole of Dire as well as the whole of Liban) was defined to a collective inheritance of the Borana, but temporary grazing rights were assigned to other tribes, on territories already occupied manu militari. Tribal reserves were established and they represented the backbone of the territorial system of the Southern lowlands until the beginning of the Derg.

In order to pacify the tense relations that were persisting among the different ethnic and clan groups of the region, the Imperial Ethiopian administration established tribal grazing areas modelled after Kenya. The tax extraction was the privileged criteria used by the imperial administration to allocate grazing rights. The agreement was about temporary grazing rights, not about ownership of land. The main point of the agreement is “the whole of Borana Awraja is to be collective property (rist) of the Borana tribe, from Dolo to Nagelle, Mega and Moyale, asserting that the Borana inherited it from their fore-fathers”. The second point reports that “Other tribes, some of them Somali (the Marrehan, the Digodia, the Garri, the Gura and minor ones) some others Galla (Arusi, Guji) have been ‘temporarily assigned grazing and water rights over the eastern and northern portions of the Awarja, which they had already conquered by warfare”. In the last point it is again recalled that “even if the non-Borana tribes pay livestock tax, they cannot claim ownership rights over this land, which belong to the Borana”.

The tribal areas did not solve all the border issues. A further phase of turbulent change took place after the independence of Somalia (1960): relations became increasingly tense, because the Somalian government openly supported the irredentist movements in neighbouring countries. In Ethiopia, support was offered to the shifta (Somali guerrilla) but also to other Muslim groups, such as the Arsi Oromo. The Somali claims were not only extending to Borana territory, but also to the Borana community, trying to build a common Somali ascending genealogy and identity. Several Borana became Muslim in that period, especially at the beginning, when they supported the fight against the Ethiopian government. In 1961 many

267 The term shifta refers to uncontrolled armed groups, between politically motivated guerrilla and banditry. The use of the term is not restricted to Somali, but it can refer to other groups in other regions.
Marrehan and Digodia went back to Somalia, either pushed by the adverse political climate in Ethiopia, or pulled by the conditions in Somalia; but in 1964 they returned to Liban, and, especially the Marrehan, in large numbers\textsuperscript{268}.

The Somali irredentism brought warfare into the Sidamo, Hararge and Bale Regions beginning in 1963. Most Somali speaking clans, several Muslim Oromo and part of the Sidamo joined the armed movement known as Shifta. They were re-organized into the WSLF (Western Somali Liberation Front), with the objective to annex the Somali-speaking area of Ethiopia to Greater Somalia. In 1976 the Oromo and Sidamo speaking fighters split and formed the Somali Abbo Liberation Front (SALF). The WSLF mainly operated in Ogaden, while SALF was military active in Sidamo Province and in other Oromo speaking areas. Like during the Italian times, the Mareexaan were particularly active in Liban and the Garri in Dire. The Digodia kept a non-alignment position, while the Gabra converted to Islam and sided with SALF\textsuperscript{269}.

Getachew Kassa reports of a further round of negotiations, which that took place in Kadaduma in January-February 1963 and assigned territory and water points to the communities\textsuperscript{270}. The final mediation assigned a rather broad territory to the Garri\textsuperscript{271}. Although the delegates accepted the outcome of the negotiation, the Borana leaders did not, accusing the mediators of being biased. The struggle over grazing areas therefore continued until the end of the imperial era\textsuperscript{272}. Markakis (1998) supports the idea that these different arrangements tried to counter the movement of the Somali, but the effort was pointless: “The Somali push westwards into Northern Kenya had to be halted forcefully during the colonial period, by drawing a line inside the Northern Frontier District which the Somali were not allowed to cross. In the post-war period, the Ethiopian authorities vainly tried to keep the Somali east of the Genale River and out of Sidamo Province”\textsuperscript{273}.


\textsuperscript{271} From Agersu on the Kenyan border, to Boji Malka Gorbessa, Dugda Fara, Qalqecha Golbichu, Ogomdi plain, Wachile, and from there to Malka Gubba on the river Dawa.


After a first phase, the Ethiopian government identified the Borana as a possible bulwark against Somali presence, and began supplying weapons to them to receive their support. The turning point was in 1963 when the Ethiopian army intervened to stop inter-ethnic clashes, strongly taking a position in favour of the Borana and against the Muslim Garri. From the end of the sixties, the Borana supported the Ethiopian army against the Somali guerrilla (shifta), and again in 1977 when the Somali troops tried to invade Ethiopia, backed by local irredentist movements. During this period, the Borana lost access to important grazing lands surrounding the Tulla complexes of El Leh and El Gof.

The early seventies marked a relatively calm period: the Borana may have felt the relation with the Garri was not particularly dangerous at that time. This may be consistent with the general modalities of penetration of Garri, based less on armed confrontation than what is reported of other Somali groups. The situation changed immediately afterwards with the spread of warfare: the temporary grazing rights assumed an authoritative value, based on the recognition of the territorial presence of different communities. The consequences of shifting watering rights became more important than what was felt during the previous periods, when tribal area demarcation was made less rigid by local level arrangements. Military pressure on the territory increased, occasionally resulting in massacres and persecution. In administrative terms however, the organisation of the territory based on the tribal areas was officially accepted, regardless of local level disputes and arrangements.

The perspective of a Greater Somalia was revitalised after the rise to power of Siad Barre in 1969. Barre was a member of the Marrehan clan, and this fact had direct influence on Ethiopian politics that, in the same period, were troubled by the change of regime and by the rise to power of Derg (1974). The idea of a common political identity between the Somali and the Oromo was supported by Barre’s regime, in a context where important Oromo leaders were visiting neighbouring countries in order to organise their opposition to the Ethiopian regime. This found a visible expression in the Somali Abbo Liberation Front (SALF), that began operating in the southern regions of Ethiopia, and contributed to the displacement of the Borana from the eastern part of their traditional territory. The Somali irredentist movement was defeated during the 1977/78 full scale war between Somalia and Ethiopia.

274 The Western Somali Liberation Front (based in Mogadishu), and the Somali Abbo Liberation Front (SALF), founded in 1976 by Muslim Oromo, as described by Bassi (1997).
(Ogaden war). Most Mareexaan and several Garri, Arsi, Gabra, Guji, found refuge in Somalia. The remaining Gabra were reintegrated among the Borana.

As the Somali invading troops were defeated, some of the territories seized during military events were re-assigned to previous occupants, and many of those who supported Somali invasion were forced to leave. Many people were displaced to camps in Somalia and Kenya, including the Garri and the Gabbra from the Southern rangelands. Getachew Kassa estimates that between 1960 and 1990, the number of people crossing the border and returning was 200,000 with several cases of people moving back and forth more than once. The people involved in the displacement were Somali and Gabbra, but also some Islamic Borana, other Oromo, and Sidamo277. However, as Bassi reports, some of the Garri and the Gabbra communities remained: the Garri around El Leh and Wachile as well as in other sites eastwards; the Gabbra in small groups scattered all over. Many Marehan returned to Somalia, and those remaining in Liban where concentrated in Qurabul PA278, 55 kilometers from Negelle on the main road to Filtu279.

3.4.3 The returnees and the rivalries on the territory starting from the 1985

Most of the people involved in the displacement, started to return with the support of the Ethiopian Government and UNHCR from 1985 onward. The collapse of the Somali State produced a massive wave of return of the 1978 refugees from Ethiopia mixed with new refugees from Somalia. The stakes concerning refugees in the eighties were formed by several concurring elements. In 1991 and 1992 this led to an influx of persons generally recognized as returnees by UNHCR. They were assisted by UNHCR and several NGOs, and in some districts and kebele they overwhelmed the local population up to nearly 300%. By registering as returnees, families were able to access individual support from UNHCR, provided on a massive scale until 1994. The sites with a large presence of returnees also received strong development and infrastructural support by several international organisations until 2004280.

As Getachew Kassa emphasises, the presence of the refugees was a way of justifying the presence of international aid. For this reason, the Somali government opposed the repatriation

278 Pastoral Association, the smallest administrative subdivision; in the highlands the same English acronym (PA) indicates the Peasant Association. This terminology was introduced by the Derg, and it was abolished during the nineties, but it is still widely used among the common public as well as among government officials.
280 Ibid.
programs, but the Ethiopian government encouraged them on the grounds that problems with security did not exist in the Ethiopian territory. However, the need for complementary measures was advocated for in order to avoid exclusion of the existing population by conferring a privileged status to returnees. The support of the Ethiopian government translated into formal and controlled arrangements: refugees were supposed to be channelled via Negele, the provincial administrative capital, where they could receive a grant, a ration card and agricultural inputs.\(^{281}\)

The repatriation campaign raised some issues linked to the mixing of different ethnic groups irrespective of the previous situation. This led to a revamping of ethnic rivalries. The way the location of the returnees was established is not completely clear. Getachew (1996) argues that no real consultation with the refugees ever took place, and the government, the party, the security forces and UNHCR decided the final destination. In any case, the first wave of repatriation involved a relatively limited number of refugees. Getachew Kassa reports a number of 7,200, quoting unpublished UNHCR reports between 1986 and 1990. During that period the Ethiopian government was increasingly under pressure because of the war in the northern part of the country and due to tense relations with international donors.

The grazing blocks earlier allocated ceased to operate. In the nineties, the responsibility for the land was formally transferred to the newly established kebele and was state owned, but pastoralism continued to be regulated according to customary practices. From 1987 the entire customary region of Liban, up to the confluence of the Dawa and the Ganale rivers, corresponding to the eastern Ethiopian section of the pre-colonial territory of the Borana, was called Borana Province (awraja), subdivided into Liban and Dolo districts. Liban district was mainly inhabited by Borana, while Dolo district by the Mareexaan and Digodia Somali, with some grazing rights reciprocally granted to and shared between the Somali and Oromo speaking communities. The western part of the Borana customary territory (Dire) was placed under Arero Province. Arero province was subdivided into Teltelle, Dire, Yabelo, Arero, Moyale, Burji and Hagaramaram woreda. The first five districts were mainly inhabited by the Borana, with access rights granted to the Gabra (mainly in Yabelo district) and Garri (mainly

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\(^{281}\) Getachew Kassa, *The displacement and Return of Pastoralists in Southern Ethiopia: a Case study of the Garri*, in In search of cool ground: war, flight and homecoming in Northeast Africa, Allen T. Ed., 1996. Getachew argues that benefits were not fairly distributed, especially during the subsequent waves, and describes the full pathway of the returnees, from Dollo Gedo (in Somalia) across to the border of Dollo Oddo and than again to Boqolmaya and finally to Negele where they received their final destination.
in Dire, Areero and Moyale districts). Burji and Hagaramaram districts were inhabited by the Burji and the Guji-Oromo respectively.\(^{282}\)

The flow of returnees greatly increased in 1991, after the failure of Derg in Ethiopia and the fall of Mogadishu in the Somali civil war. The downfall of Derg in 1991 brought a period of instability in the whole country, including the Southern lowlands. The relative vacuum of power during the change of regime meant a renewed dynamism in the flow of refugees that were in that period largely able to escape official controls. The number of refugees arriving in the area after 1990-1 appears to be much larger than the number of people originally inhabiting it. Bassi (1997) discusses the issue, arguing that the population in Moyale district may have multiplied almost four-fold between 1984 and 1993\(^{283}\), making a comparison between the official census and the population estimates done by UNHCR\(^{284}\).

There are different reasons that may have stimulated the inflow of returnees from 1990-1 onward. Firstly, the transition of government in Ethiopia coincided with an increasingly turbulent period in Somalia. In May 1991, after a progressive erosion of his power base, the President of the Somali Republic, Syad Barre, fled Mogadishu, controlled by the Hawyia clans gathered in the United Somali Congress\(^{285}\). The fall of Mogadishu did not bring about any pacification, and the political confrontation became increasingly violent and segmented\(^{286}\). The effects of this increased political turmoil in Somalia, compounded by the drought of 1991-2, promoted an international intervention in 1992, known as Operation Restore Hope but that did not prevent instability in the following years.

A second reason is linked with the economic and material advantages connected to the status of the refugees, as pointed out by Bassi (1997)\(^{287}\). Moreover Getachew Kassa highlights the shortcomings in repatriation programmes led by UNHCR that made the official arrangements to channel incoming flows for the returnees less attractive. The long-standing rivalry between the Garri and the Borana, that according to Getachew (2002) can be considered one of the major inter-ethnic or inter-pastoral conflicts in the area, was also a key determinant in the


\(^{283}\) From about 33,000 to a likely 130,000 people.


\(^{285}\) The power of Syad Barre was supported by a relatively more limited base belonging to Marehan, Ogadeni and Dulbarante clans (Getachew 1996).


repatriation of refugees. Particular features of the situation may have represented for the Garri, a favorable ground for the occupation of long disputed areas.288

Another key issue was the selection of the repatriation sites. While Bassi (1997) argues that most of the decisions were made on the basis of the origin's places, as declared by the returnees themselves, Getachew (1996) argues that the decisions where largely made by the Ethiopian administration and implementing agencies. The difference of opinion in this case is quite important as it may lead to alternative perspectives on the attitude of the Ethiopian government and on possible explanations regarding the increasing number of refugees. A possible explanation of the different points of view may refer however to the periods covered by the two researchers: Getachew's work is extensively based on field interviews carried out until 1990; while Bassi describes the field as well as the institutional context in the years immediately after. Bassi highlights the importance of the local level administrative power balances in implementing large scale programmes under considerable time pressure. This pressure may have led to an increasingly difficult control of the final destination of the returnees as their number considerably increased. At the same time, officials at local levels deliberately directed returnees towards certain sites, beyond the will of the central government authorities, especially considering the turnover within the local government that took place after the downfall of Derg.289

Helland states that the local perception of the change of government was linked to the downfall of the Borana elite which was formed during the Derg and the ascension of people representing other ethnic minorities in the Borana areas (Burji, Gabbra, Konso, etc.).290

Upon their return, refugees linked up to the local pastoralists of their own clan but retained a rather separate identity and lifestyle compared to the pastoral component. Getachew Kassa reports that the Garri returnees were identified as qohati (returnee), implying a rather differential world view, a higher inclination to adopt agricultural practices and a stronger interest in Islamic learning.291 While the Arsi and Guji Oromo ex-members of SALF re-defined their agenda and identity in terms agreed with the local Oromo and quit the

290 Helland J., Development issues and challenges for the future in Borana, Norwegian Church Aid - Ethiopia, 1997.
organisation, the Garri, the Gabra and the Mareexaan returnees changed the name of the organization into Oromo Abbo Liberation Front (OALF). Claiming an Oromo identity was a way to legitimise their demand to be resettled into Oromo speaking country. The Borana identified this influx as a new organized attempt by the SALF to take over control of their territory. Conflict eventually broke out both in Dire and Liban before the TPLF army could occupy the area.

The repatriation flow from 1991 onward brought a certain number of Garri returnees to areas that were previously under the control of Borana. Bassi (1997) mentions the case of Ardha Jila, near Arero that was a very important ceremonial site for the Borana. In other cases, the settlement of the returnees (both old and new settlers) in areas which were previously used by pure pastoral people, implied a complete change in the system. As both Getachew and Bassi point out, the settlement of the refugees was massively supported by UNHCR and, especially in the second phase, by other organisations (mainly international NGOs) providing food and agricultural inputs. Some of the returnees were not complete newcomers; they were present in the area also before the influx of people from Somalia. However, since they settled in 1993, they were induced to assume agriculture as a key livelihood strategy because of the material support received by the international organisations operating in the area. The area was nonetheless unsuitable for longer-term agricultural establishments and the process resulted in an increased vulnerability of resident communities (and therefore a structural use of relief to overcome the effect of the droughts). In addition, it provoked an unbalanced exploitation of natural resources. The transformation of the wooded areas along the Lagasure stream and elsewhere in the El Leh area, during the period between 1997 and 2004, are well remembered by the population living in the area.

In Liban, clashes occurred beginning in June 1991 between Oromo groups and the Mareexaan who managed to penetrate in large numbers, and from September 1991 between the Borana-Oromo and Mareexaan. In Dire, the conflict first broke out in November 1991 between the Gabra Miigoo and Borana after an attempt to open an OLF office in Yabelo. A conflict also broke out in early 1992 in Moyale woreda between the Borana and the joint Gabra Miigoo/Garri forces. Meanwhile, the EPRDF army arrived and began to arbitrate among

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292 For what the Marrehan are concerned, the political changes in the two countries immediately brought to armed confrontation with the Borana, and subsequently between Marrehan and Digodia, that saw Marrehan defeated and left destitute, in spite of the support coming from Barre’s former soldiers (Pallottino, 2007).

293 Getachew (2002) seems to refer to the same episode, not explicitly mentioning the name of the site, but mentioning a similar fact near Arero.

conflicting parties, while simultaneously re-organizing the administrative set-up and building its local net of alliances\textsuperscript{295}.

The issue of territorial presence of different communities became particularly hot after 1991 due to the process leading to the new federal constitution aimed at the identification of ethnic borderlines dividing the regions. The \textit{Negarit Gazeta}\textsuperscript{296} stated that the border areas disputed by more regions would have been attributed in administrative terms only following the national census, planned for 1994. It was therefore clear the extent to which the occupation of the territory by the different ethnic groups mattered in the years following 1991, when the conflict between Garri and Borana did not hinder local level arrangements for simultaneous use of the same resource base. After 1991, the confrontation became increasingly politicised with both parties claiming the support of their respective regional administrations.

At this crucial early stage, the Borana came to be identified by many observers and by the Ethiopian Government, as strong OLF supporters. Meanwhile, the OLF had embraced the way of armed clandestine struggle, despite the fact that the organisation was only known in the area during a short period of campaigning, from 1991 to 1992, when it was part of the Transitional Government of Ethiopia. This impression was later exacerbated by the position of the Borana along the border with Kenya, in an area where one of the OLF military branches became active after 1992. The Borana maintained an ambivalent position regarding the OLF withdrawal from the 1992 elections, a decision that exposed youths, supporters and sympathizers to State repression\textsuperscript{297}.

The 1992 OLF withdrawal from district and regional elections, and its re-entrance into underground activities, had a negative impact on the Borana and their relation with the EPRDF-led government of Ethiopia. In Borana Zone, the TPLF co-opted minority ethnic groups and clans, previously in opposition to the Derg and historically competing with the Borana for pastoral resources, such as the Garri, the Gabra Miigo, the Digodia and, until 1994, the Mareexaan. The federal government lacked the political authority of Borana representatives. The 1992 candidates in Moyale were only Garri and Gabra, and therefore won the elections. Borana Zone was enumerated among the unstable areas, where the federal security forces took direct control, bypassing normal representative mechanisms\textsuperscript{298}.

\textsuperscript{296} Quoted by Bassi (1997). The \textit{Negarit Gazeta} publishes the Ethiopian laws.
Getachew (2000) points out that both the involvement of regional government authorities and the OLF support for the Borana further encouraged the Garri to call on the support of Somali regional national state and the federal government in their conflict with the Borana and Oromia regional administration: “It should not however be forgotten that Oromia was controlled by OPDO, that is part of the EPRDF, and therefore not likely to strongly oppose federal government positions. On the contrary, the control of the federal government on Somali NRS is much more uncertain, and linked to specific convergence of interests. During the last decade the episodes of armed confrontation have been many, most of them hidden away from international visibility. Reports from persons travelling or working in the area during the late nineties tell about a very visible military pressure from the side of the Ethiopian army, and sudden violent outbreaks troubling any activity in the contested areas”299. While the constitutional arrangements aimed to reinforce regional administrations, this also radicalised the conflict that opposed the Borana to the Garri (and to the other Somali groups). This also left the two regional states of Oromia and Somali with a hot issue that could not be easily solved. The power of arbitration therefore returns to the federal level, which can manoeuvre the confrontation for its wider priorities: on one side, the control of OLF military activity; on the other side, an evolving alliance with Somali clans in order to control the eastern national border300.

3.5 Local political dynamics in the modern state

3.5.1 People and territories: still a controversial issue

Helland argues that the introduction of the PA (and earlier, at the beginning of the 20th century the incorporation of the Borana territory into the Ethiopian state), has somehow contributed to the safeguarding of their rights by attributing them specific portions of the territory. Since 1991 however "these rights are in doubt, the Garri have obtained sufficient political support to claim former Borana wells, and Garri refugees have resettled within the former boundaries of the Borana area. In the last ten years there have been four main trends in the dynamics of territorial control"301.

301 Helland J., Development issues and challenges for the future in Borana, Norwegian Church Aid - Ethiopia, 1997.
Firstly, the regional boundaries became a real stake in defining the territorial presence of the different ethnic groups within the new Federal Constitution. Although a perfect correspondence of ethnic and administrative boundaries never occurred, the two regional administrations started backing their respective constituencies. This re-definition of territorial and political stakes coincided with increased interference from federal powers.

The second issue is that the concurrent use of the same resource base that was the norm during the previous periods became less feasible. Recent research among Borana pastoralists of Gimbe and Somali pastoralists of the El Leh area shows a clear demarcation\(^\text{302}\). The two communities avoid trespassing the internal border. The area was once a single territorial system where the two communities coexisted, even though not always pacifically. The third element is that massive movements of returnees substantially changed the ethnic balance in some key areas (the area around Hudet, west of Wachile, and the area of El Leh/El Gof) between the end of the eighties and the beginning of nineties. This however was the outcome of a longer process that took place in the 20\(^{th}\) century, when the initial shared user rights of Somali communities were institutionalised into exclusive administrative and political rights. The intervention of development cooperation seems to have played a paramount role in accompanying the process\(^\text{303}\).

The fourth element is based on the acknowledgement that Oromo and Borana controlled space has become increasingly compressed. Parts of the former Borana Zone (that comprised the whole historical Liban, the area between the Dawa and the Genale rivers) are now administered by the Somali NRS. In order to resolve the issue of the ethno-linguistic demarcation of borders, a referendum was held in October 2004\(^\text{304}\).

The above elements suggest the need to observe the evolving identification of administrative boundaries. In 1994, the eastern part of Borana Zone was lost to the Somali Region, and the newly formed Liben Zone acquired Filtu and Moyale Districts. In 2002, the Borana zone was split in two; Borana Zone and Guji Zone. The demarcation left several territories inhabited by

\(^{302}\) Francesca Spinelli, field notes (March 2004), quoted by Pallottino (2007).


\(^{304}\) Pallottino 2007. It should be noted that the analysis so far carried out should not to be taken as the basis for a case in favour of a strict re-establishment of ‘ancestral’ rights. Rights are dynamic expressions of the relation among the people, and an improved understanding of their historical roots may be very important to mediate between the different parties. The main objective of the discussion was however to contrast the perception of the situation ‘as it is’, too often taken as the sole basis for ‘objective’ technical and administrative solutions, and the understanding of the historical process behind it. The historical analysis is also needed to contest the popular argument about the ‘unavoidable unsustainability’ of the pastoral livelihood due to demographic pressure.
Oromo settled agriculturalists or agro-pastoralists within the Borana Administrative Zone. The placement of the part of Liban inhabited by Borana pastoralists into the Guji Zone was not without tensions.

The demarcation of internal borders, namely those between Somali and Oromia NRS, is still an unresolved issue. The situation described by Zavattari shows that ethnic borders need to be represented as somehow flexible, and with a degree of overlap\textsuperscript{305}. Somali groups progressively increased their presence. In any case, it is not possible to trace a precise borderline dividing the Borana from the Garri or any of the other Somali groups. The situation is rather similar to a wide overlapping of different groups, with a mix of friendly arrangements and conflicts, in turn regulated through local arrangements, but today increasingly through the intervention of formal authorities. Many of the border areas are still disputed. It is important to note however that politico-administrative boundaries tend to coincide more and more with ethnic boundaries as do the management and use of natural resources.

### 3.5.2 The territorial reorganization and the borders' setting

Lister in 2004 reports that even in those districts which remained under the administration of Region 4 after 1994, when the Borana were squeezed out, the Gabra Miigoo were generally well-treated by the EPRDF. This occurred in order to create a counter-force to the Borana, and they benefited with an increased number of political positions. In 2004, the Gabra Miigoo were still representing the Borana in the House of People’s Representatives (the Federal Parliament) from Yabelo constituency, and members of other urban minorities of mixed ethnic background were empowered at the zonal level.

From 1992 to 2002, the Somali and Garri politicians managed to penetrate into the Oromo territory by exploiting a better relation with the federal government, gaining external support for the new settlements and managing trans-boundary migration\textsuperscript{306}.

In 1992, the regions were re-organized to fit the ethnic federalism of the Transitional Chart. Oromia (Region 4) and Somali (Region 5) regional States where created, subdivided into zones and administrative districts (woreda). Borana Province, with the exclusion of Dolo district inhabited by the Digodia and other Somali speaking minorities, was changed into Borana Zone, with the addition of Jamjam Province, a highland in the north inhabited by the

\textsuperscript{305} Quoted by Pallottino, 2007.

agro-pastoral Guji-Oromo. The administrative centre was set in Nagele Borana town, which had previously served as the centre of Borana province. The Borana and Guji inhabited districts of Arero Province were also incorporated under the Borana Zone, that was thus subdivided into 12 administrative districts: Adola, Oddo Shakkisoo, Uraga, Bore, Hagaramaram, Galana Abaya, mainly inhabited by the Guji-Oromo, and Arero, Liban, Dire, Taltalle, Yaballoo, Moyale, mainly inhabited by the Borana.

The Somali National Regional State (Region 5) was divided into nine administrative zones, but the formalisation of the internal demarcation was slow, especially along the border with Oromia. The south-western corner was called Liban zone, bordering Kenya to the south, Afder zone to the east and Oromia region to the north and west, but it was not clearly demarcated. In 1994, a territorial dispute arose between Region 4 and Region 5. A declaration was emanated by which eight kebele from Liban district of Region 4 were transferred to the Liban zone of Region 5. As a result, they formed Filtu district in addition to Dolo woreda. Despite being just a small rural village, Filtu obtained the *de-facto* status of a zonal administrative centre. The zonal authorities formed their own militia that, according to local sources, was used to further push their territorial claim in the Liban district of Region 4. The conflict between the Borana and the Digodia was intense from 1997 to 2001, particularly in Qorati and Hadhessa kebele.

From 1992 to 1994 the OALF leadership shifted to a Somali identity. By formal decision of the Transitional Government of Ethiopia, 11 kebele of Moyale woreda were annexed to Region 5. These include the crucial *tulaa* wells and surrounding rangelands of El Leh and El Gof. Seventeen kebele, including the entire town of Moyale, were instead entrusted to the administration of Region 4. Region 5 obtained the administration of the key pastoral area of Hudet, removed from Arero woreda of Region 4. By 1994 the administrative configuration of Liban Zone (Region 5) was thus emerging as divided into three woreda of Filtu, Dolo and Moyale. The entire Liban zone of (Region 5) was divided into the three woreda of Filtu, Dolo and Moyale. The entire Liiban Zone of Region 5 was therefore curved out of the customary territory of the Borana-Oromo. Out of the three woreda of the newly established Zone, Dolo was the only one no longer used by the Borana herdsmen.

Moyale town was formally under Region 4, but *de facto* divided into two, serving as administrative centres for both the Moyale woreda of Borana zone (Region 4) and the Moyale woreda of Liban zone (Region 5). Several kebele legally under Region 4 were either

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controlled by the militia of Region 5 or under the facto double administration. The people from both sides living in these kebele were either displaced by conflict or suffered serious abuse and were later forced to leave.\textsuperscript{308}

During the federal and regional elections of 1995, the Borana were excluded from institutional politics and therefore lost important seasonal rangelands in Liban and crucial market-oriented permanent water and pasture resources in Dire. The Digodia and the Garri fully re-aligned themselves with the Somali People Democratic Party (SPDP). It was highly coordinated with the EPRDF, standing in opposition to the secessionist political organisations of Region 5, since 1994. They obtained most political positions both at woreda level in Dolo and Filtu, and at zonal level in Filtu (Region 5). The Garri and their customary leaders obtained full control of Moyale district of Region 5, and representation in the House of People’s Representatives.

In 1998, the pastoral component of the Maareexan gave up the Somali territorial claim in Liban of Region 4, and recognized the Borana traditional system of resource management. The returned Gabra Miigoo retained their Oromo identity and aligned with the OPDO, the Oromo branch of the EPRDF. The Gabra pastoralists slowly re-built their relations with the Borana pastoralists by revitalizing their customary leadership and yaa’a.

The Office of the Prime Minister dealt with the border issue between Region 4 and Region 5 until June 2000, when it was presented to the House of People’s Representatives in accordance with article 48 of the Ethiopian Constitution. A total of 770 kebele were still contested, 615 claimed by Region 5 and 155 by Region 4. The House of People’s Representatives nominated a Committee of nine members to collect documentation and to discuss the contending of regional states with the administrators, but a decision was not reached. The issue was re-addressed to the two regions for a consensual solution. This new attempt was coordinated by the Ministry of Federal Affairs.\textsuperscript{309}

In 2002 Borana Zone and Guji Zone were created, with Yabelo Borana and Nagele respectively as administrative centres. The districts of Arero, Dire, Taltale, Yabelo, Moyale, mainly inhabited by the Borana, and Hagaramaram, Galaana, prevalently inhabited by the Guji, were included under the Borana Zone, while Adoola, Oddy Shakkisoo, Urgaa, Booree formed the Guji Zone.


During those years, in the target areas, more and more land in the wetter areas, especially in town outskirts and bottom valleys, was allocated for farming by the local administrators and by the leaders of the kebele. The main beneficiaries of this process were urban minorities or a few individuals affiliated with the OPDO and SPDP. Under this double external and internal pressure on water and grazing resources, the pastoral system became more and more enviable, exacerbating the state of permanent dependency on food distribution.

In 2002, Clapham defined the new politics of space in Ethiopia as the macro-process of demarcation of regions and other administrative boundaries, locally perceived sometimes as exclusive ethnic spaces.

In August 2004 a political solution was found for 287 kebele. Among the 484 pending kebele, 150 were claimed by Region 4 and 334 by Region 5. The contention between the two regions was again presented to the House of People’s Representatives; they decided to hold a referendum (September 2004) and formed the electoral board and the regional sub-permanent committees. The aim of the referendum was to attribute the contested kebele. The idea of the referendum was not evaluated fairly by all parties, especially considering the remarkable increase in population due to the massive inflow of returnees.

After a more thorough screening, the councils of the two regions agreed to reduce the number of disputed kebele to 463. The pre-conditions for the referendum were agreed upon, including the disarmament of militia, the termination of identity card distribution and resettlement, and the construction of new buildings for new settlers. A national committee was established for the implementation, with members from the Ministry of Federal Affairs, regions, zones and districts. The responsibility for the ballot was entrusted to the national electoral board. In October 2004, the House of People’s Representatives approved the report by the national electoral board. On a national scale, the registration of voters was halted in 39 kebele and the ballot was successfully completed in the remaining 424. In two of them, the ballot was declared illegal due to procedural problems. 323 kebele were assigned to Region 4 and 99 to Region 5.

The referendum was interpreted by most Oromo as a legitimating and consolidating instrument of the demographic situation achieved in the precedent years. Two factors may

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311 Gufu Oba describes the negative impact on the pastoral system of the Borana (1998).

312 Quoted by Pallottino, 2007.


have contributed to the promulgation of unfair regulations for the referendum and the inherent decision-making having no provision for the return of the Oromo displaced persons and showing a stronger influence of the Somali in the bilateral regional negotiations. The first is the political under-representation of the Oromo-Borana at all administrative levels. The Borana systematically complained that they were represented by people having no true knowledge of the local reality, and scarcely motivated. The second is the leading role of the Ministry of Federal Affairs in all the negotiations and committees. This institution during the program of support to good governance in the peripheral pastoral regional states lacked the necessary experience, including the Somali regional state but excluding Oromia. Extremely violent and protracted episodes of ethnic cleansing took place after the ballot in several localities on the remaining portions of the border, reported both in national and international media.

3.5.3 Local political elections and “new” territorial tensions
From 2005, the severe territorial threat posed by the referendum raised the level of awareness and brought attention to national-related electoral politics. In addition, the pre-electoral political debates disseminated through radio and television, and the space provided to the opposition parties in newspapers, created the diffused sensation that some degree of effective competition may have developed. There was also a progressive engagement by few individuals from both the OPDO (EPRDF) and some of the opposition parties. Of course a democratic election can be considered fair only if all political components are freely and fully involved in the democratic competition from the onset.

The sense of competition was equally perceived in the rural areas, where intensive campaigning by the OPDO took place. In official meetings, procedures were clearly explained, as well as the democratic guarantees, assuring free and fair rights to associate, campaign and compete, with good procedural standards for vote registration and at the ballot. But, as it was also reported from other parts of Oromia (Human Rights Watch 2005), informally the kebele structure was consistently utilized to threaten the rural population. The kebele officers explicitly warned the villagers about the intention of the OPDO to apply measures of revenge (haaloo) in those rural divisions where the vote would have resulted in favour of the opposition parties. The type of revenge was not spelled out but based on previous experiences, the rural communities were aware that the revenge would have

manifested in unfair food distribution. In the past, individuals openly supporting the OPDO received more food, while no-sympathizers were discriminated against. In the pre-electoral phase, food had already been received in the two zones, were stored and ready for distribution. It was now feared that the discriminatory practice would have escalated from the individual to the collective level, with retaliations against the area corresponding to a certain polling station, whose results could easily be monitored by the OPDO officers. This threat was perceived as being very effective.\footnote{Lister Sarah, \textit{The processes and dynamics of pastoralist representation in Ethiopia}, IDS Working Paper 220, March 2004.}

The second perceived area of potential discrimination was the access to reworded development jobs. In the past, job opportunities were assigned to OPDO sympathizers. This was a shift from a generic favouritism for political sympathizers to a more specific mechanism of food for vote or job for vote.\footnote{Ofcansky Thomas, \textit{Ethiopia since the Derg: a Decade of Democratic Pretension and Performance}, Pausewang, Siegfried, Kjetil Tronvoll, and Lovise Aalen Eds., June 2002.} This was probably related to the widespread feeling, even among the OPDO officers, that this time an actual competitive process was ongoing. The opposition parties actually arrived, but did not manage to find candidates in all constituencies. Despite this, they were allowed to organize themselves and campaign. The OPDO tried to involve the customary leadership of the various Oromo groups in the campaign. The modalities of potential co-option ranged from the establishment of a mechanism of the involvement of customary leadership similar to Region 5, to the possibility to include the top customary leaders of the Borana, Guji and Gabra in the woreda councils.\footnote{Pallottino Massimo, \textit{The Interplay of Power and Knowledge in Planned Social Change: From Policy Making to Project Planning: a Case from Southern Ethiopia}, Université de Geneve, Institut universitaire d'etudes du developpement, Thesis No. 19, March 2007.}

The ballot was held on May 15\textsuperscript{th}, 2005.\footnote{In the constituency under the administration of Region 5 it was held in August 2005 with an overwhelming victory of the Somali People Democratic Party (SPDP).} It was peaceful but complaints were raised about the absence of opposition or even independent observers at the polling stations. According to several urban elders, the observers were simply nominated by the woreda officers and by the leaders of the kebele; hence by the OPDO.

In all the constituencies where the ONC (Oromo National Congress) component of the UEDF (United Ethiopian Democratic Forces), locally known as \textit{Obko}, or the OFDM (Oromo Federalist Democratic Movement) managed to register candidates, they either won or seriously challenged the EPRDF (OPDO) candidate. In Borana Zone they won 3 parliamentary seats and only lost in Kercha by a 4\% difference. In Guji Zone members of the ONC/UEDF and OFDM only managed to register in two constituencies. Conversely, the
CUD (Coalition for Unity and Democracy) candidates never surpassed 17% where UEDF or OFDM opposition members were also competing. Both the ONC and the OFDM promoted a federal model of Ethiopia and supported the principle of self-determination as defined in the Ethiopian Constitution, only criticizing the way federalism was implemented by the EPRDF. The CUD expressed a more centralistic ideology and was highly critical of the principle of self-determination. Despite the threat of unfair food distribution, voters expressed a clear choice in favor of the Ethiopian constitutions and of the federal ideology. The EPRDF won the competition in large sectors of the Ethiopian countryside. However, this happened mainly in constituencies where other federalist candidates failed to register, in addition to the more fundamental exclusion of the OLF from the democratic process.

The 2005 national elections brought in a new dimension to the tensions in the area, with a more intense intra-Oromo conflict. The conflict between the Borana and the Guji originated as a Guji – Gabra Miigoo. In 2004, the Gabra Miigoo submitted a request for demarcating a woreda in their name, formed by 4 kebele in Yabelo and 1 in Arero, where they settled after 1991 an east-west strip along the Borana-Guji area of territorial interaction. Mistrust between Gabra and Guji grew on occasion of the referendum; the Guji accused the Gabra Miigoo of failing to provide the expected support in Madari kebele, contested by Region 5. A number of cruel episodes of reciprocal killings and low scale cattle raiding took place afterwards in a protracted state of low intensity conflict. The underlying factor of the conflict was the competition over pastoral resources; in particular a latent factor of mistrust related to the potential of each group to link to national politics and to the leading party, thus gaining advantage in the process of the demarcation of administrative boundaries. Attempts to negotiate peace agreements took place with the involvement of the customary leaders of the three groups, but they failed. At the beginning of April, a large scale Guji raiding attacked the Gabra in Surupa and surrounding villages. UNOCHA reported 43,000 displaced persons from Yabelo to Hagaramaram and Arero woreda as a result of this.

In the meantime, a new line of conflict emerged in Kenya and cross-boundary between the Borana and the Gabra Malbee, two groups strongly connected by ritual inter-dependence. Large scale raids occurred after a number of low scale killings, cattle rustling, retaliations and counter-retaliations. On July 12th, 2005, hundreds of armed Borana raiders attacked Turbi, a small Kenyan town between Marsabit and Sololo, mainly inhabited by Gabra. The style

321 Ibid.
recalls the Surupa attack, but it was even more brutal; 70 people were killed, including 22 children. This horrible episode was fully reported in Kenyan and in international media (Irin, 12 and 13 July, 1 August, 2005). The possibility for the Gabra to build in Ethiopia an exclusive administrative space, demographically sustained from Kenya, influenced the Guji more than the Borana. The Borana were still in conflict with the Gabra Malbee in Kenya, but they were rather supportive of the Gabra Miigoo in Ethiopia. In 2005, the Guji felt uneasy with the idea of having a Gabra buffer zone between them and the Borana and were especially complaining about the Gabra claim of Tula Wayyu kebele in Arero woreda, strongly regarded as their own.\(^{322}\)

In the post-electoral Hiddo Galgallo, abbaa gadaa kontooma of the Hawattu clan, Borana, chaired the negotiations between the Guji and Gabbra, working in close cooperation with the government. The Borana asserted their overall responsibility by declaring to both sides that any attack between Oromo in their territory would be considered as an attack on the Borana themselves.\(^{323}\)

The third stage is the outbreak of a direct and devastating conflict between the Borana, supported by the Gabra, and the Guji, in in the same contended area. Heavy fighting, with logistic support, took place for a couple of weeks beginning on May 29\(^{th}\) 2006, and continued later at lower intensity. 100 – 150 casualties were reported by the humanitarian organizations, with violence and mutilations against women and children belonging to both rural and urban populations. About 24,000 persons were displaced (Observer 2006; Irin, July 19\(^{th}\), 2006). State politics was determined to be the major factor rather than the mere competition over pastoral resources. An Irin article, as quoted by Pallottino in 2007, reports the demand by the Guji to the government of land belonging to the Borana (July 19\(^{th}\), 2006), and the mentioned account states that the conflict started during the early Nineties, after the entrance of Guji families into the grazing reserves of the Borana, paid no regard to customary pastoral rules. Those families were apparently permitted to enter into the grazing reserves of the Borana by their governmental officers with confirmation by their customary leaders. Comments were also concerned with the passive role of the army during this protracted heavy conflict.

\(^{322}\) During the Derg period the Southern Guji were often engaged in low cattle raids with the Borana, despite the close cultural ties of the two groups. During the post-Derg period the relations greatly improved, with grazing agreements, joint use of resources and no violence at all. The Guji solved the problem of intensification of agriculture in their core territory by moving herds into the large zone of interaction with the Borana and the Gabra Miigoo.

In the beginning of 2007, tension was still high when Jaldessa Borbor, *abbaa gadaa kontooma* of the Konitu clan, Borana, was reported to have been assassinated by a Guji man who had already been imprisoned for murder.

Tensions among the different groups continue to this day, becoming more serious during dry seasons and droughts. They are also now more complex: “the relatively educated and urbanized elites have learned that a successful claim to separate history, culture and identity can provide the key to separate allocation of budget, and that elevation of administrative status brings enhanced budget provisions and economical opportunities, but here the differentiation and claims are articulated at the level of primary identities. (...) Although locally oriented, conflict occurs at large scale and with an escalation of intra-ethnic violence. Here the most destructive outcomes take place when the two components, urban political elites and pastoralists, converge on common opportunistic objectives. (...) In this renovated political environment, primary groups are not directly competing for the State resources (this still operates at macro-level), but enter into conflict because of the failed regulatory mechanisms of the State. One dimension is the demarcation of administrative space and the inherent budget, the other is the capacity to influence the demographic balance and the allocation of basic natural resources, including land, grazing and water. (...) The construction of exclusive ethnic spaces runs opposite to the customary practices of the pastoralists, and to their systematic mechanisms of resource sharing, based on collective tenure, customary and territorial rights, customary law, governance. During these last years of conflict the pastoralists have constantly tried to rebuild links across both primary and national groups”\(^\text{324}\).

CHAPTER 4 – Territorial pastoral resources and management

4.1 Introduction
This chapter analyses how the different groups living in the studied area are organised in terms of access to market and infrastructures, to water sources and grazing areas, how the herd is managed, based on climate, soil characteristics, seasons' cycles. Moreover this chapter takes into consideration which aspects are mainly changed in recent times, trying to understand their causes and most of all their effects on livelihoods system of pastoral people. Finally it is described a specific external factor who entered in this dynamic change of pastoral livelihood since the seventies, that is the humanitarian intervention in the area. This chapter contributes in understanding how the pastoral systems in the studied area need to increase and differentiate their livelihoods options, and how this dynamic process is felt as a further coping strategy and resilient mechanism to preserve the pastoral life style. This because the resources on which the traditional livelihoods options were based, have been challenged in the last years by environmental changes and external factors, that are analysed in this chapter. Moreover this chapter highlights the flexibility of the pastoral systems in the studied area, also under the social and customary point of view, in order to take into consideration the elements of a changed situation.

The territory in Moyale area is shaped by the presence of pastoral communities and by their use of natural and territorial resources. Pastoral territory appears as a complex of agro-ecological features, land use patterns, access and use rights of different human groups. The pastoralist communities have knowledge of this variable environment, where each distinct element is acknowledged as essential, contributing to guarantee the viability of pastoral livelihood across climactic variations.

The economical situation of Moyale area is determined by the locally accessible resources. The livelihood of households is based on the complementary and non exclusive use of several types of resources, and each community defines its own territorial system where key resources are acknowledged and interdependencies are specifically defined. The properties of each element are considered together with the way the different elements are connected one to the other. Therefore the value of natural resources is considered as a whole.

The use of resources in a pastoral environment is based on two principles: rotation and opportunism\(^{325}\). The resources are not exploited simultaneously: they are cyclically exploited

and subsequently kept fallow, following infra-annual or inter-annual cycles. The fact that a given area or kind of resource is not used, does not mean that it was never used or that it will never be; nor the can the importance of one element be inferred by whether it is used in a certain moment. Moreover pastoralists adopt a reactive strategy, opportunistically changing their behaviour and adapting it to changed conditions. The range of choices put in place by the pastoralists is called coping strategies. Opportunistic and adaptive strategies are linked to an environment where changes are not directly linked to the behaviour of social actors. The availability of pasture usually depends on exogenous factors such as rains or climatic and socio-political conditions\(^3\).

Pastoral communities make reference to a wide territory, accessing it on the basis of a large set of elements. The different ethnic groups have developed arrangements that regulate access to the natural resources on which their livelihood is based, and have identified local territorial systems: a network of territorial resources characterised by the flexibility of their boundaries (that are in constant movement, across seasons and years) and by the concurrent use of the resources between different groups\(^3\). During my field work in Moyale area, the NGO LVIA tried to take a snapshot of some systems, in order to identify the network of territorial interaction linking specific communities to their geographic context. The outcome was represented by different maps, drawn with the pastoralists in the context of a rural participatory exercise. The maps were able to show a high degree of detail and precision in comparison to available cartography, and to highlight the key resources and linkages within a radius of 80-90 kilometers. In order to fully understand the contents (and to avoid dangerous misrepresentations), the sketch was complemented by the utilization of cartographic maps to validate the information coming from pastoral communities, the analysis of local infrastructures, the involvement of political authorities, etc.

The maps drawn with pastoralists analysed the institutional arrangements that regulate access to resources, and facilitated an understanding of the arrangements behind the different resources, as the water resources, the pastures and the kalloos. This level of analysis also helped to highlight the concurrent use of the resources. In the case of these maps, distances were indicated in days or hours. The maps also offered a valuable analysis on the history of

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\(^3\) Scoones (1995): In coping with risky and changing environment, reactive strategies are defined in opposition to ‘preventive’ strategies that are based on the idea of stabilising the environmental conditions by undertaking measures aimed at reducing the variability of the conditions that influence the decision making processes. This approach is based on the so-called ‘new thinking on range management’.

\(^3\) Pallottino Massimo, *The interplay of power and knowledge in planned social change. From policy making to project planning: a case from southern Ethiopia*, Université de Geneva, Institut universitaire d'études du développement, March 2007.
the communities, which helped to place the snapshot in a longer historical context, and also within a much wider geographical context. The village timelines indicated that some of the communities living in the area migrated in relatively recent times from other locations. Hidilola is one of the places where the pressure of agriculture encroachment is reported to be at a high level; in Arero recent history highlights increasing pressure on pastoral systems due to agricultural expansion, immigration of other ethnic groups and environmental degradation. This chapter will analyse the pastoral territorial systems of the target area, defined as the portion of the territory and the resources that are used or may be used by a given pastoral community in any moment of the dry-wet cycle. The system is defined in a dynamic form, taking into account the blurriness of its limits and the overlapping of different local territorial systems. Massimo Pallottino\textsuperscript{328}, during collaboration with the NGO LVIA, focused his studies mostly on these aspects and his writings are therefore an important reference for this chapter of my thesis.

4.2 Climatic context and livelihoods
4.2.1 Physical characteristics and climate
The altitude of the target area ranges between 900 and 1,600 mt above sea level. The majority of the area is classified as kolla (lowland) and a very small proportion of the land is woina dega (mid highland), which can be found mainly in Dire woreda. Concerning the native vegetation, plant communities consist of a different mixture of woody and herbaceous vegetation, which can define an environment of tropical savannah. Except along the Dawa River, there are no seasonally flooded areas and catchments which could support riverine vegetation or gallery forest. The target area lacks reliable surface water during most of the year (Coppock, 1994) and also a constant rainfall: the area is characterised by high variability in rainfall from one year to the other, which makes crops growing uncertain.
The primary production in the area is limited, mainly as a result of the climate. The amount of land cultivated is quite low, less than 25%, so livestock herding is still perceived as the most efficient utilisation of the rangeland. In Moyale Oromia woreda almost all the rural population relies on livestock and agriculture. In Dire and Moyale Somali woreda most of the rural population is pastoralist, with some agro-pastoralist inlands (Mega and Hidilola in Dire and Dokisu area in Moyale Somali).

\footnote{328} Ibid.
In particular, in Somali Moyale woreda the majority of the population is pastoral and only in the south (Kadaduma and Dokisu areas) are they agro-pastoralists. Somehow in continuity with the chain of hills found in the south of Somali Moyale woreda, there is Oromia Moyale woreda (hilly area bordering Kenya), of which the population is nearly all agro-pastoral. The main centre is Tuka. In Lagasure Kebele, Did-Guchi area can be considered pastoralist and it is inhabited mainly by Gabbra. Finally, in Dire area, it is possible to differentiate two main agro-pastoralist areas. One is the area around Hidilola, which recently become the capital village of the new established Miyo woreda, which is again in continuity with the Tuka hilly area. The other main agro-pastoralist area is Mega, around Mega Mountains. All of the remaining population of Dire and Miyo woreda can be considered pastoralist. A second distinction can be applied to Dire pastoral areas. The western part is poor in infrastructure and therefore has less access to the market (mainly in Mega and Dubluk); the eastern part usually has good access to the market, either directly or through well served secondary roads. Annual mean rainfall in the Borana Plateau varies from about 440 mm to 1100 mm, with an overall average of 700 mm. The area to the east, Moyale Somali, is reported to receive less rainfall compared to the west side, having sites where the annual mean does not exceed 200 mm.

Compared to rainfall, air temperature varies much less throughout the year, from 18° to 27°C. Each year has four seasons. In the following list, the different seasons are given with the local names (in oromifa language):

- **Bonna** (long dry season – December to March)
- **Ganna** (long rainy season – April to June)
- **Adolessa** (short dry season – July to September)
- **Hagaya** (short rainy season – October to November)

The **Ganna** long rainy season is the most important for pastoralist and agriculturists in Oromia side. The population harvests twice in a good year. On the Oromia side farmers plant maize, wheat, barley, pulses, sorghum and teff in the **ganna**. Crops are usually harvested in June and July. The short rainy season **hagaya** falls between October and November: haricot beans, maize and teff are the most important crops planted at this time. If the rainfall is sufficient, farmers plant wheat in addition to the other crops. **Hagaya** crops are harvested in November and December. On the Somali side, rains are vital for improving water availability and regenerating pastures for animals.

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4.2.2 Farming activities in the studied area

Contrary to some other pastoral areas of Ethiopia, the Moyale area is not gifted by the presence of permanent surface water (if not marginally the Dawa River). Therefore it does not experience conflict with permanent farmers or with big private or governmental agro-industrial farms for exploiting the water. Moreover agriculture is still carried out mainly by the same people who own the animals. Similarly no national park or wildlife sanctuary was instituted in the area. At the beginning of the Derg, settlements among pastoralists started to take place: trees were cut, many villages increased in size and people started to live in permanent houses. In places where pastoralists settled and created permanent villages, they also started farming activities in order to integrate household income. In recent times this phenomenon is becoming more common. Based on observations and discussions with woreda experts, farming activities are not predominant but they may represent a significant income source in a few areas where the average rainfall is higher. Otherwise in other cases, it does not have a real value for the household economy. It is worth mention that the increase of settled agricultural communities implied the erosion of resources used by pastoralists, and especially the more fertile lands utilised as dry or drought pastures. Agricultural activities and more rigid tenure rights based on the introduction of private ownership can bring the risk of subtracting vital dry season and drought resources away from pastoral use.

In Moyale Somali, where the settlement process was generally facilitated by UNHCR and other humanitarian interventions, farming capacity is scarce with a poor harvest, while in many cases the input costs (cash and labour) are quite high. In particular in the El Leh area (El Leh and El Gof kebeles) farming is considered a side activity. Kebeles as Katama, El Der, Chilanko, Jara, Galgalu, Hawan, El Nyapo are characterised by very low rainfall and few farmers.

In Oromia side, agriculture activity is more developed and important, compared to the Somali side. The number of agriculture products (fruit, vegetables or crop) and quantities produced are higher, mainly in some specific agro-pastoral area. This is the result of a higher level of yearly rainfall and of the resettlement programmes which took place both during Haile Selassie I and Derg times, when some people from the northern highlands moved to the dry lands. In Borana zone small towns like Hidilola, Mega, Dubluk, Bokuluboma were colonised.

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331 By the way, in Somali side it is currently under discussion the opportunity to establish a wildlife park.
by agriculturalists. Moyale town and its surroundings were also targeted by these resettlement programs.

4.3 Local resources and market/transport infrastructures

4.3.1 General aspects

The production and livelihood systems prevailing in Moyale area are pastoral and agro-pastoral. The main one is livestock production, and second to this is the cultivation of sorghum, maize and barley in riverine or hilly areas, which is often practised in tandem with livestock rearing in the case of the Oromia side. Most livelihoods in the area is based on livestock: the southern rangelands were known for decades as some of the best grazing areas in East Africa, especially in the western part, in what is known as the Plateau Borana.

The lifestyle of rural households is based on animal products, local crops and other items coming from the highlands and the Kenyan border. In the local market, food stuff and consumer goods are exchanged for local products. Observing a pastoral household economy, it can appear as a status of subsistence: most of the households lack the capacity to invest in new income generating activities to improve their production capacity. Among the factors that have influenced livelihood development in the recent years, mention should be made to the serious climatic stress, highlighted by ASARECA (2000), and its effects on the adaptation strategies of local pastoral communities.

Different urban centres have also developed, mainly following the policies of military conquest and induced immigration by the central Ethiopian governments. The areas surrounding the towns of Moyale, Mega, Yabelo and Negele are a real interface between different ethno-linguistic groups, with different livelihood and production patterns, engaged in an articulated long-term transformation process.

The Moyale town market is the main source of economic activity in the area, due to its favourable position bordering with Kenya. The Moyale area is characterised by the sale of

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334 Among others, Scoones (1994) points out that "...the pastoral Borana system has higher returns of both energy and protein per hectare compared to industrialized ranching systems in Australia. Australian Northern Territory ranches only realise 16% of the energy and 30% of the protein per hectare compared to the Borana system".


336 Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).

337 Seleshi and Zanke (2004) confirm a significant decline in the annual rainfalls for the eastern (Jijiga) and southern (Negelle) stations between 1965 and 2002, and more markedly in the last half of this period. According to Markakis (1998), "[t]here is no evidence that a macro-climatic, i.e. permanent, change is taking place in the Horn, though it could well be that a micro-climatic i.e. reversible, phenomenon is in progress."
animals, which brings a considerable income and the relevant purchase of consumer goods from abroad. The income generated by animal marketing, including big sized animals and small ruminants, is the main economical source for the area.

Due to the limited crop productivity of the area, the supply of crops is generated from the highlands. Even frequent food relief interventions contribute to satisfy the food demand in the area. Market related activities, trade and labour are increasingly prominent.

The main road of the area is the tarmac road which runs from Addis Ababa to Moyale town, and which also connects to Nairobi (once past the border, the road becomes a track of soil on the Kenyan side). Dire woreda and Oromia Moyale woreda are nearly cut into two parts by this road, while in Moyale town the road somehow represents the border between two regions. On the Borana side, several major roads extend from the tarmac road. From north to south the main side-streets are the road to Negele Borana (around 7 kilometers north to Mega turning left to east direction, passing through Mana Soda, Gayo and Dhas), the road to Hidilola (some kilometers after Melbana turning right to south direction), the road to Erder (at Bokuluboma turning left to north east direction) and finally the road to Tuka (17 kilometers before Moyale, turning right to south west direction). All these roads are not paved, but can be considered all-weather roads (excluding the Erder one).

On the Somali side there are no all-weather roads and the condition of the existing roads is very poor. The main one departs from the tarmac road few kilometers north to Moyale towards north east up to El Leh, (37 km from Moyale, the major village in the Somali Moyale Woreda). From El Leh the road proceed in east direction up to Chilanko (150 km from Moyale), either to south east up to Kadaduma (94 km from Moyale) at the border with Kenya.

4.3.2 Market opportunities
In the past decades, an important development took place in the southern lowlands that is the increased access to the market. The idea of market accessibility is also one of the backbones of development strategies implemented in pastoral areas. The access to markets has historically been, one of the features of the area. Borana used to play a role in the networking of people and territories at the junction between the Abyssinian and eastern Somali areas, linking them to southern areas. As Wilding points out, “[i]t would be improper to consider the Borana economy as it developed as having been essentially of subsistence type. It always
contained important elements of specialisation of labour, of the channelling of resources into trade and into other non-subsistence activities".\textsuperscript{338}

One of the crucial issues when looking at market relations in pastoral livelihood and production systems in Moyale area is related to the availability and accessibility\textsuperscript{339} of grains. Grains play a key role in relieving the impact of drought years on pastoral livelihood. When the first immigrants occupied the more fertile lands of the southern lowlands (firstly the Menelik soldiers, neftegna, and later Konso, Burji and other peoples from the highlands), they established exchange relations: they compensated the services of pastoralists herding their cattle with grains, supplied animals for carrying harvest, or even provided labour for weeding and harvesting. Pastoralists were also able to acquire grain in exchange for salt. Moreover, settled communities started building underground grain stores, in order to make reserves for dry seasons as well as for drought years. This represented a rather reliable source of grain for pastoralists. Some Borana communities, especially those living in the badha humid zones, also started farming and became another important source of grain.\textsuperscript{340}

Another interrelated aspect of the market is the fact that livestock marketing is the major source of cash income for pastoralists. The sale of livestock in Borana is not only a key source of earnings for pastoralists but also a major national export. According to Homann, it needs to be noted the contradiction between the strong subsistence orientation, which is a part of the rhetoric about pastoralism (even if not confirmed by the historical analysis of the production systems in the area), and the acknowledgement of a high degree of market integration "[d]espite the strong subsistence orientation, Borana cattle provided up to 90% of legal exports".\textsuperscript{341} Also unofficial trade with Kenya has considerable weight: Homann, quoting previous studies, mentioned the estimated number of heads smuggled in 1998 to be between 35 and 50 thousand.

The conditions of market access in Borana changed with the development of infrastructure in the mid seventies, in which imported grain started becoming more easily accessible on the market.\textsuperscript{342} This increase in availability represented an important element in relieving the


\textsuperscript{339} The accessibility of grains is related to their presence on the market when they are needed, to their price, to the existing stocks, to social networks and in this case also to the accessibility of aid systems.

\textsuperscript{340} Oba, G. \textit{Assessment of indigenous range management knowledge of the Borana pastoralists of Southern Ethiopia}, Borana lowland pastoral development program/GTZ Consultancy paper Negelle/Borana, May 1998.


impact of the frequent droughts that affected the southern lowlands of Ethiopia. In addition, the prompt availability of grains tended to delay the sale of livestock, thus directly contributing to a boost in the livestock population\textsuperscript{343}.

The market is therefore not at all an alien idea to pastoralists. However, they do not rely primarily on it for their subsistence, as they are largely self-sufficient in nutritional basics, because of the availability of animal protein from the milk and blood of live animals. The general pattern of consumption sees pastoralists consuming milk and milk products as much as possible. As Helland remarks, during normal times, the systematic sale of milk tends to be a symptom of pauperisation. It takes place when pastoralists cannot afford to consume their milk production, and need to exchange part of it for grain or other products. Richer pastoralists tend to cover their occasional cash needs with the sale of live animals, and namely those whose productive life is over\textsuperscript{344}. Ordinary market exchanges see pastoral products exchanged against non-pastoral food items. In order to represent the market relations between the pastoral and non-pastoral sector the notion of terms of trade can be employed. It expresses the ratio between the prices of goods sold by the pastoral sectors (livestock, milk) and the prices of goods purchased (grains, instrumental goods, other consumer goods). This ratio can give an idea of, for example, how many live cattle a pastoralist will have to sell in order to purchase a bag of maize. In the case of pastoralism, some of the common dynamics can be summarised as followed:

\textsuperscript{343} Oba, G. Assessment of indigenous range management knowledge of the Borana pastoralists of Southern Ethiopia, Borana lowland pastoral development program/GTZ Consultancy paper Negelle/Borana, May 1998.

**Table 1: Terms of Trade in pastoral sector, under various conditions**

<table>
<thead>
<tr>
<th>Interaction of pastoral production system with non-pastoral sector</th>
<th>Older times: pastoralist livelihood is relatively independent from markets (although trade is not unknown)</th>
<th>After mid seventies: infrastructure development, increased interaction with markets and progressive relief systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal rain year</td>
<td>Drought episodes</td>
<td>Normal rain year</td>
</tr>
<tr>
<td>Interaction of pastoral production system with non-pastoral sector</td>
<td>Pastoralist subsistence is based on pastoral products. Interaction with the market is voluntary and essentially for non food items.</td>
<td>There is very little availability of alternative food sources. Grain is expensive, and in most cases not available. Drought episodes could lead to famine.</td>
</tr>
<tr>
<td>Trends in the terms of trade</td>
<td>Generally favourable to pastoralists, at least in the income effect, as they are in condition of deciding whether to make recourse to markets or not. Pastoral products are much valued by non-pastoral people</td>
<td>Worsening in real terms; sometimes the notion is simply not applicable, as money based marked play a very limited role</td>
</tr>
</tbody>
</table>

The notion of terms of trade can be further expanded by linking it to other indicators, namely the food requirement, and the energy content of food items exchanged. The idea of caloric terms of trade is defined as the equivalence yielded in exchanging pastoral and non-pastoral food items calculated in caloric terms. A calculation for assessing this equivalence has been proposed by Dietz and Salih: a litre of milk contains about 700 calories, a kg of beef meat contains about 2300 calories, a kg of grain (maize or sorghum) provides between 3000 and 3450 calories.

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346 This consideration does not take into account the other negative side effects of relief.

347 The physiological needs can be summarised as follow: children <10: 1300 calories per day; adult: 2000 calories per day; estimated average: 1800 calories per day (C. de Ville de Goyet, J. Seaman, U. Geijer, *The management of Nutritional Emergencies in Large Populations*, Geneva, W.H.O., 1978, quoted by Piguet). This calculation is a rough simplification of a more complicated issue, as the caloric requirements can be modified by many elements and nutrition requires more than caloric content.
3600 calories. The common price dynamics show that pastoral sector usually enjoys favourable caloric terms of trade: by selling one litre of milk (primary pastoral product) they can fetch money to purchase grains with much more caloric power than that of the milk sold, usually between 3 and 10 times more. Given the caloric power of different products, what comes out is the interplay of the relative prices: pastoral terms of trade can be said to improve when the sale of a small amount of milk makes it possible to purchase a much larger amount of grains; or to worsen, when the opposite takes place.

These considerations should be complemented by recalling the issues related to seasonality. During drought and pre-famine events, the price of grain tends to increase because of its scarcity, and simultaneously the price of live animals decreases, because of the worsening health conditions. The outcome is that just when the needs of pastoralists are most acute and when the commercial off-take of cattle head runs higher, the pastoral terms of trade tend to worsen. Sandford and Habtu quote the case of the drought of 1984: cattle prices fell by 70% while grain prices rose by 250%. The chances for pastoralists of maximising the benefits from market dynamics is largely connected to their possibility of choosing timing and modes of recourse to markets. On the contrary, when the recourse to the market is dictated by outside forces, it is likely that pastoral trade margins will be eroded.

The decreased resilience of pastoralist production systems implies a decreased average in herd size. This involves an increased dependence on grains: it becomes more difficult to revert back to livestock products after climatic crises, because of the impracticability of the traditional coping and herd recovery options. Another element that could explain why the stronger pastoral terms of trade do not translate into benefits for pastoral communities is the ever increasing presence of brokers. As Cassini remarks, brokers “gain not only some tip for the intermediation service offered, but usually cheat the seller by making the price less than what the buyer is willing to pay. It is very difficult for a herder to avoid interference from the brokers because they are well organised and strongly defend their position.” Pastoralists are often obliged to undertake a long journey in order to reach the market, and they may be forced to sell at an imposed price if they do not wish to be forced to have a return trip with

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349 This argument only reflects the market prices of the products, without comprising the costs of production.
350 During a prolonged drought the milk production is reduced, therefore the sale of stock could become an obligation.
Their herds. The phenomenon is linked to the development of primary town markets, such as Moyale, and is reported to be more visible in Oromia than in the Somali Region\(^{353}\). The development of town markets is relevant to the concerns of the formalisation of livestock trade and the control of the international border with Kenya. Cassini estimates an increasing volume of trade through formal markets. In 2002, the monthly average value of live animals traded in both Moyale markets was around 7.5 million Birr, with a tax income officially collected by the market managers of not less than 100,000 Birr. The great development of formal markets is consistent with the pressure of the government to control livestock movements in the area (for tax imposition purposes). The most important market references in the area lie however in the comparatively richer Kenyan markets, mostly reached through informal marketing channels. The currency commonly used in a large area of the Southern Lowlands (especially in the eastern Somali area), is the Kenyan Shilling instead of the Ethiopian Birr. Kenyan markets offer higher prices for pastoral products (especially livestock) and offers wider possibilities for purchasing goods that are not available on Ethiopian markets.

Market development is linked to a wider transformation of the social pastoral institutions. When looking at long term changes in resource tenure regimes, the pastoral production system appears increasingly integrated with the market. Profit however only minimally favors pastoralists. Trade brokers are able to capture most of the possible margins when trade dynamics are positive, by trying to control through cartels the purchase price in town markets. Recourse to external markets can take place in a context of an improved bargaining process when the trade relation takes place within the boundaries of shared and accepted social institutions, without dispossessing local communities from the control of trade relations.

### 4.4 Water resources management

The access to water sources is crucial in order to determine the patterns of grazing, taking into consideration that the control of water sources was historically used as the prime leverage for the access to pastures. In Borana lowlands, the most important water resources are the wells, the ella, that are managed through a complex set of social regulations, which have been partially adopted by other social and ethnic groups. Water resources available in Moyale area can be classified as follows:

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\(^{353}\) Moyale town has a double administration, and a double set of services, including the livestock markets. The separation between the two market areas is done because of the widespread difidence by Somali people for camels owned by Borana, and by the need of completely segregated slaughtering arrangements, for religious reasons.
• **Tulla** - The deep traditional wells or *tulla*, are clustered in groups and scattered in Dire woreda. *Tullas* represent a key feature of the territory, and their excavation remounts to several centuries ago. They are periodically re-excavated and left in disuse for a period. New *tulla* have not been opened for a very long time. *Tulla* wells are located in clusters around historically known sites and are thus often identified as *tulla* complexes. *Tulla* wells have a ramp that allows cattle to reach a watering trough that is continually filled by a chain of people. They draw the water from the bottom of the well, to the rhythm of traditional songs (singing wells).

• **Adadi**: The shallow wells, smaller and less deep then the tullas, are sometimes called *adadi*. They are quite common wherever the depth of the water table allows their excavation by local means (mobilizing the clans’ resources).

• **Haro**: Ponds are locally known as *haro*. The ponds are excavated to collect water during the rainy season. They are extremely variable in size. Consequently the water presence can last anywhere from a few weeks or months from one rainy season to the next.

• **Birkas**: *Birkas* are underground reservoirs whose the water is collected by flooding in channels during the rain and usually are connected to a pump.

• **Roof or rock catchments**: some channels are built to collect the rain on the roof; or utilise the natural drain from the rock. The water is then stored in reservoirs and usually connected to a pump.

• **Rivers**: The rivers Dawa and Genale, as well as a much larger number of seasonal streams play an important role in the management of territory.

• **Modern boreholes and pumping systems**: The modern boreholes and pumping systems have been realised by development programs all over the territory. Some of these systems have been conceived in order to represent a watering source for livestock, and in those cases they had an impact on the use of the territory by the pastoral population. In other cases, the cleaner water of modern water systems was designed for human use, resulting in a positive impact on decreasing waterborne diseases. In a limited number of pilot cases, water schemes were devoted to small scale irrigation schemes. Water cisterns that were diffused in Borana during the early nineties by the ILCA-CARE project and predominantly owned by individuals belong to this category as well.

Borana developed a complex set of social institutions in order to regulate the creation and exploitation of water sources. The basic right associated to a well is the *konfi* (literally digging
This right is owned by someone belonging to the *gosa* that undertakes the digging of the well or who has inherited the *konfi* from the original population (*choqorsa*), entitling him to the re-excavation of an old well. In each area, a specific Borana clan is the *Choqorsa*\(^\text{354}\). This implies a clear understanding of who is entitled to specific rights in each particular area, but also limits the power of determining the use of the resource as arrangements about the resource use need to be discussed on an inter-clan basis. Each Borana is in principle entitled to water his cattle (and therefore graze) in every corner of Borana land.

The idea of excavating (or reopening) the well has to be approved by the clan through a process that implies the mobilisation of a network of traditional alliances. The *konfi* is permanent and does not expire, even if a well has been left unused for many years. In any moment it will be the responsibility of the descendants of the *konfi* to re-open it. The digging of the well is launched during a public ceremony\(^\text{355}\) where those who will benefit in future use of the resource are called to contribute to the excavation in accordance with precise rules.

When the well is excavated, the person detaining the *konfi* is considered the *abba ella* (the father of the well), and he will supervise the use of the water source. Ownership of the well does not translate into an absolute property right. There are clear obligations to allow other clans to access the well if they contributed to the excavation, and other social groups are also allowed access.

As confirmed during the work in the field, the original claim on the well (*konfi*) is separated from the contingent basic rights to the well in a given historical moment (the *abba ella*), although the claim can belong to the same person. The responsibility of the practical management of the water source is entrusted to the *abba herega* (father of the rotation) who is appointed by the clan. The access to the well is regulated by a rotation cycle of three days (as the cattle are watered every three days) and in positions of watering within a given day. The first day (*guyya*) is for the *abba ella* and his clan, while the other two are attributed to the clans who contributed to the digging. Other rules regulate the organisations of the positions (*bua*) of watering in each day of utilisation. For example, the provision of the last position in each day is left to foreigners or whoever needs watering regardless of specific rights gained during the excavation. The seasonal opening of the water point is subject to a common decision that is taken at *ardha* or *deeda* level. In order to preserve the balanced utilization of

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dry season resources, all the water sources available within a given area are opened simultaneously. The customary water management rights are therefore regulated in a balanced network that simultaneously ensures both the respect of individuals’ rights and the socially sustainable territorial system which, through access to water, regulates the access to the whole territory and to the natural grazing resources.

The *tulla* well complexes are used and re-excavated along wide historic cycles, influenced by climate (years of heavy rains decrease the acute need for water and thus led to the disuse of several wells) and by the wealth of clans who are supposed to excavate them. Some of the *tulla* wells which were re-excavated during the Nineties were abandoned for 130 years or more. In several cases, the complex of rules used for deep *tulla* wells are used for managing other sources of water as well. The excavation of a *tulla* well implies a very important organisational effort that guarantees for the Borana the availability of reliable water sources across their history, and is still operational.

The main difference between the Borana and the other ethnic groups is that resource tenure rights in the Borana are vested to all Borana, represented more specifically by those clans that are said to be the *Choqorsa*. The *tulla* wells presently controlled by the Garri, are apparently managed following similar arrangements, and a Garri *abba ella* can be usually identified in the vicinity of the water source.

Modern water sources are either privatised, or managed by a committee that is established as per the instructions of the agency that developed the water source. Modern water sources are mostly equipped with pumping systems that require maintenance. This implies some maintenance costs, therefore one of the main tasks of the water committee is to gather the money needed for running the pumping system, by collecting contributions, imposing water fees or selling the water. The installation of a pumping system implies a certain degree of technological dependency as well. In some cases, the technical means made available through development cooperation projects were used by the communities in order to rehabilitate or maintain traditional *ellas*, against the payment of a cash contribution.

The idea of selling water is alien to the Borana culture, where the contribution of those who can access the water is made in terms of manpower or material support (especially cattle for...

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358 According to Spinelli, who was performing a study on water management in Somali side in 2005 for the NGO COOPI, the access to water sources among Somali is responsibility of the *abba herega*. 
the upkeep of those who are working during the excavation phase). Payments in money form are increasingly present even if generally perceived as incongruous with the tradition. Among the Somali, the principle of water sale is considered less strange. In most of the Somali Region (even if not particularly in the area of reference of this research), it appears linked to the introduction of berkado, rain harvesting cisterns, that are owned by individuals. The introduction of berkado\textsuperscript{359} led to substantial changes in terms of social relations and livelihood organisation.

4.5 Soil characteristics and suitability for grazing

Pastoralism classifies the areas in terms of their un/suitability for grazing. The Borana use for this purpose the concept of chiisa, a qualitative indicator for specific conditions of grazing and soils, such as the presence of important minerals for livestock. Chiisa is related to the concept of potential grazing capacity, an indicator independent from current conditions. The second key concept is finna, linked to contingent conditions, for example, an infestation of biting ticks. The evaluation of positive and negative chiisa and finna determine the final decision about grazing\textsuperscript{360}.

As emerged during the work in the field, pastoral agro-ecological environment is defined by a variety of elements, recognised and appreciated by the pastoralists as a broad set of features concerning soil, vegetation, and common utilisation. Pastoral communities have a fine-tuned perception of the agro-ecosystem that is highly functional for them.

The more common landscape units in the southern lowlands are:

- **Wayam-red soil bushy vegetation (WRSBV)**: It varies in altitude from 1000 to 1250 mt a.s.l. Soils are derived from various volcanic land forms. The soil ranges from red sand to red clay. Soil patches are formed between vegetation thickets and along livestock trails. The bush cover may exceed 60%, mainly Acacia nilotica, A. busseri, A. Senegal, A. brevispica, Commiphora sp., Grewia sp. and Sanserviera sp. WRSBV has a rich grass cover, used for the dry season grazing.

- **Chaari-basement complex heterogeneous uplands (CBCHU)**. It varies in altitude from 1200 to 1300 mt a.s.l. Soil varies from red sandy clay to grey sand. The soil surface is spread with pebbles of granite. Bare soil forms discontinuous patches. Woody species

\textsuperscript{359} Waters-Bayer Ann in a working paper of 2003 reports that a massive introduction of rain harvesting cisterns was done during the fifties by the British administration in the Haud, leading to the creation of a birkad belt.

include *Commiphora* sp. and *Acacia bussei* which cover 5% to 40%. The distribution of bush cover is highly patchy with a rich under story grass that is used during the dry season and drought year for grazing.

- **Kobe-sandy-clay upland wooded grassland (KSCWG).** It varies in altitude from 1200 to 1300 mt a.s.l. The KSCWG are sandy-clay originating from sedimentary uplands. Soil varies from light grey to brown sandy-clay loam. The vegetation varies from wooded grassland to heterogeneous thickets. *Balanites orbicularis*, *Acacia drepanolobium* and *Grewia bicolor* are the common woody species with bush cover ranging from 5% to 25%. The KSCWG is mainly used for encampments and grazed during full-year by *warra*-herds.

- **Malbe-volcanic soils bush climax (MVSBC).** It varies in altitude from 590 to 900 mt a.s.l. Soil varies from grey to black, sometimes with lava rocks on the surface. The vegetation is dominated by *Acacia reficiens*, *A. paoli* and *A. nilotica* with annual grasses. Bush cover exceeds 50%. MVSBC is used for the wet season grazing by the *foora*-herd management.

- **Booji-lime stone grassland (BLSG).** It varies in altitude from 1000 to 1100 mt a.s.l. The BLSG landscape is found in the belt of Precambrian geological formations of the nine tulla well complexes in the Dire area. The soil is white lime. BLSG has a rich perennial grass cover that varies from 30-80%. Bush cover varies from low to bush climax. BLSG is preferred for livestock grazing during the dry season, but not by encampments.

- **Kooticha-bottom land-vertisol soils (KBLV).** It varies in altitude from 1000 to 1030 mt a.s.l. The KBLV soils are poorly drained black cracking clay. The landscape unit accounts for 2% of the lowlands of Borana. The woody vegetation is predominately *A. drepanolobium* and perennial grasses. KBLV is a key grazing resource, but is currently being converted into farms for growing crops.\(^{361}\)

The use of patches of landscape has changed over the last decades, as well as the composition of vegetal species. Pastoralists not only have a clear perception of the characteristics of each complex of features, but they are also aware of their potential in productive terms. The role played by each type of landscape in the pastoral livelihood and production system should not be evaluated only by looking at its quantitative relevance, but also in relation to its significance for the different phases of the pastoral production cycle. Resources that are not

used for large part of the year (or that are even unusable, as in the case of humid patches along the rivers that are usually infested by pests and ticks during the wet season) become the only way to overcome the dry season or a drought year. Consequently, the subtraction of a comparatively limited amount of the territory from the pastoral use may harm the viability of the system more than expected.

The pastoral territory can also be described in terms of wider eco-climatic zones. In the southern rangelands, this includes golbo which identifies arid lowlands, as well as badha, the humid zone, with highland vegetation. In badha soils are red volcanic with high fertility, and are easily eroded by water and wind. Species biodiversity is rich, land clearing and intensive farming have removed much of the natural forest, and fire remains the main threat. It is a key resource for cattle, used preferably during the dry year and drought, and with high grazing capacity.

The suitability/unsuitability is also linked to the type of herds. Camels and small herds are suited for bushy rangelands and adapted to a fairly mobile type of grazing, while cattle are based on grassland resources and relatively more suited to semi-nomadic livelihood. Small stocks tend to choose highly variable landscapes. This promoted the adoption of land use strategies in order to feed animals according to the pasture availability.

Only a very small percentage of the whole territory (around 3%) can be said to simultaneously suit the three different herd types. In spite of the limited overlapping of grazing areas suitable for cattle and camels, a competition may take place because of different land use strategies. In the Somali area, land use patterns follow a rotation that, compared to Borana cattle-based production system, reflect the longer distance covered by camels. The Somali, who are predominantly camel herders, are used to moving with a whole family group in search of good pastures, while the cattle-keeping Borana rotate the use of resources, leaving them to rest in the dry/wet season cycle. It happened that Somali groups occupied wet season rangelands, obstructing the return of Borana afterwards, generating historical conflicts.

In the Somali area during difficult times, livestock move closer to boreholes and shallow wells in the west and Dawa River in the north. When water-pasture distance becomes very far, camels have to spend the night on the way before watering the next day – this overnighting is known as guul-oon (the thirsty overnighting). The next night after the watering, animals overnight again on the way to the browse area, and this is known as guul

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biyad (overnighting after watering). Camels can also bring water to the homesteads’ weak and young animals.

The general land use patterns are highly differentiated. Some establishments of Somali communities were reported along the permanent rivers and, from the beginning of Nineties, in the area of Hudet, Wachile, El Leh and Moyale eastwards. The settling communities (especially around El Leh and El Gof) assumed a different land use pattern compared to Somali communities living on the eastern side. Around El Gof and El Leh, a production system similar to the Borana context was developed, based on the ownership of cattle and the articulation of the herd between forra and warra.

The viability of the whole system is also crucially linked to the rotation in use between the wet and dry season. Dry season pastures are concentrated around the most reliable water sources (especially for what the productive warra herd is concerned): the tulla complexes and the Dawa River. Some of these resources are traditionally reserved for drought year to minimize the losses, and make the recovery period easier. The periodical rest (coupled with other traditional rangeland management techniques such as the periodical bush burning) allows a high grazing pressure to be sustained without damage.

Before 1993, Borana populations could access water points located near El Leh and El Gof, that were used in the context of a camel based production system and thus of an ampler migratory movement towards the eastern side. At that time, El Leh and El Gof areas were considered fully integrated into the Dire area, one of the key dry season resources for cattle. Currently, the Borana have lost access to the area and pressure in increasing over remaining water resources (Erder, Web, etc)\textsuperscript{363}. Another factor endangering the environmental and socio-economic sustainability of water resources around El Leh/El Gof is the increasing deforestation and the agricultural exploitation that has been taking place since the Nineties up to the present.

The border area around El Leh/El Gof as well as some areas around Dawa river are simultaneously claimed as a key resource area by both the Garri and the Borana. The controversy over El Gof and El Leh is at the origin of the present day’s conflict between the Borana and the Garri. The conflict doesn’t appear to be completely settled up to now, and important grazing lands are left underutilised due to insecurity and conflict\textsuperscript{364}. The effect of


\textsuperscript{364} Riché Beatrice, Hachileka Excellent, Awuor Cynthia B., *Climate-related vulnerability and adaptive capacity in Ethiopia’s Borana and Somali*, International Institute for Sustainable Development, Save the Children, Care, USAID, ECHO, August 2009.
this is also a relative segregation of the seasonal migratory movements in such areas, with a more rigid separation between pastoral populations. Available resources are used differently in different areas, originating location-specific production sub-systems. The Borana cattle-based pastoral system is articulated in three subsystems:

- The Liban sub-system is based on transhumance movement between the Diid Liban pastures during wet season and the Chaari landscapes during dry season that can extend up to the Dawa River when the climatic conditions get closer to drought. Chaari is found along the Dawa River, mixed with pockets of Badha humid landscape, which however is unsuitable for wet season grazing because of the presence of flies and ticks.
- The Dire sub-system’s main feature is the presence of several eco-climatic zones and the complex of tulla wells. The land around the tulla wells represents the key dry season pastures, while the encampments are kept traditionally 10 to 15 kilometres away from tulla complexes.
- The Golbo sub-system is the driest sub-system and extends to Kenya. It is subject to frequent droughts and is the typical environment for foora herd management. Its key limiting factor is the paucity of dry season pastures. The grazing resources are therefore exploited all the year by quick and opportunistic movements and cattle try to make the best use of the pasture patches that follows highly erratic rains.

While in the Liben zone cattle tend to migrate all in once and to exploit the resources based in a more flexible and less constrained form. The distinction between dry and wet season pastures is particularly relevant in Dire area. The more static warra herds move to and from the encampments, located 10 to 15 kilometres away from tulla wells and the dry season pastures, consisting of about 100-150 km² around Tulla complex. The forra herds that graze beyond that limit react opportunistically to the patches of good grazing. The different parts of the territory are exploited on a rotational rather than continuous basis, following the infra-annual wet-dry cycle. A similar pattern is followed for what the wider climatic cycles are

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366 For Borana, the grazing patterns are defined within the ardha, the lowest traditional resource administration unit. The ardha is divided into ollas, which can comprise a variable number of households (from very few to dozens). More ardhas form a madda which name means ‘source of water’ that doesn't have special functions with regards to resources management, apart of traditional water sources.
concerned: the concentration of herds around the few remaining water points and well-off patches during the prolonged droughts (accompanied by a contraction in herd size) leaves wider parts of the territory to regenerate in light of the subsequent expansionary cycle.

In Golbo (the southern part, along the borderline between Ethiopia and Kenya) the difference between dry and wet season pastures is less rigid. The overall poorer resources do not enjoy systematic periodical rest and are therefore potentially subject to more environmental degradation. Drought in Golbo strikes harder than in other production systems, with higher losses and longer recovery times.

The eastern part of the southern lowlands, is currently administered by the Region 5 and is mostly inhabited by the Garri is known as Wayamo. Besides the prevailing red soils, patches of black and white soils are also found scattered in the territory, which consists mostly of lowland plains, with occasional hills and scattered grassy plains throughout the territory. The bushy landscapes are particularly suited for camels. More potential agro-ecological resources are concentrated near Moyale, in pockets along the Dawa and Genale rives and mostly around Filtu. Soils are black to reddish, and prevalent vegetal population is grassland, shrubs, bush and forests. In these areas agriculture becomes a more viable option, and irrigated agriculture in some sections of the land bordering the Dawa and Genale rivers has developed\(^{367}\). The areas around perennial or semi-perennial streams, such as Laga Sure, have played a role as fall-back areas in the past, and have more recently been encroached on by agricultural activities.

Goomole, Wayama, and part of the Malbe and Golbo areas rely on the permanent water resources located in Dire for dry season and drought periods. The pastures of Wayama are among the most productive, and cattle coming from that area are particularly valued. Due to the vegetal species composition, that area is among the very few suitable to both grazing and browsing livestock. Forest resources are also present in different sites of the southern lowlands, and play a very important role in pastoral production systems, as fall-back areas and as reserves for wood\(^{368}\).

Permanent water sources are relatively scarce. They are located at Ararsame (hand dug wells), El Leh (deep and shallow wells), El Gof (borehole that supplies Moyale town, shallow and deep hand-dug wells), Kadaduma (shallow wells), Hudet (shallow wells) and the Dawa River.

\(^{367}\) Riché Beatrice, Hachileka Excellent, Awuor Cynthia B., *Climate-related vulnerability and adaptive capacity in Ethiopia's Borana and Somali*, International Institute for Sustainable Development, Save the Children, Care, USAID, ECHO, August 2009.

Towards Filtu, the water tables are very deep, because of particular geologic formation: few ponds and boreholes are the sole water resources available.

In 2001, Save the Children UK described the part of the territory administered by the Somali NRS in terms of food security zones, defined on the basis of groups of households which obtain their food and cash by broadly similar combinations of means.\textsuperscript{369} Reported within a territorial perspective, the outcome consists of a broad picture capturing main agro-ecological features leading to the definition of the prevailing production systems:

- The Moyale Wayamo production system is located south and west of the Dawa River. It is in an area with a very arid environment, with 400 mm average rainfall in two rainy seasons, slightly higher near the Galgalu and Dawa River, and to the north, along the boundaries with the Oromia Region. Camels dominate, with little goat\textsuperscript{370} herds, useful for exploiting the diversified landscapes, and residual cattle. These are more common on the western side, where the deep tulla wells of El Gof and El Leh can be exploited. In the latter area, market access is easier but there is also conflict due to competition over water and grazing resources.

- The Dolow-Filtu production system is found between the Dawa and Ganale rivers, and is mostly based on camel rearing and nomadism, though some families have adopted a semi-nomadic attitude, by leaving the women and the children in a semi-settled location where they can come together during the wet season. The fall-back zones during drought years are those along the Dawa and the Genale, including the possibility of relying on the support of relatives who have settled there.

- The Liban agropastoral production system is developing increasingly in the existing pockets of good agro-ecological resources, and is becoming the most common livelihood system in Filtu Woreda. It is also found near Moyale and along the Dawa and Ganale rivers. Agro-ecological conditions are at the limits of allowing maize growth and enough for cattle rearing. However, the main threat to this production system is conflict with other pastoralists (namely the Borana), as the lands are traditionally seen by the latter as a key resource for cattle dry season grazing. The availability of all-weather roads has probably represented an incentive to develop a more market oriented attitude in production, even if potentially more risky (all-weather roads are also a channel for timely availability of relief aid when needed).

\textsuperscript{369} Save the Children (UK) baseline studies, Appendix I “The Household Economy Approach”. The approach aims to provide a detailed but quick picture of the factors constraining household economy during ‘normal’ years, as well as their reaction to climatic shocks, and employs many participatory tools. A typical Household economy baseline assessment includes the following steps: 1 - Identifying Food Economy Areas (FEA)s and populations; 2 - Identifying Wealth Groups and a ‘reference’ year; 3 - Describing Household access to food and cash income; 4 - Understanding links to markets; 5 - Clarifying risk-minimising strategies and potential coping strategies.

\textsuperscript{370} Shoats: sheep+goats
- The Dawa/Ganale riverine production system, maize and vegetables are grown by pastoralists who settled in the space of one generation and in most cases passed through a stage of share cropping\textsuperscript{371} where they cultivated land, sharing the products with irrigation pump owners. El Nino rains in 1997 allowed many families to gain an independent farming status, by getting a production surplus that allowed them to invest and avoid the pump owners’ intervention during the subsequent agricultural season.

4.6 Herd management, seasonality and resource use cycles

Pastures are used under a rotational regime, driven by the seasons. Grazing is organised by fine tuning the composition of the sub-herds. The basic distinction in Borana cattle-based pastoralism is between forra herds and warra herds. Forra herds are those composed by aged males and dry females, while warra herds are composed by calves and lactating females\textsuperscript{372}. A similar distinction is operated also by Somali camel herders.

The general pattern of consumption sees pastoralists consuming milk and milk products. The herd has to be big enough to provide milk to cover the nutritional needs of the family, without endangering the reproduction of the herd itself. Herd size should be as large as possible, with a high proportion of lactating females; and the herd size should be adjusted as quickly as possible to changed climatic conditions. These two principles imply the understanding of pastoral production systems in terms of de stocking-restocking cycles. Different and interweaving cycles exist: infra-annually, following the rainy seasons; and across years with documented cycles of contraction-expansion that span over a period of thirty years or more. The regularity of the cycle may be interfered with clusters of particularly dry years that accelerate the downfall of the herd size or slow down the recovery cycle. Sandford and Habtu give an assessment of the time needed for pastoralists to recover after a drought cycle that implies the loss of a given proportion of the livestock\textsuperscript{373}. Their calculation is reported in the following table.

\textsuperscript{371} The burjuwasi system comes from Somalia and consists in a tripartite agreement between the farmer, the land owner who gives the land to a pump owner in exchange for water. A part of the land is then cultivated by the land owner’s family, while for the rest a share-cropper, the burjuwasi, is recruited, who will cultivate, handing over a half of the products to the pump owner.


Table 2. Time needed for pastoralists to recover livestock after a drought cycle

<table>
<thead>
<tr>
<th>Herd surviving as proportion of pre-drought herd</th>
<th>20%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>24 yrs</td>
<td>17 yrs</td>
<td>10 yrs</td>
<td>8 yrs</td>
<td>4 yrs</td>
</tr>
<tr>
<td>Sheep</td>
<td>10 yrs</td>
<td>6 yrs</td>
<td>4 yrs</td>
<td>3 yrs</td>
<td>1 yr</td>
</tr>
<tr>
<td>Goats</td>
<td>6 yrs</td>
<td>4 yrs</td>
<td>3 yrs</td>
<td>2 yrs</td>
<td>1 yr</td>
</tr>
<tr>
<td>Camels</td>
<td>28 yrs</td>
<td>16 yrs</td>
<td>12 yrs</td>
<td>9 yrs</td>
<td>4 yrs</td>
</tr>
</tbody>
</table>

A study from IFAD points out some limitations of this estimate, because it is based only on biological parameters, but it does not take into account the social impact of livestock loss and the existence of socially constructed coping strategies. If these parameters were taken into account, the recovery periods may be as short as one fourth of the times indicated in this table\textsuperscript{374}.

Some other endogenous and exogenous factors play a role in determining the attitude of pastoralists in their herd management strategies, beside the climate. Firstly, the contraction-expansion cycle connotes a cyclically intensive use of a variable resource base. In normal conditions, the low-peak in herd size that follows a drought implies the reduction of the territory exploited, and the recovery phase allows for a progressive re-occupation of larger areas (that have meanwhile enjoyed a fallow period). These long-term compensation chambers became more difficult because of constraints in pastoral mobility. Moreover the water sources represent the key constraint factor in the use of the territorial resources, because longer cycles are also linked to the capacity of pastoralists to expand available sources of water.

The fluctuation of the herd size is basically governed by the climatic conditions in the short term, while other factors have their effect in the medium or long term, when pastoral livelihood is strictly linked to the availability of the resources needed during the most critical moments. During the low-peak, the objective is to minimise the loss of livestock, as the remaining stock will be the base for the recovery phase. The recovery phase should be as quick as possible in order to minimise the likelihood that a further drought intervenes before recovery is completed. During dry periods, pastoralists are particularly concerned with minimising the loss of an excessive number of the most productive stock and to safeguard its core, namely the lactating and fertile females, selected males, and young animals. Therefore pastoralists tend to identify food reserves for this kind of stock (kalloos), to supplement food

\textsuperscript{374} IFAD, Pastoralists risk management, the experience of IFAD. Livestock and rangeland knowledge base, Rome 2002.
availability by lopping evergreen tree and to provide hay whenever possible. They also tend to limit their own intake of milk (diluting it with water), by differentiating their sources of income (opportunistic agriculture, coal making, seasonal migration).

However, the possibility of effectively coping with seasonal and inter-annual climatic fluctuations is linked to mobility and to the availability of key fall-back resources that are typically quite limited in quantitative terms, even if they play a crucial role in determining the long term resilience of the pastoral production system. A purely quantitative approach of the resources subtracted from pastoral use may be misleading, as it risks misunderstanding their importance in terms of their fall-back function and also as resources needed to relieve the lowest peaks of the cycle or even to ease the recovery phase. The importance of the fallback resources becomes evident only within a wider time-span that captures the infra-annual seasonality cycles as well as longer term cyclical variations. The safeguard of what may appear as unused resources plays a critical role for the survival of the system as a whole.

4.7 Pastoral systems under change

4.7.1 General characteristics of the pastoral systems change

Pallottino states that pastoral systems of southern lowlands are undergoing a profound revision, in particular:

- A crisis in the livelihood and in the production systems. Outsiders, as well as the pastoralists themselves, see pure pastoral livelihood as increasingly difficult. Traditional production systems seem to be increasingly incapable of supplying the basis for subsistence, and the cyclical need for relief aid emerges as an unavoidable feature of the current situation. The vulnerability of pastoral production and livelihood systems, once known for their resilience, is now increasingly considered an unavoidable structural feature.

- An ecological crisis with a natural environment that is under the pressure of an increasing human and animal population. Environmental degradation is an outcome of the rupture of the traditional balance between human presence and a fragile resource

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base. The repeated climatic crises are at once a cause and an effect of an increasingly vulnerable livelihood.

- A social and institutional crisis, with traditional institutions that face increased challenges, and seem not to be able to ensure a minimal control on the impending transformation. The relation between customary and modern institution is often more competitive than collaborative. The diffusion of alcohol abuse and khat chewing is acknowledged as the sign of a lowering moral standard of the communities, while the self-help coping strategies based on mutual help through community ties are increasingly seen as ineffective.

While in the past the most typical elements of the pastoral livelihood (nomadism, extensive livestock rearing) were considered as factors that would have hindered any effort needed to reverse the negative trend, current thinking seems to find elsewhere the key constraints for the development of pastoral areas. A possible strategy for expanding the productivity is diversifying into non-livestock activities. This would however bring improvements to the pastoral livelihood only if the pastoral resource base is maintained. Otherwise the improved productivity obtained through alternative activities (such as agriculture) would be paid with the concrete risk of endangering the viability of the system as a whole.\textsuperscript{378}

Frequent drought is often said to undermine pastoral systems. However, while the drought is the major climatic challenge that these communities have to face, it is not an exceptional event. It is one of the features of the system, to which human populations have adjusted, elaborating coping strategies that allowed them to survive along centuries. The fact that drought becomes an overall threat to pastoral livelihood may be due either to the increased frequency of the climatic crises or to other factors undermining the coping strategies. The common understanding of development constraints in pastoral areas of southern Ethiopia is well summarised by the World Bank (2001): "In the lowlands of Ethiopia, pastoralism is the mode of production best suited to an arid and unstable environment, and livestock sector development has the potential to improve the welfare of many poor rural families, as well as contribute significantly to national income. However, population pressure and the increasing frequency of droughts has exceeded the ability of traditional strategies to cope, resulting in widespread animal deaths, food insecurity, and conflict."\textsuperscript{379}


This definition states that the population pressure, together with exogenous factors such as the increasing frequency and depth of climatic crises, is at the root of pastoral livelihood crisis, via the progressive erosion of the effectiveness of traditional coping strategies. This definition doesn’t take into consideration the political processes previously described that contributed to the population pressure, as the promotion of migrations and settlement.

4.7.2 Ecological trends and encroachment
The constraints to pastoral development come from both the decreased availability of grazing resources in quantitative terms (due to the subtraction of key resources and to the limitations to long range transhumance), and a qualitative transformation of available pastures. The pastures of the Borana Plateau were known as among the best in the Great Horn of Africa, suited for grazing of the cows, due to the ecological characteristics of the prevailing plant species. The system was recognized to be in equilibrium: the vegetative cover and the human and animal pressure were in reciprocal control, but the high pressure made decrease the vegetative soil cover, that attenuated its carrying capacity. The dynamics of human and livestock population, as well as vegetative soil cover, in non equilibrated systems depend also on exogenous factors, such as rains or socio-political elements related to the access to resources.

The encroachment of woody plant species in some portions of the studied area (as Kagofa) and the transformation of fertile grassland into impenetrable bush are cause of a wide concern among pastoral communities. The phenomenon is not new, but its overall impact seems to be perceived as more negative during the last 20 years. Bush encroachment is considered one of the most important elements threatening the resource base of the pastoral communities in southern lowlands.

It is difficult to quantify the qualitative transformation of the vegetal cover. According to the World Bank (2003), over 40% of the southern lowlands in general and 83% of former native pastures in Borana valley have been invaded by noxious plant species. The transition from

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381 Ibid.
grassland to bush becomes critical when the bush cover exceeds the 30% of the vegetation cover, because this process can lead to the disappearing of palatable herbaceous species\textsuperscript{383}. The available sources (including oral local historians) report that the process of bush encroachment took place in the last 80 years or so\textsuperscript{384}. The majority of commentators (including those from local communities) agree that a key role in accelerating this trend was played by the ban of the bush fire. The practice was banned by the Ethiopian government in 1975, in favour of productive rangelands practices.

Traditional range management techniques included the periodical fire of pastures to regenerate the prevalence of herbaceous species. The grazing in the first year of growth is more nutritious than later grazing, thus adding specific qualities to the pastures\textsuperscript{385}. This practice is linked also to labour saving objectives within a context of land abundance. The side effect is the risk of having bush fire running out of control, endangering vast portions of the territory. More recently, the virtues of traditional rangelands management have been recognized: bush fire represents a way of regenerating the vegetative cover of the rangelands, by allowing an easier predominance of herbaceous species rather than the unpalatable bushy species, as well as their nutritional value. Periodical burning of pastures has also advantages for controlling ticks and other pests.

Grazing is also part of the maintenance of the agro-ecosystem: abandoned landscapes tend to be invaded by the bush, which may therefore be the outcome of under-grazing. An example of this can be Golbo area of northern Kenya, where bush encroachment occurred around forty years ago, when the use of grazing lands by the pastoralists was reduced due to insecurity factors\textsuperscript{386}. Adugna Fekadu, in his MA Thesis "Inter-ethnic relation between the Oromo and Somali: the case of Borana, Digodia and Marehan" Social Anthropology, Addis Ababa 2004, mentions the case of the resource border between Borana and Digodia. The territory remained under-used because of conflicts from 1997 to 2002 and was invaded by the bush. The long-term adaptation of pastoral communities to this trend includes the differentiation of herds, and the adoption of browsing animals such as camels and goats, that can exploit the bushy vegetal species.

\textsuperscript{383} Oba G., Where the bulls fight, it is the grass that suffers: impact of border administration on drought coping strategies of the Obbu Booran during the 20th Century, Journal of Oromo Studies, Vol. 7, No. 1, 2000.
\textsuperscript{384} According to Oba (1998) there is little evidence of this phenomenon from the oral sources referring to the period before the gada of Maad’a Galma (1944-52).
\textsuperscript{385} Oba G., Where the bulls fight, it is the grass that suffers: impact of border administration on drought coping strategies of the Obbu Booran during the 20th Century, Journal of Oromo Studies, Vol. 7, No. 1, 2000.
\textsuperscript{386} Ibid.
Especially in areas with a consistent increment of settled population, as El Leh on the Somali side, it is evident a relevant expansion of degraded land to the detriment of woodland. This is exploited as source of energy, source of animal feed and wood for construction. This phenomenon is depleting resources and degrading the environment, exposing the area even to desertification. The settlement process challenged the traditional management of natural resources, as pastures, feed and wood, and increased the susceptibility of the area for land degradation.  

4.7.3 Land use and agriculture

The patterns of land use have changed during the last decades, from a situation where the pastoralism was the sole mode of production in the area to a situation where also agriculture started to utilise the land, determining important changes in the use of the territory. The development of systematic agricultural activities can be referred to the arrival of the soldiers of the Emperor Menelik (the neftegna, between the end of the nineteenth and the beginning of the twentieth century), to whom plots of land suitable for agriculture were assigned; and later to the settlement of other Oromo groups coming from the highlands, mainly Burji and Konso (collectively referred as Sidama). Those peoples started to undertake agricultural activities in the most fertile patches of southern rangelands. Even Borana communities started cropping, especially those living in the humid badha of Liban. Those were initially considered inferior by the other clans, as the production system relying on agriculture involved a sedentary style of life. However, the grains produced by those communities played a crucial role in relieving the effects of the drought, that stroke the southern rangelands between 1960 and 1962. In the period following the drought of 1974, most destitute pastoral families, who lost their stock, started to cultivate, receiving support from the Government. Agriculture was widely promoted as a part of government policies, including the adoption of rural extension packages, tailored on highlands agriculture. Agriculture got therefore widespread from Goomole and Arero to all Borana land, except those areas that are too dry for farming. In Dire, cultivations started in the area of Mega and Hidilola, in the bottom land along the seasonal rivers, humid enough to cultivate banana, coffee and khat. This has determined a long-term transformation of the production systems.

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388 The khat or chat is a flowering plant native to the Horn of Africa and the Arabian Peninsula. Amongst communities from these areas, khat chewing has a long history as a social custom dating back thousands of
and land use patterns, primarily concentrated on the higher potential lands that once served as fall-back areas for pastoralists during the prolonged dry season\(^{389}\). Farmers cultivating around Mega and Hidilola are actually newcomers from Ethiopian highlands, and the same can be said for some other cases found in the lowlands\(^{390}\). Agriculture is however also increasingly popular between Borana. Nowadays only a minority of pastoralists rely completely on pastoral products: the large majority of them associate some type of agricultural activity to livestock herding.

However, the southern rangelands are generally not suitable for farming, if not in a complementary sense, as also communities' practices reveal. Cultivated areas give highly variable outputs and fluctuating year after year. In most of the southern rangelands, harvest fail from half to two thirds, making cropping a very risky activity; in some cases it is reported a shift from maize towards short maturing crop (haricot beans, barley and teff) in order to make a better use of scarce rains\(^{391}\). Since the first systematic studies on southern lowlands, the general unsuitability of the area for agricultural activity was clearly acknowledged. Cropping was considered as an exception, immediately after drought year and during recovery phase, and basically intended to lessen the pressure for food from the livestock\(^{392}\).

Also in recent times, self produced agricultural products do not meet the requirements of the families and need to be complemented by other purchased grains, as the field research revealed.

In Borana case, when farming has been adopted as coping strategy to food insecurity, the decision to devote land to agriculture (in detriment to those reserved for grazing) was authorized by the traditional institutions at ardha level, and its extent was clearly delimited\(^{393}\).

It is estimated that at the end of nineteens, from 2 to 3,4% of the southern lowlands were opened to agriculture.

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under cultivation and this figure continued to grow in the following years. This figure is concentrated in the humid and fertile bottom valleys that were grazed as dry season or drought pasture. Their unavailability for pastoral use is a factor of great instability for the system as a whole. Nowadays, pastoralists tend to see the expansion of agriculture as one of the main threats and the Borana consider it the main threat to their production and livelihood system.

Cropping is trying to expand in Somali area too, even if the humid areas are much less than in Borana lands and the rainy seasons are generally more reduced. Farming was practised by the Garri since the first period of their settlement in the area. At the beginning however they were planting, but then leaving for migrations with camels. At their return they harvested whatever they found, depending on climatic conditions. In some exceptional cases, cultivation is becoming more organised as per the field observation: for example households in Dokisu are reported to cultivate a field of 1 hectare average.

4.7.4 Property and use rights: from the common use to the kaloo

The management of grazing resources is the object of a complex of norms and regulations, primarily based on the Borana customary arrangements. The other ethnic groups that are present in the area (Gabbra, Garri and other Somali groups) are somehow referring to it. Resource tenure rights in Borana are vested to all Borana, but more specifically with those clans that are said to be the Choqorsa, having occupied the area as early as five hundred years ago. In each area, a specific Borana clan is the Choqorsa. The traditional basic arrangement in the area is the common property that implies the non-exclusion of users. All Borana enjoy the right of using pastures all over Borana land and this right was customarily extended to other pastoralist groups living in the same areas. The access to grazing resources in a specific location is kept up primarily through the regulation of the access to water resources. It assumes the function of “door key” for pastures and the whole system.

The Kalloo is a more recent development in the use of grazing resources, introduced in the Sixties from the experience of neighbouring Jamjamtu (Gudji) Oromo from the north, from

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where the name is borrowed as well\textsuperscript{397}. Kalloo are grazing areas of different wideness that are fenced-off, used as a grazing reserve and fodder bank, where the access is limited to the components of the ollas that are cooperating to manage them. This sort of arrangement is an evolution of the custom, traditionally adopted by the Borana, to reserve a space for calf grazing (seera yaabiye), where all other types of herd are excluded.

The Gumi Gayo officially approved the development of the kalloos in 1988, thus showing a degree of flexibility of customary institutions in taking into consideration the elements of a changed situation. Examples of management of kalloo indicate that it may represent a viable way to preserve the rangeland and recovering the quality of degraded pastures, by adopting a graze/rest pattern whereby calves are allowed in only during dry season. Some sources support the idea that kalloo represent a subtraction of pastoral grazing resources, as agriculture does\textsuperscript{398}. It is also important to analyse how Kalloo resources are decided and managed. The property/users rights related to kalloo assume different modalities: from a purely private ownership and management, which would contradict the basic principles of the customary regulations and may contribute to disrupt the traditional range management institutions by increasing conflict on scarce resources; to a way of allowing the gradual intensification of the pastoral production system and the evolution of natural resources regimes within the framework of customary institutions, avoiding the alienation of key resources for pastoral livelihood.

By emulation, other plots of lands in the immediate vicinity are sometimes enclosed, extending the surface subtracted to community management. Usually this sort of alienation takes place at the expenses of the most potential land resources, and thanks to a personal relationship with administrative officers.

The use of kalloo seems to have spread in the Somali area as well. According to recent field research\textsuperscript{399}, it may indicate privatised enclosures used by individual owners as grazing reserves or as agricultural plots. Kalloos are usually located in the areas with higher potential. The areas to be enclosed are reported in most cases as demarcated after decisions taken by the elders, sometimes in cooperation with the local administrative authorities that thus receive a small annual fee. In the areas inhabited by Somali groups, there are apparently no signs of communally managed reserves, which may indicate that the phenomenon of enclosure is more

\textsuperscript{397} Helland J., Development issues and challenges for the future in Borana, Norwegian Church Aid, Ethiopia, 1997.


\textsuperscript{399} Antonio Favero, University of Florence, field notes April 2005.
consistently leading to privatised arrangements and to the erosion of communal grazing areas. The transformation of the property rights in rangeland is a complementary phenomenon of changes in the administration of water rights, in particular the increased importance of money-based transactions concerning water use.

Another phenomenon observed in the southern lowlands is the privatisation of land for cultivation, by the administrative authorities to private individuals or groups. Cases of acquisition of land for cropping, used then for creating privatised grazing reserves, are reported\textsuperscript{400}. The development of farming is sometimes seen as the root cause of the introduction of the idea of private property, a concept that is not familiar to the traditional customary arrangements.

4.8 The effect of external intervention on pastoral resources and management

4.8.1 The emergency relief

Large-scale emergency relief was introduced in the southern lowlands during the drought of 1974 (and still it is continuing): the supply of massive quantity of grain was considered the only possibility to save the lives of drought-stricken pastoralists\textsuperscript{401}. The distribution of grains was at first done on free basis, and later following a food for work method. The idea was to avoid pastoralists waste their assets and link the relief phase to the subsequent development. Beside the immediate relief provided by the availability of grains, this intervention had also the side-effect of decreasing the price of grains in the market, thus favouring the so called net purchasers (pastoralists, urban population), but not the local producers.

The use of emergency relief appears to have some other negative effects, especially on the long run: after almost forty years from the beginning of relief activities, dependency of the local communities on relief is increased. The distribution of relief grains through official channels has spread among aid workers the idea that pastoralists are basically unable to cope by themselves. It has also contributed to weaken the traditional institutions in several respects, overlooking the social mechanisms that may have helped in administering relief aid. Repeated


\textsuperscript{401} Oba G., Assessment of indigenous range management knowledge of the Borana pastoralists of Southern Ethiopia, Borana lowland pastoral development program/GTZ Consultancy paper Negelle/Borana, May 1998.
relief presence has also contributed to decrease the strength of social obligation, weakening the possibility of a collective reaction to crisis.\textsuperscript{402}

Food aid was mostly implemented basing it on a short-term perspective which did not help linking it to further development activities. The constant supply has induced the adjustment of coping strategies of local communities. Partoralists noticed that, when drought comes, water and food are regularly distributed and the points of distribution are in the most populated villages. This affected decisions concerning production, but also the sites where to locate the permanent or semi-permanent settlements. Petre and Nega (2002) argue that this expectation visibly induced people to settle in some places without water supply around all the year, as the case of Sororo and Jarra villages. The same consideration may apply to many other Somali locations and Oromia ones, such as the village of Dikicha, depending completely on the distribution of relief aid.\textsuperscript{403}

The management of humanitarian crises has often been functional to political objectives, such as in the case described by Khalif and Dornbos\textsuperscript{404}. They argue that the humanitarian crisis in Somali Region in 2000 was “choreographed by the EPRDF regime”, in order to maximise the relief and minimise the interference of outside actors. As Brunel (2000) noted, the government can pursue its political objectives by showing the crisis on the media in a way that puts on the international community the guilt of late and insufficient relief, while at the same time pursuing the strategy for controlling an historically rebel region with uninterrupted military effort.\textsuperscript{405}

\subsection*{4.8.2 Water resources development}

Water development is considered one of the main strategies to improve the livelihood in pastoral areas, because water resources are the key to access grazing areas. Among Borana, the regulation of watering rights ensures an appropriate articulation of the use of pastures for different types of herds, and in different seasonal times. The re-opening of a source of water,

\begin{footnotesize}
\begin{enumerate}
\item[]\textsuperscript{403} Ibid.
\item[]\textsuperscript{405} Brunel S., \textit{Ethiopie: une famine exposée, l'Ogagen}, in Géopolitique de la faim - Edition 2001, Paris, Presses Universitaires de France. See also the concept of ‘exposed famine’, used by Brunel (2000) in order to describe the Ogaden case before the year 2000: a humanitarian catastrophe that takes place in a peripheral region where the Federal Government try to increase its political control. Also in that case, the situation is “choreographed” by local authorities in order to gain bargaining power vis-à-vis the international donors.
\end{enumerate}
\end{footnotesize}
the decision about its exploitation in a given moment and the watering rights are matter of detailed social institutions, which involve kinship, cooperation, negotiation. Moreover in the traditional system, the access to a water point is basically linked to the contribution given at the moment of its construction: the fee method adopted by the majority of modern water pumping systems introduced the principle of water as a commodity that can be traded. Therefore watering rights become more linked to the money than earlier on. Previous arrangements were rather based on the availability of manpower in order to concretely contribute to the excavation and to the exploitation of the water source, and mostly on herd. Cattle were the primary contribution requested to acquire permanent watering rights. The size of herds was limited at no more than one bua and the watering capacity of one bua did not exceed 150-200 cattle.

Water development projects enter in interaction with traditional water sources and during the rehabilitation of the water system; they also promoted the idea of paying for water, in order to guarantee the future maintenance and sustainability of the well/pump. This idea could contribute to disrupt the customary arrangements for water sources exploitation. Moreover even if the decision of rehabilitating the water sources pass through consultations with both administrative and traditional leaders, the number of systems to be rehabilitated is established by the project document, that is signed between the donor and the implementing organization. This could cause the lowering of the water table in the long time as well as an increase of conflict in communities where a water scheme has been implemented. This is, most probably, because the new asset was introduced by an initiative from outside. Another consequence could be also the change in the directions of migratory pathways.

Moreover unrestricted water sources like ponds invite settlement, particularly when they are large enough to last for the whole dry season. The case of ponds realised in Did Hara had the effect to increase the number of settlement by 200% between 1974 and 1990 and attracted also the migratory movements with the livestock. This accelerated immigration produced a worsening of the livelihood conditions and nowadays Did Hara communities continue to identify lack of water among their biggest problems. In other cases however an appropriate development of water resources may help the balanced exploitation of the pastures, especially where large grazing areas remain unexploited during dry season. Although water is the major

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limiting factor in the use of the rangelands, increased availability for human consumption can also imply a significant improvement of livelihood conditions as well, mainly during peaks of human diseases as cholera and acute water diarrhoea.

4.8.3 Resources tenure
The tenure regime of the natural resources in southern lowlands underwent deep changes that, since the end of nineteenth century, were provoked by a number of factors. These are mainly the colonisation policies undertaken by the imperial regime and the consequent demographic dynamics. The rangelands management has always been a field of debate, to optimise the main productive resource of the pastoral environment, since the imperial age. The developmental idea was that the sustainability of the pastoral system was ensured only by maximising the productivity of the livestock commodity chain and by making the best use of the available resources408. Private property of pastoral resources was deemed as better suited to ensure land security and a greater productivity: a higher willingness to invest is attributed to those producers who gained private possession rights on their plots. The effect of privatisation was however that of segregating vital dry season and drought resources away from pastoral use. Privatisation was also widely promoted in the context of ranch development409. As Bassi points out “Ranches were introduced with the 1968 Land Act for dividing trust land into pieces of land communally owned by groups of individuals. The aim of the Group Ranches Programme was to convert milk-oriented traditional pastoralism into beef producing ranching. The division of land was mainly made according to clan and subsection territories, but modern management was introduced, consisting in an elected committee of ten, led by a chairman, a secretary and a treasurer. Mismanagement, rigid boundaries and small size for sustainable use led to the failure of the programme and to the recent prevalent tendency to subdivide them into individual holdings”410.
Ranches were introduced in four locations of Borana rangelands: Diid Xuyyura, Sarite (17.000 ha), Damballa Wachu (12,000) and Walensu (25,000). Besides interfering with traditional land use patterns, a ranching production mode implies key differences with the

409 IFAD, Pastoralists risk management, the experience of IFAD. Livestock and rangeland knowledge base, Rome 2002.
production strategies adopted by the pastoralists. These tend to sell off old and unproductive animals, replacing them as soon as possible by using the money obtained with the sale, in order to keep a herd composition largely dominated by productive females\textsuperscript{411}. Intensive livestock production is based on the sale of immature cattle, in order to minimize the breeding period and intervals. In setting up ranches, mostly through the big pastoral development projects operating in the area, the plan was to hand over the provision of services to Service Cooperatives (SC), once the initial phase had come to an end. The enclosing of grazing land was however mostly unwelcome by local communities and, during the power-vacuum period that coincided with the downfall of Derg in 1991, existing ranches were extensively looted, their infrastructures raided, and all the fencing destroyed\textsuperscript{412}.

The ranching concept is nowadays seen as the legacy of an obsolete understanding of pastoral issues, but the implications of the older policies are still far reaching. Prime pastures from former ranching areas appeared to be permanently removed from pastoralists’ control. During the following phases, the privatisation policies excluded pastoralists and communities’ representatives from previous ranching areas, and from those handed over to private investors, mainly rich businessmen coming from outside\textsuperscript{413}. This initiative was taken to initiate a more functional land development process.

Privatisation of resources is still promoted as a base for improved production and local authorities are starting to compromise a sort of private property rights for those who engage in undertaking agricultural development in the area. For example a portion of land may be allocated to a person for a certain number of years on an exclusive basis, but he cannot sell it to other people. Lister (2004) claims that the policy of Oromia region, intended to favour external investment, is the root of many private enclosures found in the area. Similar concerns are raised about the possible privatisation of other key resources, such as the salt licks of the four craters of Dire woreda, where private investors may acquire exclusive property rights on resources customarily used by the pastoralists.

\textsuperscript{411} Obi G., Assessment of indigenous range management knowledge of the Borana pastoralists of Southern Ethiopia, Borana lowland pastoral development program/GTZ Consultancy paper Negelle/Borana, May 1998. According to Kamara (2003) the ranches were only three.

\textsuperscript{412} Ibid.

\textsuperscript{413} Boku (2000) in his MA Thesis "Individualising the commons: Changing resource tenure among Boorana Oromo of southern Ethiopia" explains in details the implications of the eviction of pastoral communities from ranching areas, in economic, social and ritual terms.
4.8.4 The promotion of agriculture

Agriculture is usually a risky undertaking in arid and semi-arid areas, as the case of the southern lowlands of Ethiopia. The suitability of the southern lowlands for agriculture is known as being low, as already recognised by Wilding (1985)\textsuperscript{414}. In spite of this, the intensification of agriculture has often seen as the possible development of what was usually considered an extensive, low-productivity nomadic herding. This didn’t consider that pastoralism plays a role in the sustainability of lowlands productive system. Agriculture has been practised for generations also by pastoralists, but in terms of time-bound and opportunistic recourse during post-shock and recovery phase, not in a long-term period.

Agriculture has been propagated through different channels. The large demographic inflow of the early nineties has implied a powerful boost on agricultural activities. Agriculture was seen as the quickest way to put returnees in conditions of self-subsistence. This process, as Farah points out, encouraged pastoral populations to develop farming habits even if they were not particularly keen on that\textsuperscript{415}. The long standing favour towards settled livelihood was at the basis of a development package comprising settlement, privatised land titles, social service provision and agriculture. The evidence of the development of agricultural activities is nowadays widespread all over the southern lowlands, and the consequences of the encroachment of agriculture were already mentioned.

Agriculture is practised mainly during the long rainy season, and the production is usually consumed. Pastoralists are aware of these developments, and consider the expansion of agriculture among the most worrying factors that endanger pastoral livelihood. Among the effects of the development of agricultural activities, the environmental implications deserve to be considered: in the area around El Leh, the development of agricultural activities especially along the semi-permanent stream of Lagasure, caused a permanent degradation in semi-forested soil cover, while subtracting key dry season resources from pastoral use. Similar phenomena can be observed in other forested areas, such as in Arero, documented by Tache and Irwin (2003). Given the general unsuitability of the southern lowlands for agriculture, many agricultural communities encounter severe difficulties and saw their level of vulnerability increase. Tessoma and Godakarro inhabitants highlighted a highly unreliable

\textsuperscript{414} “there is no reason to assume that agricultural activity was ever a suitable and viable alternative to transhumant pastoralism, except in the immediate vicinity of wells, in the higher retreat grazing areas, or a few higher rainfall pockets”.

\textsuperscript{415} Farah A.Y., The Plight & the Prospects of Ethiopia’s Lowland Pastoral Groups, in In search of cool ground: war, flight and homecoming in Northeast Africa, Allen T. 1996.
situation for what concerns agricultural production due to both frequent droughts and the spread of pests. This situation contributed to cause repeated need for relief intervention\textsuperscript{416}. 

CHAPTER 5. Gum and resins collection as livelihood option in Moyale area

5.1 Introduction
As reported by Lemenih Mulugeta and Demel Teketay\textsuperscript{417}, and also by Tadesse, Desalegn and Alia\textsuperscript{418}, Ethiopia’s dry lands are endowed with native plant species of Acacia, Commiphora, Boswellia and Sterculia, producing gums and resins. This research has identified the first three just mentioned species in Moyale area, while it has been chosen to assess the value chain of resins produced by Boswellia and gum by Acacia.

Major gums and resins produced in Ethiopia are gum arabic, frankincense/olibanum, myrrh, opoponax and gum karaya. In Ethiopia five Boswellia species produce three different quality frankincense namely Tigray, Ogaden and Borena types. Myrrh and opoponax are products of Commiphora species. Gum Arabic is produced by Acacia Senegal and Acacia Seyal trees. Gum karaya is produced by species of the genus Sterculia mainly from the species Sterculia setigera. This research is going to target gum arabic from Acacia Senegal and A. Seyal and frankincense from Boswellia Ogaden and B. Borena.

As in the local language those trees are known with other names, as well as the gum and resins they produce, this research has needed to perform an effort in order to recognize the botanical and physical characteristics of the trees and find a correspondence between the local names and the scientific ones, as used in the literature. At this purpose the interviews with agents from exporting companies have been very useful to clarify species and typologies of trees and resins/gums products; following these data have been cross-checked through discussions with natural resources experts from Wondo Genet College.

Another effort made by this research is linked to the fact that few studies have been made to document the status of the vegetation resources cover that provide gums and resins and their economic contributions to rural households in different parts of Ethiopia. Economic potential of gum and resins has not been completely studied, even if the literature already mentioned at the beginning of this paragraph recognises their contribution to pastoral livelihoods both in terms of supporting subsistence and as a means of generating financial income, employment and industrial supply. As a result of this, alternative income opportunities from natural resources, in particular gum and resins, are poorly organized and exploited in Ethiopia, and

\textsuperscript{417} Lemenih Mulugeta and Demel Teketay \textit{Frankincense and myrrh resources of Ethiopia: distribution, production, opportunities for dryland development and research needs}, Ethiopian Journal of Science, Vol.1, 2003.

\textsuperscript{418} Tadesse W., Desalegn G., Alia R., \textit{Natural gum and resin bearing species of Ethiopia and their potential applications}, Ethiopian Institute of Agricultural Research - Forestry Research Center, No. 16 (3) 2007.
also inadequately valued, so pastoralists and agro-pastoralists still have inadequate knowledge on their economical potential.

This is particularly true in the case of southern and eastern Ethiopia, because a more structured way to collect and trade gum and resins is present instead in Tigray region and generally in the north and western part of Ethiopia, where the 90% of the national exporting items are produced\textsuperscript{419}. In this area also gum and resins are not just collected by natural exudation as in the case of the area target by this research, but the tapping process is encouraged in order to get biggest quantities of the products.

Generally speaking the literature didn't study the issue of resins and gum very deeply, mainly in the target areas, and when this has been done, it has been talked about alternative means of survival, while I prefer to refer to this opportunity of income as a complementary means, since the collection of gum and resins doesn't require the neglect of livestock herding, but it can be done at the same time. In this research it has been chosen to analyse the collection and selling of resins and gum, naturally produced in Moyale area by Boswellia species and Acacia trees respectively, and to refer to it as a specific livelihood strategy. In Moyale area, the utilization of gum and resins is very well known, even if their trading is not quite old as in other parts of the country, as interviewed people in communities reported: communities have recently been trading gums and resins to diversify their economic base and address the issue of food insecurity, mainly during dry times. Gum and resins are locally used from centuries as herbal medicines, insecticides, fumigation during ceremonies, hygienic and sanitation detergents, food during crisis times. However it has been noted that the local population don't really know the utilization of gum and resins in international industry and processing companies, the high demand of these items on the international market and the effects that appropriate market information could have on their income and food security situation. All these aspects have been analysed during the value chain assessment.

5.2 Referring to gum and resins as a livelihood strategy

Among the livelihoods options complementary to livestock, in pastoral areas of Moyale, it has been chosen to analyse resins and gum collection, as they have been found very interesting because of some specific characteristics, that it is not possible to find in other income generating activities, as for example bee-keeping, petty trading, daily labour, milk processing.

\textsuperscript{419} Kassa Habtemariam, Tefera Berihun, Fitwi Girmay, Preliminary Value Chain Analysis of gum and resins marketing in Ethiopia CIFOR Brief No. 4, March 2011.
etc. Natural gums and resins are dry land resources: trees produce resins mainly in dry season, providing people with supplementary important economic activities, just when the main source of income, the livestock, is decreasing in quantity and quality. Resins and gum collection contributes to improve livelihoods of local communities mainly in a period with few other options. I noted also that the collection of the surveyed assets is coherent with pastoral lifestyle. Resins production is carried out by collecting hardened exudates from trees in natural stands by random picking from naturally or accidentally exuding trees. Most resin is obtained by casual incisions into the bark of the tree. The milky liquid that exudes hardens on exposure to air into droplets or tears which are then detached by collectors. Usually some tears are produced by accidental injury or from splits occurring in the stems or branches of the tree. Gum and resins are daily used by southern lowlands pastoralists as an emergency food, traditional ceremony (coffee ceremony is a very good example of this); religious services and as a good fragrance for houses, clothes, etc. The consumption of wild foods, as gum and resins, increases during the dry season, as wild plants reduce vulnerability to food shortage in times of stress.

Through this complementary income earning activity, pastoralists and agro-pastoralists can preserve their productive assets as livestock, instead to sell them during difficult times, as may happen. This could limit their vulnerability to shocks. The proper utilisation of gum and resin resources to diversify the livelihood is a complementary way to make communities benefit from products naturally available in their areas. Resins and gum collection has also low investment costs and at the same time produces immediate financial results, also because resins collection is a complementary activity of looking at animals, so all the pastoralists can easily carry out this activity, while moving with their animals.

Harvesting of resins and gum is generally considered to be less damaging forest resources than timber extraction, such as wood used to produce charcoal; their exploitation is widely believed to be relatively compatible with forest conservation and also contribute to the environment amelioration (Belcher 2003, Arnold and Ruiz Pérez 1998, Peters 1996). Even if not all resins trees are generally utilised to produce charcoal, pastoralists engaged in this production could reallocate their efforts to other activities, as resins collection, not damaging the environment. The literature agrees on the fact that commercialization of resins and gum potentially offers a means to achieve both conservation and development goals (Plotkin and Famolare 1992, Counsell and Rice 1992), by increasing the value of forest resources to local communities.
The exploitation of this asset can be also realised in favour of poorest pastoralists. Pastoral population are not homogeneous and there are differences between geographical areas and within the communities, in terms of food security and vulnerability. This research is indirectly taking into consideration the poorest pastoralist, meaning those one who have no or few animals, with the risk to lose them at the next critical time. They are also the one who more need to diversify livelihoods and complementary income sources for their survival, because they are a more limited capacity to manage risks and cope with shocks. Within the Oromo of the target area, as in other ethnic groups of Ethiopia, there are some woodworking castes, who together with craft-base castes, are traditionally the groups much affected from social, cultural and economic marginalization and more dependent on livelihoods differentiation.

Involving complementary livelihoods coming from natural resources and from area where pastoralist commonly are living can therefore reduce the phenomena of destitute pastoralist, who after having lost their livestock, have been forced to abandon their traditional pastoralist way of life and moved to urban settlements in search of alternative livelihoods.

In 2003 the Journal of arid environments has published a study of Lemenih Mulugeta, Abebe Tarekegn and Olsson Mats, on the economic contribution of gum and resins resources from Acacia, Boswellia and Commiphora species in Liban Zone\textsuperscript{420}, south-east Ethiopia, area partly targeted by this research.

The study reveals that vegetation in Liban belongs to the Somali-Masai \textit{Acacia-Commiphora} deciduous wood-and bush land formations. Oleo-gum resin producing species comprise over 60 \% of the total stem density and they are dominant in the vegetation of Liban: eight species of trees/shrubs belonging to two families \textit{Mimosaceae} and \textit{Burseraceae} have been designated by informants to yield currently traded oleo-gum resins. The identified species include: \textit{Acacia Senegal}, \textit{A. Seyal}, \textit{Boswellia neglecta}, \textit{B. ogadensis}, \textit{Commiphora myrrh} (syn. \textit{C. molmol}), \textit{C. truncata}, \textit{C. africana}, and \textit{C. boerensis}. Particularly, \textit{A. Senegal} and \textit{C. myrrha} are the dominant species among the oleo-gum resin producing species in most of the mixed vegetation types. At present five types of oleo-gum resins are collected from these identified species for commerce. These are gum obtained from \textit{Acacia Senegal} and from \textit{A. Seyal}, frankincense obtained from \textit{Boswellia neglecta} and \textit{B. ogadensis}, myrrh obtained from

\textsuperscript{420} Liban is one of the administrative zones in the Ethiopian Somali National Regional State, is located at longitude 39-41\(^{\circ}\)E and latitude 3-4 \(^{\circ}\)N in south eastern Ethiopia. It is an area bordered by the Ganale river to the north and east and the Dawa river to the west and south. Generally Liban falls within the arid to semi-arid lowlands, with an altitude ranging from 200 to 1100 m a.s.l. Mean annual rainfall ranges from 28 - 820 mm. Population density is generally low, 10 persons per km\(^2\). It is one of the least populated areas in Ethiopia.
Commiphora myrrha, C. truncata and C. boresis and hagar obtained from Commiphora africana.

The study has estimated that a total of 903 tons of oleo-gum resins are collected each year from the vegetation in Liban. Out of this, 242 tons is gum arabic, 266 tons is frankincense, 187 tons is myrrh and 208 tons is hagar. Information obtained from the survey indicates that the quality of gums and resins at lower altitude, with drier climate, is generally higher than at the relatively wetter higher altitudes.

The average annual cash income generated per household from collection and sale of oleo-gum resin has been estimated to be US$ 80.00. This income contributes to 32.6% of annual household subsistence and ranks second after livestock in the overall household livelihood. The contribution from crop farming has been estimated to be 12%, which is about one third of the contribution from oleo-gum resins. Crucially harvesting is conducted mainly during the two dry seasons, filling an important income gap. These results show that oleo-gum resins play a significant role in the economy of rural households in Liban.

The study lists also the various goods and services provided by these vegetation resources and their oleo-gum resin in Liban. Fodder for livestock, traditional medicines for human and livestock disease treatments, incense for fumigation, cultural and religious rituals, and emergency foods during droughts are among the most common. The same study concludes that there are several reasons to develop these resources:

- the vegetation resources and their oleo-gum resins provide multiple goods and services to households living in semi-arid and arid lands. Livestock production, which supplies the major needs of the pastoral families in Liban, is heavily dependent on the plant biomass for fodder provision. Particularly in dry season as well as during droughts, the trees and shrubs are the only source of fodder for the livestock;
- resins also provide income mainly during dry seasons when households often fall short of other subsistence means;
- resins and gum provide emergency food during drought and famine;
- because of their wide industrial potential, these resources could be developed and provide employment opportunity for local people and economic development for the country;
- if properly utilized, they also provide significant ecological advantage. The non-destructive extraction of oleo-gum resins means conservation of the vegetation resources, useful in protecting desert encroachment and hence desertification control.
A study from Adefires Worku in Borana Zone, in December 2006, recognise the importance of non timber forest products and oleo-gum in particular to fill the gaps in pastoral livelihoods of Borana Zone, and also a not documented information of the role of these alternative means of survival. It affirms that “collection of gum and resins is found to be one of the most important means of survival through generations of reasonable income, mainly during severe droughts and when other means are inaccessible for the local poor pastoral and agro-pastoral communities. The villagers were found to generate an average annual income of 294,75 USD per households”. Oleo gum-resin collection and trade was found to be one of the three major economic activities such as livestock and farming

Following, the study states that “apart from their economic benefits, the species are the primary source of fodder, medicine for both human and livestock, and wood. The role of gum from Acacia Senegal, mainly during famine periods as source of food, is highly acknowledged by the population. Resins are further used for hygienic and fumigation purpose and other cultural practices. Gum and resin based utilization of the woodland resources of the study area may not only offer a sustainable development for the local and national economy, but also one of the sustainable way of resources management that contribute to biodiversity conservation, control of global climate change and combat desertification, as gum and resin collection is almost non-destructive way of resource utilization”.

### 5.3 Market orientation

This research aims to focus on the market potential of resins and gum, mainly in terms of advantages at local level, starting from the collectors, up to the local markets and less to exporting companies. The gum and resins are generally produced in remote areas of the country, traded in urban centres and then processed and used in different cities of the world. Local markets are focal points in which resins are accumulated and then make them available to reach the capital city and export channels.

The objective of the research is not studying commodities per se but understanding systems that lead such commodities to effective market orientation and consequently to income generating, and the connections between collectors or small retailers in kebele with the nearest main local markets. The focus is not for example simply to improve the production, but in particular to look at the markets, in order to transform resins and gum productivity and

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production in an environmentally sustainable way for market oriented pastoral development. When it has been chosen to assess resins/gum as priority commodity, it has been accomplished a specific process: what is appropriate based on what the people can do plus what the market requires.

This research aims also to face the different constraints of gum and resins market in Moyale area, starting from the lack of knowledge on market issues (demand, price, quality, etc) by collectors. Moreover remoteness, rugged and undulating topography of the habitat where resins producing species grow, lack of access roads, infrastructure, facilities and inadequacy of transport still make very difficult the mobilization of labour force and equipment, the collection/transportation of harvested resins and the market information circulation.

This research is going to investigate the different marketing aspects from production, through different trading levels, up to the export. It will focus on trade volumes, quality requirements and income opportunities among all the actors, both to better organise the supply of resins and to improve the position of stakeholders, in particular the poorest one and the less informed, in order to make their capacity to compete more effective.

Ethiopia is one of the major producers and exporters of various kinds of natural gums and resins. However according to the interviewed exporters, the export of gum and resins in Ethiopia is not really exploited and it remains underdeveloped. The amount of gum and resins products in the market is insufficient to meet export demand and products in local markets are of low quality. The factors affecting the commercialization of these resources are of different type:

- Location/Inaccessibility of the Resource Sites

Production, processing and marketing of natural gum is hampered by the inaccessibility of gum producing regions since they are located far from ports or market centres. The current marketing chain does not allow the fast expedition of the production from the place of production to the export outlets. In most cases gum and resins must be transported over 1000 kilometres of rough roads to the capital for processing and packing, and then to the port of Djibouti for shipment, which ultimately escalates the cost of production. In addition security risks in boarder areas contribute to the high production and/or transport cost.

- Lack of Quality Awareness

Lack of quality awareness and backwardness of production, storage and processing are among the limiting factors for good prices and expansion of natural resins and gum commercialisation. In this connection, there is a need to improve the quality of gum and resins produced and marketed in order to retain or increase markets.
- Uncontrolled Trade and a Sluggish Transaction in Export Trade

Lack of control on both domestic and export trade of gum and resins products in Ethiopia is affecting the expansion of official commercialization of the product. The fact that unregistered traders do not pay tax is affecting the competitiveness of registered taxpaying traders and is discouraging them from expanding their commerce of gum resin products of the country.\textsuperscript{422}

In Ethiopia the gum export market was dominated in '70 and '80 from public companies. Until 1986, the government-owned Natural Gum Processing and Marketing Enterprise was the sole business working in the sector. Since the mid '90, a number of exporting companies are emerged to become important players. Nowadays more than 30 enterprises are engaged to export gum and resins. They are required to prepare management plans supported by site maps, indicating management schedule. These are submitted to the local MoARD (Ministry of Agriculture and Rural development) bureau, which evaluate them and provide supporting documents. These are then taken to the MoTI (Ministry of trade and Industry) bureau, which issue a license. Management practices are then periodically monitored.

Enterprises engaged in natural gum production and marketing in Ethiopia acquire the products from two sources: i) from products collected by hired tappers from forest stands obtained through concession and, ii) direct purchase from local collectors (farmers/pastoralists or producer cooperatives). The former procedure is common in the north and northwest parts of Ethiopia, while the second one in the studied area.

The former one involves direct employment and organization of experienced coordinators and tappers. The enterprises provide them with basic necessities for the collection. The workers are hired on contractual basis during gum collection period, which begins in September and terminates in June. The collected gum/resin is filled in sacks and stored in temporary stores in the field, sometimes for prolonged period as the stores are located far off-road, until transportation is organized for delivery. In case of inaccessible sites for vehicles the products are transported close to roads by means of camels, donkeys or humans. Then trucks transport the products to processing centres located in towns.

In the second procedure, the marketing channel is very long as it will be shown during the analysis of value chain in the next chapter. The marketing starts when the collectors sell the products to the intermediaries. The intermediaries carry the products to established sellers in the local market. The local market transfers the products to nearby towns or exporting

companies’ branch office. At national level the products are either sold to private enterprises or to the national exporting companies. Then, the products are sorted and graded, and finally prepared for shipment. Information obtained from the various enterprises engaged in natural gum trade indicate that prices for the various natural gum and quality grades are more or less stable for the last five years.

5.4 Resins and gum: lessons learnt from other countries

Resins and gum are important items for increasing food security in different countries, mainly in Africa. Looking at some of these countries and at one in particular, can help to imagine the potential that the development of gum and resins could have also in Southern lowlands of Ethiopia. The lesson from Sudan can be interesting in understanding the importance of resins and gum and the way they could be targeted by Governmental policies and external aid. Africa is the world’s leading producer and exporter of arabic gum and resins, as frankincense and myrrh. Sudan accounted for 80% of the world’s gum arabic production and exportation from the 50' to the early '90, followed by Chad, Nigeria, Senegal, Mauritania, Mali, Ethiopia, Tanzania, Niger, Uganda and Kenya (Seif el Din and Zarroung, 1996). Resins and gum are widely exported as raw materials from African countries and then processed by several industries in the main import countries: Europe, China, Middle East, North America.

World exports of gum gradually fell from over 60,000 MT in the mid '60/early '70, to around 30,000 in the '80 to mid '90. They then rose to 50,000 MT in 2000, remaining fairly stable. A joint assessment in Sudan of December 2007 states that gum arabic is one of the four important agricultural export commodities in Sudan, along with livestock, cotton and sesame. Over the last 20 years, gum arabic export value amounted on average 40 million USD annually, even if the quantity of arabic gum exported is decreased yearly since 1975. Gum

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423 Ibid.
424 The majority of gum arabic, which enters international trade, originates in the so-called gum belt of Sub-Saharan Africa, extending from the northern parts of West Africa eastwards to Sudan and Ethiopia.
425 Frankincense and myrrh are still widely used therapeutically in regions raging from North Africa to China (Krieglstein et al., 2001), and especially in the traditional Ayurvedic medicines of India, Arabia and China as well as in Ethiopia and Somalia (Farah, 1994; Mulugeta et al., 2003).
426 In Middle East, particularly in Saudi Arabia, approximately 500 tonnes of Somali type olibanum are imported for chewing gum manufacturing as a coating agent and as a pigment stabilizer, while similar quantity are also used in these countries for burning at home.
arabic is mostly produced by small-scale farmers in traditional rain-fed farming areas of western and central Sudan, where the incidence of rural poverty is in the range of 65 to 90%. They represent the 20% of Sudan's population, around 6 million people, and they are among the poorest. Small-scale farmers, in addition to food crop production, seek other sources of income to meet the basic household's needs. They harvest gum arabic because this activity constitutes a crop diversification strategy to mitigate crop failure and to secure the food needs of the family. These characteristics are very similar to the pastoralists target by this research, while considering the strategy to diversify livelihoods. Gum arabic production is part of an integrated farming system, characterised largely by subsystem production and family labour with no modern equipment and inputs. In Sudan gum arabic trees are planted when cash crops productivity declines (every 4-5 years). Gum arabic harvesting is primarily financed by village traders: they provide to households cash, seeds, tools and basic commodities as water, sugar, tea. Farmers pay back in kind at prices early determined. All the gum produced in Sudan is exported.

The study just mentions the beneficial environmental impact of gum arabic: acacia trees long lateral roots system reduces soil and wind erosion, and it has a regenerating impact on the land; as a leguminous tree, acacia fixes nitrogen which improves soil fertility.

The study analyses also the governmental policies on forest products and how these have affected the income of small farmers. In 1969 a Governmental policy granted an exclusive concession to export gum arabic to the Gum Arabic Company, a public one. The Ministry of Foreign Trade defined yearly the price of gum arabic to be bought by the Company to local farmers. The Sudan standards & Metrology Organization fixed two main categories of gum arabic for export and six different gum grades. This monopoly that is following evolved in a cartel system with 4 international agents has resulted in low prices paid to farmers and the declining in gum production. Local farmers have not been able to access the final market directly, as gum has been handled by village merchants and additionally intermediaries. This market arrangement, together with two severe sahelian droughts (mid '70 and mid' 80), has been one of the main causes of the decline of gum exportations. In 2003 a presidential decree in Sudan has granted 12 licenses for gum processors, with the consequence of increasing the dynamicity of the market, developing the processing industry, increasing domestic demand and paying higher prices to local farmers429. In 2006, it has been estimated that gum arabic

429 The study reports also that the cleaned grade raw gum is not exported anymore. Sudan exports primarily hand pcket selected raw globules of clean gum arabic, specially sorted and graded; and white powder of mesh size inferior to 100 microns, which results of a process by which raw gum is dissolved in water, centrifuged,
sales represented the 20% of the total annual income of households living in some areas of North Kordofan and Blue Nile, while it was 6.5% in 2002. Also in 2002 the price paid to local farmers was 280 USD/MT, so the 20% of the export price, 1400 USD/MT. In 2006 local farmers gained 1240 USD/MT, 37% of export price, 3400 USD/MT in average terms, based on categories and grades of the gum. Today Chad accounts for a quarter of the total gum arabic export and Nigeria's export is around 10%.

5.5 Export commercial value of resins and gum

For Ethiopia, China and Europe are the largest import markets, followed by Middle East and to a lesser degree North America. Yemen and Djibouti are intermediate destinations between Ethiopia and Middle East countries. The European Community is the biggest regional market for gum arabic, especially France and Germany. This last one is the biggest importer and re-exporter. From 1997 to 2004, gum arabic imports by EU ranged between 20,500 and 39,320 tonnes/year and Ethiopia has been an important market from where buying these items.

Four processors account for about 70% of the world trade of raw gum. Based in Europe and in the USA, they buy raw gum for further transformation and re-sale as additive for the industry. The USA is the largest single market for gum arabic, accounting for approximately 30% of the total trade. Europe is around 20% of the world trade. Japan accounts for less than 10% of world trade. India, South Korea and China are emerging markets.

At world level, resins price as well as its demand is fairly stable. Myrrh, the highest priced resin, reaches US$ 4.00/kg, while other resins range between 1.50 – 3.50 USD/kg. In particular the price of frankincense produced in Ethiopia is: 1st choice US$2.00/kg, Pea size US$1.60/kg, Siftings US$1.30/kg, 4th grade US$1.30/k, 5th grade US$1.30/kg. The price of gum is higher.

Confectionary represents the major use for gum in Europe while soft drinks production is the largest in the USA. Gum arabic is used for its properties as an emulsifier, thickener, binder, stabilizer and adhesive. Soft drinks and confectionery represent the 70% of the demand for gum arabic. Gum arabic is generally used as an additive which represents a small portion of

\[ \text{pasteurized and sprayed in hot air. In 2006, market value of spray dried gum arabic was between 6,600 USD and 13,200 USD per MT.} \]

\[ ^{430} \text{Gum arabic revenues estimates are calculated on a base of 150 trees per feddan (4,200m}^2 \text{ or 1.030 acre, with 400 gr per tree.} \]

\[ ^{431} \text{By the way, gum arabic from Sudan and in particular from Kordofan Region, is the highest quality in the world and sets the standards by which gum arabic from other countries are judged.} \]

\[ ^{432} \text{W. Tadesse, G. Desalegn, R. Alia Natural gum and resin bearing species of Ethiopia and their potential applications - Ethiopian Institute of Agricultural Research. Forestry Research Centre, 2000.} \]

\[ ^{433} \text{Ibid.} \]

182
The cost of the finished product. It is regarded by end users as having technical advantages which makes it difficult to replace it in many applications. This makes demand for gum quite price inelastic. Demand for gum arabic is driven up by the increasing world consumption of soft drinks and sweets. It is reinforced by the attention given by consumers to food product's quality and naturalness. Because of its high fibre content, gum arabic has recently found a new range of applications in the dietetic food and health sub-sectors.

The discussion about the export value of gum and resins is to help in understanding the potential that this resource could have in terms of economic growth for the country and increased food security for people directly involved in collecting it, as the pastoralists target by this research in the south of Ethiopia. Pastoralists could really benefit from trading gum and resins, if they had the appropriate market information, as they have in their hands an item that is highly demanded on the international market. In this sense it is not important for this research that the biggest majority of gum and resins exported from Ethiopia is coming from Tigray, the north of the country, because is not the development of gum and resins as exporting commodity that I'm interested in evaluating. Rather it is its value for the food security and reducing vulnerability of pastoralist in south Ethiopia and Moyale area in particular. In this sense it is also interesting to note that many forest products as resins and gum, mainly in remote areas as the ones surveyed, are mostly used for subsistence or traded at local market, that remain unaccounted in official figures. The following table shows the quantity of gum and resins exported by Ethiopia and its value from 1999 to 2008.

Table 3. Quantity of gum and resins exported by Ethiopia and its value from 1999 to 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (tons)</th>
<th>Value (USD)</th>
<th>Value (Birr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1680</td>
<td>2,400,000</td>
<td>20,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>1750</td>
<td>2,480,000</td>
<td>20,000,000</td>
</tr>
<tr>
<td>2001</td>
<td>2,209</td>
<td>2,821,000</td>
<td>24,000,000</td>
</tr>
<tr>
<td>2002</td>
<td>1900</td>
<td>3,188,930</td>
<td>27,500,000</td>
</tr>
<tr>
<td>2003</td>
<td>2400</td>
<td>3,212,000</td>
<td>27,500,000</td>
</tr>
<tr>
<td>2004</td>
<td>3500</td>
<td>2,261,000</td>
<td>19,500,000</td>
</tr>
<tr>
<td>2005</td>
<td>3700</td>
<td>3,985,000</td>
<td>35,000,000</td>
</tr>
<tr>
<td>2006</td>
<td>3750</td>
<td>5,543,000</td>
<td>48,000,000</td>
</tr>
<tr>
<td>2007</td>
<td>3900</td>
<td>5,438,000</td>
<td>50,000,000</td>
</tr>
<tr>
<td>2008</td>
<td>4612</td>
<td>7,500,000</td>
<td>74,000,000</td>
</tr>
</tbody>
</table>

Kassa Habtemariam, Berihun Tefera and Fitwi Girmay estimate that 90% of export resins are from Tigray.
From the table, it comes out that the exported quantity of resins is steadily increased since 1999 and in 9 years the export amount is grown of 176%, while the value in birr is increased of 275% and the one in USD, as the exchange rate is not stable, of 212.5%. If the average unit cost of one ton of gum and resins in 1999 is 12.000 birr (1.441 USD), it is in 2008 equal at 16,000 birr (1.626 USD). The value of gum and resins is increased at a trend more steep than the one of the quantity.

For what is concerned the volume exported in the years before the 1999, in the '90 the export doesn't reach the 1000 tonnes until the 1995, remaining in the range of 300-900 tonnes per year. In 1997 the exported quantity is again around 1000 tonnes and increase until 2000 tonnes in 1998. For what concerning the value of exporting resins and gum in the '90, it is in the range of 3 million – 9 million birr, overcoming the 10 million after 1997 and reaching almost 20 million only one year later. It has known an increasing trend since the mid '90, also due to trade liberalization and involvement of private companies in the export market. Some elements of this growth are actually the liberalization of the trade and increased participation of private entrepreneurs. In the past, gums and resins trade was solely monopolized by the Natural gum processing and marketing Enterprise (NGPME), whose contribution is sharing only 44% of the total export from Ethiopia today. Currently export private companies account for about two-thirds of the export volume and earnings.

While large market demand still exist for the export of these products, substantial quantities of gum and resins are also traded in domestic markets and used locally in households and religious institutions. Local markets for gum and resins are poorly documented. The exports refer mainly to myrrh and gum, that are high value products and just a very small part of them enter in local markets. Lemenih Mulugeta and Kassa Habtemariam in *Gums and Resins of Ethiopia* CIFOR Brief No. 3 February 2011, estimated that 10.000 MT of resins and gum per annum (value of 12 million USD) are locally consumed, 60% of which is used in religious establishments. The export volume, based on this estimate, remains much lower than the domestic market. For other estimates, domestic and export markets accounted for average

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40% and 60% respectively of the total marketed volume. By the way this different estimates need to take into account that most of the resins locally consumed is not traded and also that some kind of resins and gum are more suitable for exportation, as myrrh and gum arabic, while others are not requested by the international market and continue to be used for internal consumption only. The frankincense is used both locally and also it is exported, depending on its quality.

At national level, even if resins are exported as raw materials, there are anyway some products sub-sectors including tapping and collection, transportation, basic processing (cleaning, sorting and grading) and storage facilities. The commercial product is available in different qualities from dust, siftings, to tears. Consistency of quality is an issue with end-users; resins get different prices depending on the quality, which is decided by size, colour and species origin.

**5.6 Area covered by resins/gum bearing species in Ethiopia**

The dry land areas in Ethiopia cover 71.5% of the total land area. Of the total estimated area of dry land, 25 million ha are covered with woodland and bushland. The total area of resin bearing woodlands covers about 2.9 million ha of land. In Ethiopia, forest resources comprise 5% of high forest, 72% of other woodlands, shrublands, savanna and grasslands, 16% of cultivated land and 7% of others. The resins and gum belt in Ethiopia runs in a semi-circle around the northern, western, southern and eastern parts of the country, mainly in the drier low lying arid to semi-arid lands at altitudes below 1700 m. The following table shows the estimated hectares covered by gum/resins bearing species in the different regions of Ethiopia.

<table>
<thead>
<tr>
<th>National Regional State</th>
<th>Genus</th>
<th>Estimated area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigray</td>
<td>Boswellia, Sterculia, Commiphora &amp; Acacia</td>
<td>940,000</td>
</tr>
<tr>
<td>Amhara</td>
<td>Boswellia, Commiphora, Acacia &amp; Sterculia</td>
<td>680,000</td>
</tr>
<tr>
<td>Oromia</td>
<td>Boswellia, Acacia, Commiphora &amp; Sterculia</td>
<td>430,000</td>
</tr>
<tr>
<td>Gambella</td>
<td>Sterculia, Acacia &amp; Commiphora</td>
<td>420,000</td>
</tr>
<tr>
<td>Somali</td>
<td>Boswellia, Acacia &amp; Sterculia</td>
<td>150,000</td>
</tr>
<tr>
<td>Benshangul-Gumuz</td>
<td>Boswellia, Acacia &amp; Sterculia</td>
<td>100,000</td>
</tr>
<tr>
<td>Southern Nations Nationalities &amp; Peoples</td>
<td>Boswellia, Acacia &amp; Sterculia</td>
<td>70,000</td>
</tr>
</tbody>
</table>

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436 Mulugeta L. and Demel T., *Frankincense and Myrrh resources of Ethiopia: distribution, production, opportunities for drylands development and research needs*, Ethiopian Journal of Science 26 (1), 2003

185
It is assumed a population density of 50-80 trees per hectare and a production potential of 0.25-1.0 kg per tree per year, with an estimated 30,000 tons of gums and gum resins production potential. By the way, it is quite difficult to really estimate the resins and gum production, because there is a lack of reliable data on the resources base and productivity levels.

Resins and gum are harvested in traditional manner in Southern and East-southern areas of Ethiopia, because the collectors are mainly herdsmen, women and children, so the gum/resins collection is not their sole occupation, but they accomplish it side by side with herding: natural exudates are simply collected, without acting on the trees (Mulugeta, Tarekegn and Olsson, 2003). In this area the collection and selling of resins to export purposes is a more recent phenomena, than in the north of country, in Tigray Region for example, well endowed with these resources and integrated in export market. Here tapping is the most common collection technique. Generally the process is quietly labour intensive and individuals or small associations operate over large areas, often difficulty inaccessible, to collect. Where the trade of gum and resins is more diffused and structured (Northern part) in recent years acacia

437 Lemenih Mulugeta, Kassa Habtemariam, Gums and Resins of Ethiopia CIFOR Brief No. 3 February 2011.
438 Gum tapping in Ethiopia differs from place to place and there is not a method considered as standard. A common practice is scrubbing the bark of trees using local tools. Tapping involves incisions to the body of the trees. Incisions are made by shaving off the bark of the trees using sharp instruments such as axe or knife. The depth, intensity and frequency of incisions depend on the experience of the taper. Intense tapping and improper wounding are harmful to the frankincense trees. Particularly, repeated stabbing with the attempt to harvest more incense, as often practiced in most areas, is injurious. Deep incision that affects the inner bole (the sapwood) of the trees would cause drying and death of the trees (Wubalem et al., 2002). In the cases where the trees withstand the deeper incisions, healing may take longer time and trees suffer from the recovery since the wound is made during dry seasons when growth conditions are poor to allow quick healing. This ultimately declines trees’ vitality and productivity. Incisions have also been indicated, though not certified scientifically, to predispose frankincense trees to insect and pathogenic infection (Farah, 1994; Tilahun, 1998). Incision creates route to allow woodborers and other parasites to get access and infect the frankincense trees. The infection coupled with the weakened resistance of the trees due to the intense wounding in dry seasons, cause frequent death of frankincense trees (Farah, 1994; Tilahun, 1998). Another improper tapping that is reported harmful to the frankincense trees is bark-burning practice. While light burning of the bark of frankincense trees is claimed to increase yield, trees subject to fire eventually face drying more frequently than those not exposed to burning (Farah, 1994). According to Farah (1994), the overall damage done to frankincense trees owing to improper tapping is tremendous, and perhaps over 50% of the frankincense trees subject to tapping are often damaged. Together with other damages such as overgrazing, fire and clearance for agriculture, improper tapping is causing a widespread damage including hampering natural regeneration. The deterioration of the woodland vegetation stocks in the drylands is the principal root cause for the advancing desertification in the region (Mulugeta and Demel, 2004).
trees have been also planted and the tapping technique is adopted in order to increase the quantity of gum and resins collected and much exploit these forest resources.\(^{439}\)

5.7 First approach on the field to local names and uses of resins and gum

In the studied area 3 types of incense and gum have been assessed, at the beginning known only for their evident characteristics: black incense, white incense and arabic gum. During a preliminary phase, it has been thought to assess also the value chain of what has been called the yellow incense, because it was present in the local markets. During the survey it has been noticed that it is produced mainly in Somalia and areas of Ethiopia bordering Somalia, and the product found in Moyale area markets was imported or smuggled. Another initial target of the research was the Agarsu, but during the research I realised that it was smuggled all in Kenya, because it is not requested by intermediary and local traders of Ethiopia, as per the interviews in the field. Also the pastoral population didn’t really utilise it for domestic and local uses. Moyale town is composed by two entities: Moyale Ethiopia and Moyale Kenya. Even if separated by international border, the two Moyale are economically well integrated and movements from one side to the other one are frequent and smooth. In the following table, the name of each resins/gum thought to be assessed is reported, as known in the local language, and also the tree producing it. White and black incense are the typology until now called frankincense.

Table 5. Assessed resins and gum during the preliminary phase of the study

<table>
<thead>
<tr>
<th>N.</th>
<th>Product</th>
<th>Name in Oromifa Language</th>
<th>Trees names in Oromifa</th>
<th>Scientific name of the tree</th>
<th>Family trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Black Incense</td>
<td>Anchà Gurrach or Itahn</td>
<td>Dunkhal</td>
<td>Cadaba Glandulosa</td>
<td>Boswellia (Burseraceae)</td>
</tr>
<tr>
<td>2</td>
<td>White Incense</td>
<td>Anchà Adii</td>
<td>Dunkhal</td>
<td>Cadaba Glandulosa</td>
<td>Boswellia</td>
</tr>
<tr>
<td>3</td>
<td>Yellow Incense</td>
<td>Kumbi</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>4</td>
<td>Agarsu</td>
<td>Ur</td>
<td>Muke</td>
<td>Commiphora Rivae</td>
<td>Commiphora</td>
</tr>
<tr>
<td>5</td>
<td>Gum Arabic</td>
<td>Akbè</td>
<td>Wacho &amp; Sebansa</td>
<td>Acacia Seyer &amp; Acacia Senegal</td>
<td>Acacia (Leguminosae)</td>
</tr>
</tbody>
</table>

\(^{439}\) Tadesse reports that tapped trees are more attacked by worms and pests than untapped trees; tapping also hampers natural regenerations (Natural gum and resin bearing species of Ethiopia and their potential applications, Ethiopian Institute of Agricultural Research - Forestry Research Center, 2007).
The following criteria have been established to choose the typologies of resins and gum to be finally assessed: their production in the studied area, their local utilization, their trading within Ethiopia.

In the following table the uses of each gum/resin assessed are reported, both locally as described by the interviewed people, and after been processed.

**Table 6. Uses of assessed resins and gum**

<table>
<thead>
<tr>
<th>N.</th>
<th>Product</th>
<th>Uses/Purposes</th>
</tr>
</thead>
</table>
| 1  | Black Incense | To smoke houses, in order to provide nice smell and to whisk flies/bees away  
To smoke clothes to provide them with a good smell  
To smoke women body, as natural perfume  
To smoke during traditional ceremony, such as coffee ceremony  
To smoke during chewing chat  
To control camels skin diseases, by applying it, after been boiled  
During religious celebrations  
Used in meditation blends  
Traditional ink production  
After processed it is used in medicines⁴⁴⁰, cosmetics, detergents, soaps, creams, lotions and perfumery, paints, adhesives and dyes manufacturing |
| 2  | White Incense | To smoke and in traditional/religious ceremonies: the same uses of black incense, but the quality and the smell of white incense are better  
Medical uses for human and livestock disease treatments  
After processed, the same uses of black incense |
| 3  | Gum | Fodder for livestock  
Food: specially during emergency situations it becomes an emergency food for people  
Traditional stick/glue  
After processing:  
As stabilizer, thickener, flavouring, fixative, emulsifying in food and drink (beverages, candies, chewing gum, gelatines, nuts products, puddings, canned vegetables)⁴⁴¹ industries; |

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⁴⁴⁰ It has modern pharmacological applications for several disease treatments most of them predicted by the traditional therapies. Their unique chemical compositions, pharmacological activities and non-toxicity tend to support the safe use of these popular traditional drugs in modern therapies (Michie and Cooper, 1991).

⁴⁴¹ Due to its stability in acid conditions and its high solubility, gum arabic is well suited for use in citrus and cola flavor oil emulsions. In beer, it is used as a foaming agent and to assist lacing. Gum arabic is used increasingly as a source of soluble fiber in low-calorie and dietetic beverages. Gum arabic is an effective encapsulation agent because of its high water solubility, low viscosity, and emulsification properties and it is used in soups and dessert mixes (Verbeken, 2003).
Among the three, gum arabic is the product with much more utilization, after been processed. It is multi-functional: it is used as emulsifier, stabilizer, film-former (it forms an impenetrable film around the flavour particle), texturizer and low-viscosity water binder. In the soft drink industry, gum arabic is utilised as emulsifier and stabilizer of aromatic emulsions and spray-dried flavours for beverages. In confectionary, gum arabic is utilised to bind water and prevent sugar crystallization. Its emulsification quality is important to enable fat to be distributed throughout the product and not move the surface, and make the food appear greasy. Gum arabic is also used as a suspending agent in syrup, antiseptic preparation, cosmetics and adhesive, in paints, inks, litography and textiles. Gum arabic is not chemically modified and it qualifies for natural labelling or no artificial additive claims. It is natural and no toxic. It has a high source of fiber and low caloric value (it contains 85% of soluble dietary fiber). Because of this, gum arabic has recently found a new range of applications in the dietetic food and health sub-sector. Gum arabic is also utilised in pharmaceutical industry and in technical applications as printing, glues and ceramics.

5.8 Gum and resins producing trees

Although about 35 species of Acacia, Boswellia and Commiphora have been identified as potential producers of gum and resins, currently they are collected only from few species. Gum arabic is collected from Acacia Senegal var. Senegal and var. kerensis, Acacia Seyal, var Seyale and var. fistula; frankincense from Boswellia papiphera, B. neglecta, B. rivae, B. microphilla, B. ogadensis; opoponax and myrrh from Commiphora myrrha, C. guidotti, C. erithraea.

442 It is used as a suspending agent, emulsifier, adhesive, and binder in tablet and in demulcent syrups (Getachew and Wubalem, 2004), also in ayurvedic medicine and traditional therapies.
443 It is used as a thickening agent in printing pastes for the coloration of knitted cellulose fabrics.
444 As a stabilizer in lotions and protective creams, where it increases viscosity, imparts spreading properties, and provides a protective coating and a smooth feel. It is used as an adhesive agent in blusher and as a foam stabilizer in liquid soaps (Whistler, 1993).
445 Food additives manufacturers have tried to develop gum arabic substitutes as starches, corn-based, celluloses, but it seems that none has the functionality of gum arabic. It has comparative technical advantages over substitutes: products incorporating gum arabic retain flavour better and their shelf lives is also superior. Both Peopsi and Coca Cola contain gum from Acacia Senegal.
In the intervention area all the 3 species of trees are found, but it has been chosen to analyse the value chain of frankincense from Boswellia and gum arabic from Acacia. Boswellia is indigenous lowland tree species of Ethiopia. It is a deciduous tree that reaches to the height of 12 meters or more at maturity. It is usually dominant in on steep rocky slopes, lava flows or sandy valley, with altitudinal range at 950-1,800 m, where temperature is between 20-25° C and rainfall is less than 900 mm per annum. The ecological distribution of the species is confined to lowlands subjected to hot and arid conditions. Frankincense is the resin obtained from species of Boswellia trees: in particular the Ogaden (B. rivae, B. ogadensis and B. microphylla) and the Borena (B. neglecta) species are present in the eastern, south-eastern and southern parts of the country, respectively where this research focuses. A third topology of Boswellia in Ethiopia is the papyphera, found in the North and North-west, so not object of this research, even if it produces the most widely exported frankincense (90% of the overall export). Literature speaks mainly about Boswellia papyrifera, as this is the species that produces the biggest quantity of gum in Ethiopia. Frankincense tree produces leaves with small showers of rain that start in April. The leaves drop sometimes in November at the beginning of the dry season. Frankincense is classified in 5 grades and only the resins from grade 1 to grade 4 can be exported, while the grade 5 is just for internal use. Frankincense is traded internally and for exporting uses and it is available in different grades; it ranges in appearance from pale pieces or tears up to several centimetres in size to smaller pieces, and from powder and siftings to large, reddish brown or dark agglomerated masses.

Gum arabic is the dried exudates produced from the trunk and branches of the acacia Senegal tree and the acacia Seyal tree. Gum arabic is a pale white to orange brown solid which breaks with a glassy fracture. If properly stored, it stays unaltered for decades. Gum arabic is a complex polysaccharide with food, pharmaceutical and technical applications, whose uses are known since about 5,000 years. Gum from Senegal trees (hard gum) has major technical properties and different chemical composition than gum from Seyal trees (flaky gum).

446 In Ethiopia is possible to find also the Boswellia pirrotae.
448 Boswellia resins (frankincense) contain the so-called α- and β-boswellic acids: 3α-hydroxy-olean-12-en-24-oic acid and 3α-hydroxy-urs-12-en-24-oic acid, respectively. The non volatile constituents include numerous triterpenoids of the lupine, oleanolic and ursolic acid types, either as the free acids, acetyl esters or ketones.
Senegal comprises about 70 % and A. Seyal about 15–25% of the species that contribute up to 95% of the total gum entering international trade.\textsuperscript{449}

Acacia Senegal is a deciduous shrub or tree up to 15 m high, crown variable, flat to rounded; bark yellowish-brown to purplish-black, rough or smooth, scaly (Dagnew 2006). A. Senegal thrives on dry rocky hills, in low-lying dry savannas. This hardy species survives many adverse conditions, and seems to be favoured by low rainfall and absence of frost. It ranges from warm temperate thorn through tropical thorn to tropical dry forest life zones. It is very drought resistant. It grows on sites with annual rainfall mainly between 300-400 mm, and 5-11 month dry periods. It tolerates high daily temperatures (temperatures of up to 45°C or more), dry wind and sandstorms. Acacia Senegal prefers coarse-textured soils such as fossil dunes, but it also grows on slightly loamy sands and skeletal soils. It tolerates high daily temperatures and a long dry season. It is available from 600 m to 1,700 m in altitude.

Acacia Senegal enrich the soil with nitrogen and so restoring soil fertility. Its wood is also an excellent slow-burning fuel wood giving intense heat and little smoke; it is also used for charcoal making. It has an important role in arid and semi-arid agro-forestry systems: it is browsed by livestock, mainly camels and goats, and it is reputed to fatten livestock and enrich milk.

Acacia Seyal is a deciduous and indigenous tree of the savanna woodland and the semi-arid lowland forest, in between 700-1800 meter of altitude, commonly found in the rock hillsides or in the drier parts of Acacia thickets. It is flat topped or umbrella shaped, small to medium sized tree to 17 m. It has a shining greenish white or greyish white bark. It has strong white thorns to 8 cm long. The milky white pears of prickles, straight bifurcated, are mostly swollen at the base.\textsuperscript{450}

Yields of gum arabic from individual trees are very variable: from 250 grams of gum per tree per season to 1 kilo (Dagnew, 2006). The demand of the Sebansa gum (from Senegal type) is higher than Wacho gum (Seyal type), because of its better quality; therefore also the price is very different: gum from Sebansa price is 70-80% higher than gum from Wacho price.\textsuperscript{451} The gum from Sebansa tree is more white and shining, than that one from Wacho tree: the last one is less brilliant. Sebansa gum is shaped in stones, while Wacho gum is in the shape of sticks.

\textsuperscript{449} The remaining 5\%, which is relatively low quality, is mainly contributed by Acacia Polyacantha and A. Drepanolobium. In Ethiopia it is possible to find also A. Sieberiana, but just for internal consumption.

\textsuperscript{450} Tadesse W., Desalegn G., Alia R., Natural gum and resin bearing species of Ethiopia and their potential applications, Ethiopian Institute of Agricultural Research - Forestry Research Center, No. 16 (3) 2007.

\textsuperscript{451} Acacia Senegal comprises about 70 % and Acacia Seyal about 15–25% of the species that contribute up to 95% of the total gum entering international trade, from Ethiopia.
An acacia tree, when planted, takes 5-7 years before producing gum Arabic and 15-20 years for its productivity to start to decline. The average gum yield per tree per season is around 300 grams but production can vary from less than 200 grams to exceptionally 1 kilo. Resins and gum exude from cracks in the bark of wild trees. It is not possible to collect immediately after the crack the resins and the gum, as not yet properly dried. To collect gum from Sebansa and Wacho trees it is necessary to wait for 3 weeks, while is possible to perform every 2 weeks collection from Dunkhal tree to collect white and black resins, in order to give the time to resins to come out and get dried. In the target area, resins and gum are collected in the natural forest/bush lands, from naturally oozing and without forcing the exudation from the trees.

5.9 Challenges in gum and resins production

Tadesse, Dessalegn and Alia (2007) in “Natural gum and resin bearing species of Ethiopia and their potential applications” state that resins and gum species trees are threatening by agricultural expansion, deforestation, overgrazing, fire, encroachment, resettlement, clearing of the woodlands for farming, set fire and harvesting for fuel wood, windfall, poor incense harvesting practices as improper tapping, insect/termite/worm attack, clearing and debranching by local farmers, trampling and browsing by cattle, as well as insufficient and inadequate research under-takings, absence of strategies and action plans for development, sustainable utilization and conservation of these resources, etc.

Moreover the topography of the habitat where gum and resins trees grow is remote, rugged and undulated and these areas are missing access roads, infrastructure and transportation facilities.

Dry woodlands in Ethiopia are under serious threat mainly as a result of the following processes: (i) clearing and conversion of woodlands to arable farming, ii) government resettlement programs, iii) excessive wood harvesting for fuel wood; iv) improper harvesting/tapping of gums and resins, v) overgrazing by livestock. Similarly, there are various other factors hampering the expanded commercialization of gum resin products. Some of the major market constraining factors in development of the resources and their

452 Traditional savannah and woodland vegetation management particularly by cattle herders and pastoralists involve fire. Though the vegetation in dryland areas are evolved under cyclic fire, some species such as Boswellia need some fire-free years to allow enough regeneration and the development of seedlings into saplings and poles to maintain the populations (Menaut et al., 1995). However, in most cases woodland vegetations are exposed to annual burning that is badly affecting not only delicate seedlings but also mature trees (e.g. Abeje and Demel, in press). Tapped trees are more easily affected by fire than untapped trees, since the resin oozing out of the trees is very inflammable to cause intense fire and thus tree death.
commercialization are i) poor accessibility and thus higher production cost for the resources; ii) lack of quality control, and iii) parallel across border trade. The target areas, as already described in the previous chapters, have been affected by resettlement programmes and also by sedentarization process. The emphasis has been put on conventional agriculture in the dryland regions by Governmental policies, as already discussed, and the attention on forestry resources is quite recent, but the agriculture didn’t until now took a large portion of land, so farming is not really competing on resources with livestock herding and trees growing, mainly on the Somali side. For sure the target area is assisting to a process of land degradation due to encroachment, overgrazing and other factors as described in chapter 4, but still there are in the area so many trees producing gum and resins, whose items are not collected, because it is not known the market or the income potential for pastoralists. Also the fact that animals are allowed to graze without particular restriction is an aspect that can make pastoralist continue to collect gum and resins as a complementary activity. The fact that the territory where gum and resins grow is difficulty accessible is a challenge more for the demand side than for the offer one, as pastoralists know since centuries the territory and they are managing this issue for herding livestock and implementing any other livelihoods strategy since long. In the target area, there is an

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453 Lemenih Mulugeta, Kassa Habtemariam, *Opportunities and challenges for sustainable production and marketing of gums and resins in Ethiopia* CIFOR (Center for International Forestry Research), February 2011.

454 In 2007 the Ethiopian Forestry Action Programme (EFAP) was issued alongside the Forest Development, Conservation and Utilization Proclamation (542/2007), but no a Federal Forest Act has been declared to facilitate the implementation. The proclamation of 2007 recognises the importance of community management and the links between livelihoods and environmental resources. The EFAP represented the first attempt to systematically address the development needs of forestry sector, but was left largely unimplemented, following the decentralization of the country (Melaku 2008). Forestry sector is represented at federal level just by 3 foresters under the Sustainable Land and Watershed management sector of Ministry of Agriculture and Rural development. Conversely, interest in forestry at regional level has grown and new management regimes have been established in Oromia, that has the largest forest resource in the country. The base of the current legal framework guiding the use of forest resources are represented by the Environmental Protection Organs Establishment Proclamation (295/2002), the Environmental Impact Assessment Proclamation (299/2002) and the Environmental Pollution Control Proclamation (300/2002). Regional government administration hold authority over land in Ethiopia. The authorities in Oromia have issued their own forest legislation, but not the Somali state. In Oromia authority over forest lies with the Rural land and Natural resources Administration Authority, that is in practice the regional arm of Ministry of Agriculture and Rural Development. In 2003 the Forest Proclamation of Oromia (72/2003) incorporates the communal sense of communal ownership of natural resources, respecting the rights of local communities in managing, developing and utilizing natural resources. In Oromia a forest can be given to a community, responsible for the sustainable use of forest resources and the payment of taxes and licenses, while private investors have different limitations on trees to be planted and protection of local species.
unexploited potential for gum and resins, much more than in other areas of the country where these items are already traded. Boswellia and acacia trees grow up spontaneously, without being planted, in Moyale area; to increase the production of resins and gum, not more planting is needed, just the awareness of the economic potential the collection could provide. Also the target area in Liben zone is very few densely populated.

Therefore the challenges highlighted by the literature concern in my view more the areas where for example tapping technique is performed, the population density is bigger, the farming is more practiced. Also these challenges concern more the traders and the exporting companies, which cannot access to these items without intermediaries and the work of collectors, because of their location. Pastoralist just would need to continue in their life style, if they like it, but knowing that they can easily find someone to whom sell resins and gum, possibly kept in a good quality to find a better price.
CHAPTER 6 – The Value chains analysis

6.1 Introduction: the value chain
This chapter analyses the value chain of gum and resins in Moyale area, and in particular the methodology that was utilised, its application and the results. A value chain survey was carried out to obtain a detailed understanding of the actors, activities and costs related and associated services, to the flow of gum and resins. This value chain started the analysis from the collection level, represented by pastoralists in Moyale area until the final exporting phase, with buyers in Addis Ababa. It identified the links among the different actors and the number of transactions that occurred between collectors and final buyers. The value chain operated over different spatial domains and considered different kinds of buyers, with specific requirements regarding price and quality.

At each stage in the value chain (meaning at every transaction points), resins and gum changed hands. At each transaction, costs were incurred and some form of value was added. Value addition may include simple tasks, as cleaning, weighting, grading, bagging, but could also include moving and transporting the product, packing, processing, etc. The coordination between the different stages of the value chain was an important focus of this study. The analysis of every chain step was performed in order to explore the efficiency of actors along the chain and also to describe the various activities and market channels. Through them, products are delivered to buyers, who then become the sellers in the following step.

The demand was an important preliminary consideration in this value chain analysis, because the interest in investigating gum and resins came after having verified the availability of these products in the local areas and the high demand both at domestic and international levels: the demand of gum and resins is still higher than the supply.

6.2 The methodology
6.2.1 Methodological instruments
In order to gather information, this value chain analysis was dealt with as an analytical stage and this implied a participatory approach. In particular I employed the rapid market appraisal method (RMA), developed by Holtzman (2002). This method relies on semi-structured informal interviews with key informants, who are knowledgeable observers, and with a sample of participants at the different stages of the chain. A key informant was defined as any

person with expert knowledge on some specific area of information related to the value chain, even if he/she was not directly involved in the market chain operations. The selection of the informants was a very important phase: a small sample was chosen at each stage of the market chain analysis. The sampling was carried out not only for informants and interviewed people but also in terms of geographical areas. Therefore, the interview approach allowed gathering primary information from several value chain actors and key informants.

The basic instrument to carry out the interviews in order to collect primary data was the elaboration of a questionnaire (Annex 1), that was designed to be modified for different kinds of informants. The questionnaire covered important topics and sub-topics, as prices, quantities, quality, previous seller, customers, seasons, etc. It was used as a starting point, a sort of guideline that helped to make interviews more consistent and systematic. By carrying out this survey, other targeted questionnaires were designed, to be utilized while interviewing specific kinds of informants, such as the woreda line departments and officers from natural resources and finance offices. Information provided by interviewed people was cross-checked with information from other key informants, and with other people replying to the same questions. In particular, the mirroring procedure was utilized: cross-checking was done by asking similar questions to actors at different levels of the market chain. Another procedure utilized was the triangulation which relies on different market actors at the same point of the chain and consists in comparing responses from them. This method was followed taking into consideration that interviewed informants at the same stage in the value chain may be from different kebele/villages and this can cause different responses (geographical heterogeneity).

The followed methodology is a combination of primary data, collected by interviewing the value chain actors and the key informants, and secondary data, collected by discussing with representatives from other humanitarian organizations, governmental institutions, such as the woreda line department and reviewing the relevant literature. To carry out this study and identify strengths, weaknesses, opportunities and threats, other important methodological means were used, such as participant observation and the employment of appropriately skilled local community members as translators and cultural facilitators. An interesting intermediary role was played by the cultural facilitators, recruited to make the interviews possible not only from the linguistic point of view, but also the cultural one. These cultural facilitators were indigenous to the surveyed areas, they had a pastoral backgrounds and they contributed by recognizing constraints and opportunities identified by the informants.
6.2.2 Implementation of the methodology

Before carrying out this survey, some judgments were made concerning the spatial references of the study. The options were to consider just the local markets and so conducting the market chain analysis within the boundaries of Moyale area, or to extend the understanding of the market chain beyond these boundaries. I decided to follow the second option, even if it was quickly observed that the process became more complex and costly the further the distance from the collection area. It was also noticed that passing through the different steps of the chain, until becoming close to the final buyer in Addis Ababa, the complexity of some sub-sectors (or stages) of the chain increased, because these are characterized by a multiplicity of supply chains and products. As the analysis became more distant from collectors, their level of participation decreased and the interest to reply from informants and value chain actors was reduced. This was the case, for example, with interviews done with some traders and transporters in Moyale town. They were unsurprisingly quite reluctant to provide information on certain sensitive issues, such as their quantity of business.

The objective of this research is not to demonstrate how to generally improve the value chain of gum and resins. Instead the aim is to verify which strategies and benefits collectors may gain from the value chain and also to discuss ways to improve their position within the chain, in order to decrease their vulnerability during dry times and promote their livelihood strategies and food security. The survey was performed in local situations, starting from collection points and local markets, to verify the availability of products and price trends. The interviews phase was conducted in small groups, usually formed by two people (not more than three), since topics and methods of the survey were conducive to discuss sensitive information, as prices, quantities sold, supplies, profit, etc.

During the interviews, not only were the questions written in the questionnaire asked, because other issues came out by curiosity and by gaining a deeper knowledge of the topic. Therefore other questions were asked, when it felt relevant and these proved to be very useful in pursuing the survey objectives. It also focused attention on control replies in a cross way like already described. When the cross control method was used and provided incoherent outputs, more details were then asked. Physical facilities were also visited, such as post collection handling, stores, open shops, retailers’ points, markets, etc. This was done to observe actors’ usual practices and performance of marketing functions. Every interview was accompanied by a site or field visit, as they were carried out in the location where the interviewed person usually operated. After every interview, the relevance of the gained information was analysed. Moreover, how to improve the survey methods was discussed with the facilitators, based on
recently gained experience and cultural considerations. In particular the needed adjustments were discussed to receive more exhaustive information and avoid the informants get suspicious or bored during the interviews. Before accomplishing the fieldwork, some preliminary findings were analysed, in order to try to present tentative figures, hypotheses, elucidate ambiguous points and try to clarify them, and fill in the gaps with experience and knowledge of local trading systems. This exercise was useful for constructing a clearer and broader picture, and to compare different situations and adapt relevant strategies. The following table reports the number of interviews performed in the different villages/kebele, the characteristics of the informants and the date of the interview:

**Table 7. Number of the interviews performed and characteristics of the informants**

<table>
<thead>
<tr>
<th>No</th>
<th>Village/kebele &amp; Woreda</th>
<th>Characteristic of the informant</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chilanko, Moyale Somali</td>
<td>Retailer</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>2</td>
<td>Chilanko, Moyale Somali</td>
<td>Collector</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>3</td>
<td>Dibe, Moyale Somali</td>
<td>Collector</td>
<td>19 Feb 2008</td>
</tr>
<tr>
<td>4</td>
<td>Dibe, Moyale Somali</td>
<td>Retailer</td>
<td>19 Feb 2008</td>
</tr>
<tr>
<td>5</td>
<td>El Der, Moyale Somali</td>
<td>Retailer</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>6</td>
<td>El Gof, Moyale Somali</td>
<td>Collector</td>
<td>19 Feb 2008</td>
</tr>
<tr>
<td>7</td>
<td>El Gof, Moyale Somali</td>
<td>Retailer</td>
<td>19 Feb 2008</td>
</tr>
<tr>
<td>8</td>
<td>El Kur, Moyale Somali</td>
<td>Retailer</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>9</td>
<td>Galgalu, Moyale Somali</td>
<td>Retailer</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>10</td>
<td>Haigudda, Moyale Somali</td>
<td>Retailer</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>11</td>
<td>Haigudda, Moyale Somali</td>
<td>Collector</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>12</td>
<td>Harshilmi, Moyale Somali</td>
<td>Retailer</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>13</td>
<td>Jarra, Moyale Somali</td>
<td>Retailer</td>
<td>21 Feb 2008</td>
</tr>
<tr>
<td>14</td>
<td>Kadaduma, Moyale Somali</td>
<td>Retailer</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>15</td>
<td>Kadaduma, Moyale Somali</td>
<td>Retailer</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>16</td>
<td>Udeth town, Udeth</td>
<td>Woreda Agriculture Office Head</td>
<td>24 March 2008</td>
</tr>
<tr>
<td>17</td>
<td>Bokuluboma, Moyale Oromia</td>
<td>Retailer</td>
<td>28 Feb 2008</td>
</tr>
<tr>
<td>18</td>
<td>Bokuluboma, Moyale Oromia</td>
<td>Retailer</td>
<td>28 Feb 2008</td>
</tr>
<tr>
<td>19</td>
<td>Dhas town, Dhas</td>
<td>Retailer</td>
<td>20 March 2008</td>
</tr>
<tr>
<td>20</td>
<td>Dubluck, Dire</td>
<td>Trader</td>
<td>21 March 2008</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Position</td>
<td>Date</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>21</td>
<td>Dubluck, Dire</td>
<td>Trader</td>
<td>21 March 2008</td>
</tr>
<tr>
<td>22</td>
<td>Erder, Moyale Oromia</td>
<td>Retailer</td>
<td>17 March 2008</td>
</tr>
<tr>
<td>23</td>
<td>Gayo, Moyale Oromia</td>
<td>Retailer</td>
<td>20 March 2008</td>
</tr>
<tr>
<td>24</td>
<td>Gofa, Moyale Oromia</td>
<td>Retailer</td>
<td>20 March 2008</td>
</tr>
<tr>
<td>25</td>
<td>Guchi, Moyale Oromia</td>
<td>Retailer</td>
<td>17 March 2008</td>
</tr>
<tr>
<td>26</td>
<td>Mega, Dire</td>
<td>Natural Resources Line Department Dire Woreda</td>
<td>28 Feb 2008</td>
</tr>
<tr>
<td>27</td>
<td>Mega, Dire</td>
<td>Retailer</td>
<td>28 Feb 2008</td>
</tr>
<tr>
<td>28</td>
<td>Wachile</td>
<td>Retailer</td>
<td>20 March 2008</td>
</tr>
<tr>
<td>29</td>
<td>Moyale</td>
<td>Revenue Collector Moyale Somali Woreda</td>
<td>25 March 2008</td>
</tr>
<tr>
<td>30</td>
<td>Moyale</td>
<td>Trader’s agent</td>
<td>18 Feb 2008</td>
</tr>
<tr>
<td>31</td>
<td>Moyale</td>
<td>Retailer</td>
<td>18 Feb 2008</td>
</tr>
<tr>
<td>32</td>
<td>Moyale</td>
<td>Vendor in the market</td>
<td>18 Feb 2008</td>
</tr>
<tr>
<td>33</td>
<td>Moyale</td>
<td>Vendor in the market</td>
<td>18 Feb 2008</td>
</tr>
<tr>
<td>34</td>
<td>Moyale</td>
<td>Natural Resources Expert Moyale Somali Woreda</td>
<td>13 March 2008</td>
</tr>
<tr>
<td>35</td>
<td>Moyale</td>
<td>Natural Resources Officer Moyale Oromia Woreda</td>
<td>3 March 2008</td>
</tr>
<tr>
<td>36</td>
<td>Moyale</td>
<td>Trader</td>
<td>27 Feb 2008</td>
</tr>
<tr>
<td>37</td>
<td>Moyale</td>
<td>Trader</td>
<td>27 Feb 2008</td>
</tr>
<tr>
<td>38</td>
<td>Moyale</td>
<td>Trader</td>
<td>10 March 2008</td>
</tr>
<tr>
<td>39</td>
<td>Moyale</td>
<td>Transporter</td>
<td>27 Feb 2008</td>
</tr>
<tr>
<td>40</td>
<td>Moyale</td>
<td>Trader’s agent</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>41</td>
<td>Moyale</td>
<td>Vendor in the market</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>42</td>
<td>Moyale</td>
<td>Vendor in the market</td>
<td>20 Feb 2008</td>
</tr>
<tr>
<td>43</td>
<td>Yabelo</td>
<td>Exporting Company branch manager</td>
<td>17 May 2010</td>
</tr>
<tr>
<td>44</td>
<td>Addis Ababa</td>
<td>Governmental Exporting Company general manager</td>
<td>30 May 2010</td>
</tr>
</tbody>
</table>

6.3 Resins and gum value chain

6.3.1 General outputs

The survey was carried out in:

- Moyale Somali woreda (Somali regional state)
- Moyale Oromia woreda (Oromia regional state)
- Dhas and Dire woreda (Oromia regional state)
Firstly, a general value chain analysis was elaborated, including all the four just mentioned woreda. Following this, two other value chain analyses were identified and described, dealing with the above mentioned woreda separately. One is concerning the Moyale Somali woreda and the second the Dhas/Dire woreda. Woreda of Dhas and Dire were managed in one value chain, because stakeholders from these two areas were strictly linked (Dhas woreda was part of Dire woreda until the year 2007). Regarding Moyale Oromia woreda, some stakeholders after two stages within the chain enter into the Moyale Somali woreda value chain, while others enter into the Dhas and Dire woreda value chain. Therefore Moyale Oromia woreda was not analysed as a separate value chain.

The following figure shows the first analysed value chain, concerning all the four woreda.

Figure 6 – Resins and Gum Value Chain in Moyale Somali Woreda, Moyale Oromia Woreda, Dhas and Dire Woreda
The main actors of the chain are:

- Pastoralists/collectors
- Retailers, cooperative members, collection points in villages and kebele
- Traders’ agents
- Traders in local markets
- Local retailers in up-country (most of all Addis Ababa) and national export companies

As shown from interviews and data analysis, pastoralists collect resins and gum from trees mainly while moving with livestock, then they transport these items to be sold, to shop retailers or cooperatives’ members, that are based in the kebele centres/villages. The traders agents come periodically in each kebele where the collection point is located, to bring the resins and gum and transport them by truck to the two main local markets: Moyale (Moyale Somali woreda) and Dubluk (Dire woreda). In Moyale there are three traders, while in Dubluk there are only two.

Resin and gum that reach the Moyale market are from Guchi kebele (Moyale Oromia Woreda), from Moyale Somali Woreda and Hudet Woreda villages, while resins and gum reaching Dubluk market are from Gofa kebele (Moyale Oromia Woreda) and from Dhas and Dire Woreda villages. From Moyale and Dubluk markets, resins and gum reach for the 90% of the cases the Ethiopian exporting companies that then sell abroad the raw items, and in the 10% of the cases the local markets in up-country, mainly Addis Ababa.

The general outputs of this value chain concern different aspects. The input to collect/sell resins comes in most of the cases from the following stakeholder in the value chain. The trader asks the retailers in kebele to buy gum and resins for resale. The retailers in kebele also ask the pastoralists to collect resins and deliver them. The stakeholder who asks to collect resins is also the same person who then decides the price to be paid for the resins and gum. Actually this price, or at least within a certain price range, is agreed upon in many cases before the collection is undertaken. All stakeholders in the chain make profits from buying and selling resins, and the income gained by each stakeholder rapidly increases while climbing the chain. This because the number of involved stakeholders promptly decreases at each step of the chain, compared to the number of stakeholders in the previous step and simultaneously the available quantity of resins is augmented. For example, at the first step of the chain it is possible to meet between 50 to 600 pastoralists/collectors who meet at the same
kebele weekly, while at the second step the number of retailers varies from 2 to 20 per kebele and in some cases only one per kebele. Finally there are only two or three traders in the local markets of Dubluk and Moyale and at this stage the chain has already entered the woreda level. The final destination of the gum and resins is in the hands of national retailers up-country to be locally sold (in very small portions), or mostly within national trading companies to be sorted and then exported. Some kinds of resins are very suitable for exporting, while the poor quality resins remain within the Ethiopian markets. Gum is the typical example of a consistently exported item.

Importantly, all the resins collected in every step of the chain are then resold: resins trading doesn’t experience any unsold quantities, including the poor quality resins. Moreover traders, agents and retailers direct their efforts to encourage pastoralists to collect as much as possible, since the supply is still less than the demand.

The availability of resins and gum varies consistently throughout different seasons. In the rainy season resins are washed away from trees, so the quantity available decreases. The gum completely disappears, because it becomes black and liquid when it comes in contact with water, loosing all its chemical characteristics that make it a special product and becomes permanently damaged. During the rainy season, the other resins can also get spoiled and their quality generally decreases.

The amount of resins sold to traders in the Moyale market decreases to around 40-50% and in Dubluk to 70-80%. This difference between the two markets may be explained because in the rainy season pastoralists from Oromia side (Moyale, Dire and Dhas woreda) feel less impetus to collect resins, than on the Somali side. As already mentioned in previous chapters, in Oromia the livelihoods are also based on farming activities, for a quite small portion of total income, while this aspect is absent on the Somali side. Moreover, it has been noticed that in Moyale Somali woreda, pastoralists are more aware of the importance to collect resins and gum than in Oromia; the area is very large and access is very difficult, so the potential for improvement is still great. Finally, cultural considerations, more fully explained in the following paragraphs, play a role to discourage the resins’ collection in Oromia.

As reported by informants, the dry season is the best time to collect gum and resins, on the other side if the rainy season fails, resin production drops. Trees produce resins if they receive sufficient rainfall and when they are healthy. Trees grow with rain: if they do not receive enough rain, they will not grow properly and they will not produce a decent amount of resin.
6.3.2 Moyale Somali Woreda Value chain analysis

6.3.2.1 Political and geographical characteristics

Moyale Somali woreda is situated in the southern part of Ethiopia. It borders with Kenya on southern and south-eastern side while on north it shares the boundary with Hudet Woreda and Liben Woreda. In the east, it borders with Dolo Odo and Liben and in the west with Oromia Regional State. The total population is 254,237 people (138,790 male and 115,447 female)\textsuperscript{456}: 85% of them are pastoralists. The total area of Moyale somali woreda is 14.547 km\textsuperscript{2}, with a density of 17,47 habitants per km\textsuperscript{2}\textsuperscript{457}. The altitude is between 700 m (Jara kebele) and 1300 m (Galgalu) above sea level. The dominant soil type is the red sandy soil. The majority of the area is classified as dry lowlands. The temperature varies from 20°C to 27°C. The lowest temperatures have been recorded in El-Gof and Galgalu areas. Resin production is bigger in areas covered by bush and dense bush. The soil types within the woreda, where resins are produced are: orthic haplic calcisols, orthic eutric cambisols, orthic chroic cambisols, orthic eutric fluvisols\textsuperscript{458}. As reported by the WIDP\textsuperscript{459}, incense is one of the three most important natural resources of the Woreda, as gold and timber.

6.3.2.2 Resins and gum value chain

Figure 7 - Moyale Somali Woreda Resins and Gum Value Chain

\textsuperscript{457} Woreda Integrated Development Study, section 3, Appendix 3.1 & 3.2.
\textsuperscript{458} Pastoral GIS Atlas of Liben Zone Somali Regional State USAID Save the Children LVIA COOPI EU, July 2007.
Products collected and brought in the villages by pastoralists are purchased by different local retailers in the kebele. The traders’ agent is based at the kebele level and after having bought a defined amount of resins and gum, they are transported to the local market in Moyale. Here there are three traders who sell resins mainly to national companies based in Addis Ababa and Nazareth, to be exported. Agarsu is a resin product that initially was considered to be assessed within the value chain, but it was quite difficult to follow up its final destination as already explained in chapter five. Agarsu, after the collection, doesn’t remain inside the country, but from pastoral Moyale Somali villages it is brought directly to Kenya, passing the border by smuggling, without reaching Moyale. An issue that Moyale Somali Woreda is facing is actually the illegal cross-border trade, that concerns also the Agarsu. There are 44 kebele in Moyale woreda. Kebele from where resins and gum are collected and then sold to traders in Moyale are showed in the following table.

Table 8. Kebele of Moyale Somali woreda, from which resins and gum are collected

<table>
<thead>
<tr>
<th>N.</th>
<th>Kebele’ name</th>
<th>Sampled kebele</th>
<th>Distance from Moyale/ hours to reach the kebele from Moyale</th>
<th>Population in 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Galgalu</td>
<td>X</td>
<td>187 km / 5 hours</td>
<td>7,088</td>
</tr>
<tr>
<td>2.</td>
<td>Chilanko</td>
<td>X</td>
<td>150 km / 4 hours and half</td>
<td>20,250</td>
</tr>
<tr>
<td>3.</td>
<td>Jara</td>
<td>X</td>
<td>125 km / 4 hours</td>
<td>6,750</td>
</tr>
<tr>
<td>4.</td>
<td>Sororo</td>
<td></td>
<td>112</td>
<td>6,750</td>
</tr>
<tr>
<td>5.</td>
<td>El- Der</td>
<td>X</td>
<td>100 km / 3 hours and half</td>
<td>8,775</td>
</tr>
<tr>
<td>6.</td>
<td>Majire</td>
<td></td>
<td>110</td>
<td>6,750</td>
</tr>
<tr>
<td>7.</td>
<td>Hay Gudda</td>
<td>X</td>
<td>207 km / 5 hours and half</td>
<td>6,953</td>
</tr>
<tr>
<td>8.</td>
<td>Kadaduma</td>
<td>X</td>
<td>90 km / 3 hours</td>
<td>13,500</td>
</tr>
<tr>
<td>9.</td>
<td>Beede</td>
<td></td>
<td></td>
<td>7,898</td>
</tr>
<tr>
<td>10</td>
<td>Har shilmi</td>
<td>X</td>
<td>120 km / 3 hours and 45 min</td>
<td>2,228</td>
</tr>
<tr>
<td>11</td>
<td>El-Kur</td>
<td>X</td>
<td>83 km / 3 hours</td>
<td>7,297</td>
</tr>
<tr>
<td>12</td>
<td>Har Dure</td>
<td></td>
<td>112 km</td>
<td>2,633</td>
</tr>
<tr>
<td>13</td>
<td>Dibe</td>
<td>X</td>
<td>55 km / 1 hour and half</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>Dodo</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>El-Gof</td>
<td>X</td>
<td>42 km / 1 hour</td>
<td>13,534</td>
</tr>
<tr>
<td>16</td>
<td>Katama</td>
<td></td>
<td>60 km</td>
<td>6,705</td>
</tr>
<tr>
<td>17</td>
<td>Hawan</td>
<td></td>
<td>174 km</td>
<td>2,018</td>
</tr>
</tbody>
</table>

460 By car and during dry season, as performed during the survey.
461 This kebele is habited by Dogodia people.
It was possible to draft the list of these kebele by consulting the relevant literature, in particular the WIDS (Woreda Integrated Development Study), by interviewing a Moyale Somali Woreda Natural Resources expert and by the knowledge of the facilitators, employed for this survey. The choice of the sampled kebele was carried out, respecting the following criteria:

- Sampled kebele were chosen in order to try to cover all the extensive of Moyale Somali Woreda area. I tried to not arrange a concentrated sample, but to reach all the different areas of the Woreda, in order to be comprehensive as much possible. In figure 3, the red dots show the surveyed kebele.

The following figure shows the map of Hudet and Moyale Somali Woreda. The border between them is identified by a black dotted line. The red points highlight the surveyed kebele in the Moyale Somali Woreda.

![Figure 8 – Hudet and Moyale Somali Woreda Map](image)
The survey was carried out on the Somali side in the month of February 2008, when the drought had already started. The most affected kebele, such as Dodo and Boji, were not included in the sample area for two reasons. The first reason is that people were not interested in replying to survey questions while they were facing emergency situations and the second one was that in those kebele the majority of the habitants had already moved away. Furthermore, because of the drought pastoralists weren’t collecting and selling resins around these kebele.

### 6.3.2.3 Availability of incense

In the following table the available products for every sampled kebele is reported and their availability during the rainy season compared to the dry season, as was discovered during the interviews.

<table>
<thead>
<tr>
<th>N</th>
<th>Kebele</th>
<th>Available items</th>
<th>Quantity the interviewed retailer sells per month and number of incense retailers in the kebele</th>
<th>Availability in rainy season, compared with dry one</th>
<th>Price trend trough seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Galgalu</td>
<td>- Black Incense - Agarsu</td>
<td>- 1000 kg - 20 kg 20 retailers&lt;sup&gt;464&lt;/sup&gt;</td>
<td>Black incense production decreases by 60-70%. Agarsu is not available.</td>
<td>Prices stay constant through dry and rainy seasons.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Agarsu</td>
<td>- 5,6 kg&lt;sup&gt;465&lt;/sup&gt; - 20 kg 8 retailers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Chilanko</td>
<td>- Black Incense - Agarsu - Gum</td>
<td>- 200-300 kg - 20 kg</td>
<td>Black incense production decreases by 50%. Agarsu production decreases by 60-70%. Gum is not available.</td>
<td>Prices stay constant through dry and rainy seasons.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Agarsu</td>
<td>- 6 kg&lt;sup&gt;465&lt;/sup&gt; - 20 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Gum</td>
<td>- 20 kg 8 retailers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Jara</td>
<td>- Black Incense - White Incense</td>
<td>- 600 kg - 150 kg</td>
<td>Black incense production decreases by 40%.</td>
<td>Black price decreases by 50%.</td>
</tr>
</tbody>
</table>

<sup>462</sup> Data refer to the current dry season, which was particularly difficult because of the drought.

<sup>463</sup> Data refer to the fact that items’ prices could change during rainy season, according with items’ availability. Many retailers in kebele said that the prices are sometimes more dependent on the demand in town, expressed by traders, than on the seasons.

<sup>464</sup> In Galgalu there are 20 retailers, selling only black incense, just the interviewed one, as cooperative member, sells also agarsu; the quantity of black sold by other retailers is much less than that one sold by the cooperative.

<sup>465</sup> The cooperative produces 800 kg of black incense and 20 kg of Agarsu per month.
| 4 | El-Der | - Black Incense: 75 kg | - White Incense: 45, 50 kg | - Agarsu: 10, 15 kg | - Gum: 30, 35 kg |
|   |        | 7 retailers            |                          |                    | 8 retailers     |
|   |        |                        | Black, White incenses   | and Gum are not    |                |
|   |        |                        | and Gum are not        | available.         |                |
|   |        |                        | Agarsu production      | decreases by 60%.  |                |
|   |        |                        | decreases by around 20% |                |                |
| 5 | Hay Gudda | - Black Incense: 150 kg | - Agarsu: 20 kg | - Gum: 25 kg | 20 retailers |
|   |        |                        | Black incense and Agarsu| production decreases by 50%. |        |
|   |        |                        | Gum is not available.  |                |                |
|   |        |                        | Prices stay constant   | through dry and rainy |        |
|   |        |                        | seasons.               |                |                |
| 6 | Kadanuma | - Black Incense: 50 kg per month of every | - White Incense: 20 kg | - Agarsu: 900 kg | 20 retailers |
|   |        | product | - Gum: 20 kg | | |
|   |        | No items are available | | | |
| 7 | Har Shilmi | - Black Incense: 1000 kg | - White Incense: 8 kg | - Agarsu: 20 kg | - Gum: 900 kg |
|   |        | 3 retailers | - 468 | - 469 | - 470 |
|   |        | | | | |
| 8 | El-Kur | - Black Incense: 600 kg | - Agarsu: 50 kg | - Gum: 500 kg | 5 retailers |
|   |        | | | | |
| 9 | Dibe | - Black Incense: 400 kg | - Agarsu: 100 kg | - Gum: 1000 kg | | |
|   |        | | | | |

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466 Two retailers were interviewed: one buying just from pastoralists (data in the table), while the other one is the agent of the traders. The agent from Kadanuma sells 2000 kg of Agarsu, 15000 kg of gum, 1000 kg of black and 200 kg of white, after having bought both of them from retailers in El Kur, Katama, Boji, Erresteno (Kenya), Sake (Kenya) and Kagaba (Kenya).

467 They sell most of their resins to the biggest retailer of Kadanuma, who is also the agent of traders in Moyale.

468 If good dry season, the production could be also doubled.

469 In good dry season, up to 200 kg per month.

470 In good dry season, also 10,000 kg per month.

471 In normal dry season (around 3 months), when there isn’t drought, he sells 2000 kg of black incense, 400 kg of Agarsu and 5000 kg of gum.
Black incense is available in every sampled kebele, as well as Agarsu and gum, the last one not available in Galgalu. As reported by the informants, black incense is also the most rain resistant product. During the rainy season, not only the quantity, but also the quality of gum and resins decreases. Because of this, it would be expected to be sold at a lower price, but at this stage of the chain and just in some kebele, the high and constant demand of resins keep the price at the same level during both the rainy and the dry seasons. During the rainy season however, the frequency of travels of the trader’s agents in the kebele is less than during the dry seasons.

Prices stay constant mainly in Galgalu, Chilanko, Hay Gudda and Har Shilmi. These four kebele are the furthest, out of the sampled ones, from Moyale town. They are also quite isolated from the main market. Only in few kebele, during the rainy season, the price decreases, from 20% to 50% and in particular the price of black incense decreases more than that one of Agarsu. The price of white incense keeps constant through different seasons\(^{472}\).

### 6.3.2.4 Actors

The stakeholders of this value chain and their characteristics are described in this paragraph. They are:

- Pastoralists/Collectors
- Local Retailers (kebele)
- Traders’ agents
- Traders in Moyale
- Local markets in up-country and National Trading Companies

1. Pastoralists/Collectors

Resins and gum are collected by pastoralists from trees. The trees are usually in lowland areas and scattered on very steep and remote slopes, which makes their harvesting very difficult.

\(^{472}\) The price of white incense remains constant because its quantity is always small compared to the demand.
Collectors looking for resins are in particular the poorest pastoralists, who don’t gain enough income from their livestock. Usually people collecting resins live at the subsistence level, they are the most affected by climatic emergencies and animal deaths. Collecting resins is therefore for them an important way to generate income and avoid extreme measures as selling livestock at low prices and loosing their potential products. Main katana/small villages where resins and gum are collected, are indicated in the following table:

**Table 10. Villages from where resins and gum are collected**

<table>
<thead>
<tr>
<th>Kebele area</th>
<th>Katanas where pastoralists collect resins and gum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilanko - Jara</td>
<td>Qarari Bachara, Tille Dertu, Wal Wal, Ires Jibbo, Marares, Nanaw Gofo, Marbitan, Jilal Gamo, Wangay Rako, Dakadima</td>
</tr>
<tr>
<td>El Gof - Dibe</td>
<td>Sowle, Allogirafu, Kubi Guba, Dokatu, Tuma, Afura, Raaro, Facho, Mata Arba, Gule, Har Adi, Dakawata, Falti, Tille</td>
</tr>
<tr>
<td>Har Shilmi – El Kur</td>
<td>Dakal, Abbagobe, Hargala, Boji</td>
</tr>
<tr>
<td>Galgalu – Hay Gudda</td>
<td>Buke, Mader Ale, Uran Ur, Saddeti, El Nyapo, Did Dadacha, Hay Badada</td>
</tr>
<tr>
<td>Kadaduma</td>
<td>Wal Mar, Kabai, Koyetti, Karale, Gobolle, Lanole, and in Kenya side: Erresteno, Sake and Gagab</td>
</tr>
</tbody>
</table>

Pastoralists go out looking for resins alone or more often in groups, involving their families and relatives. In some cases the whole family (wife and children) is involved in the collection, especially the women collect near their houses. Most of the pastoralists collect resins and gum while they are moving with animals, such as camels and cattle, but some of them go out purposely to collect: in this last case they can spend more than two consecutive weeks in the collection activity, before reaching the selling location. Pastoralists who make this kind of choice, don’t have surplus animals or they have just few, so they can be looked after by other family members. An important role is played by children, because they help their family herding animals and at the same time searching for resins. Herding animals and collecting resins are two activities that can be carried out at the same time: places where resins are collected are the same pastoral areas where livestock graze, so while collecting, animals are not neglected. This is important, because both of the activities are income generators and collecting resins can easily match the income from livestock herding.
Pastoralists bring resins and gum in kebele centres, by manpower (loading them on their back) or by animals (donkeys and camels) depending on quantities and distances. Up to five-six kilos of product, they deliver by manpower (short distance), whereas if the quantity is bigger and the distance covered longer, they deliver resins by use of pack animals. Normally, they spend from two to five days collecting before reaching the kebele, to sell the items to retailers. Usually pastoralists sell resins in the same villages, where they know that they can find the buyers. For collecting resins they move on far distances and in different areas, up to 20 km per day, whereby for selling resins they don’t need to look for villages, but just stop in a familiar one. Here they can meet from two to seven retailers, who buy all the quantity that pastoralists bring to the village.

Pastoralists feel that they do not have other selling options: usually pastoralists are not aware of other retailers who buy incense. They say that if they could find someone else buying at a better price, they would like to sell to him, but they only know the people to whom they sell in that kebele. On the other hand, they reported that while travelling, they met other retailers, but usually they preferred to sell to the same people, to have a guaranteed market, since the number of pastoralists collecting resins is very high compared with the purchasing retailers in kebele. Sometimes collectors reach the kebele on daily basis, especially when the demand for resin is high. The quantity they can provide during the rainy season is less than during the dry one, and so is the income. Moreover, the transport to Moyale becomes difficult to some kebele, because the roads are less accessible. Pastoralists who sell resins obtain variable incomes. Incomes gained by pastoralists are also influenced by the geographical area of collection. The further the kebele/village is from the main market (meaning Moyale town), the smaller the price pastoralists can obtain. For example in Hay Gudda resin price is very low, while in El Gof the price can increase up to five times more.

Few pastoralists clean resins before selling them, so the main value added by pastoralists in the chain of resins and gum is the collection and the transportation of resins from the bush to the kebele. Usually, before paying resins to pastoralists, the retailer cleans, removes sand, tree particles and stones, and then weighs the resins, before paying the final price of the cleaned resins. Pastoralists, before selling, keep resins in plastic bags, usually they don’t have a place to store them, so they can only keep resins/gum for maximum four-five days. To collect resins and gum, they don’t use protective materials, but just hands and simple tools, such as an axe if the resin/gum is hard or a stick with a hook. Pastoralists don’t face any kind of monetary cost while performing this activity, because plastic bags are provided by retailers, moreover they don’t utilise any specific tools while collecting, neither do they have transportation or storage.
costs. Pastoralists simply decide that it is cost-effective to utilise some of their time for performing this activity.

Collecting resins for sale is for most of the interviewed pastoralists quite a recent phenomenon. Usually they started three-four years before the date of the interviews, to have an additional source of income other than livestock. They started to collect resins for sale after the suggestion of retailers, to whom then they sell the items. Other collectors reported that, while moving around, they saw other pastoralists gaining income from this activity and therefore they started to follow their example. Pastoralists believe that collecting resins is an important additional income source for their family. In particular during the dry season collecting is very important, because expenses increase, as cost of water and food, while the income coming from livestock and its by-products decreases. Moreover, during the dry season the quantity of resins that is possible to collect increases, because it is not washed away from trees as in rainy season. With the money collected by selling resins, pastoralists purchased food and basic items in the same village where they sold resins, and they reported as well to pay school fees and drugs for human and animal consumption. Pastoralists sell the resins at the price decided by their buyers. Retailers also identify the quality of the items that affect the final price. Pastoralists usually don’t have enough information to recognise the quality of the collected items. Some of them recognize that the colour is important, but they don’t know all the criteria to make a judgement. For them quality criteria is just a question of what retailers and traders prefer and choose. Pastoralists know which resins are in highest demand, for example gum and white incense are more valued than the black ones, but they reported not to know the reason.

While the number of retailers and traders was quite easy to estimate, the number of pastoralists was more difficult because it was very high, as hundreds per kebele. When asking the Woreda Line Department or speaking directly to collectors, they don’t know how many they are. Moreover, pastoralists move constantly and across far distances, so they collect in different areas. Asking retailers in kebele, they can meet from 10 to 40 pastoralists per day and not the same pastoralists every day. The problems faced by pastoralists while performing the collection of resins concern the long distances covered with the risk of not finding water, especially in dry season: the areas where resins grow are in fact usually remote and hard to access. Some resins’ trees are also high, so it is necessary to climb them, with the risk of falling down. Some trees, like the Sebansa, have thorns, but pastoralists don’t have any protective materials. Finally there is the risk of attack by different kind of insects, while collecting resins on the trees.
2. Local retailers in kebele

Retailers number from two up to twenty in each kebele and they represent the second step of the chain: they buy resins directly from pastoralists, who bring resins and gum back to the village. They don’t go out to collect resins because they report to not have enough time, as they have other business, and the collection activity is hard work. Their main income activity is the shop where also resins are sold, and in most of the cases they own some animals. Most of the times, they receive resins in their villages, without leaving to buy them. Only if few pastoralists transit their area or collectors bring resins in an irregular way, retailers go in other kebele to buy resins and gum. Retailers reported not to know resins and gum prices in Moyale town and in the other villages, because they only met the agents of traders who decided on the price to be paid. Some retailers also tried to go in other kebele to reach better market opportunities and get a better price from traders. This scenario happens when traders’ agents don’t reach the kebele often where the retailer has the shop. Some retailers may get the chance to reach Moyale town and they sell directly to the traders. In this case they can fetch a higher price, but this profit is then consumed to pay the transport. Retailers prefer to trade resins during the dry season, because they are not wet, so they are less heavy and not spoiled.

Retailers in different kebele meet a certain number of pastoralists during the day and this number may vary for different factors. For example, the retailer has a bigger opportunity to meet pastoralists in a kebele where there are good water points for animals during the dry season. Kebele retailers reported that traders decide criteria regarding the good quality of resins and gum: resins’ cleanness is felt as a very important aspect. They also reported that prices are dependant on the demand in town, while the quantity is determined by the season. The main problem they have is that they find it very difficult to bargain on the price established by the traders. Retailers started to trade resins because they had already a shop in the kebele; while visiting other villages or talking with other retailers, they understood the possibility of gaining further profits by selling these kinds of items in their shop. Some of them were also pursued by traders or their agents to sell resins; this is the case mainly with more isolated retailers. Traders’ agents buy from the retailers all the resin they have, since the demand is very high and also they usually suggest to the retailers to increase their contacts with collectors, in order

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473 Any interviewed retailer in kebele has a shop, where he/she doesn’t sell only resins, because trading this item alone is not enough for their own income, so food, grain, sugar, clothes, shoes, soap and other general dry goods for immediate consumption are sold. Usually resins are not the main item traded, and most of all it follows different market channels than other products sold in the shop. The last ones are for local and immediate consumption within the population of the kebele, while resins are bought by traders, to be transported in other areas, as well as outside the country.
to accumulate larger quantities of resins and gum. Selling resins and gums is something recent for this category of stakeholders.

Local retailers in kebele sell resins just to traders and their agents. They don’t have a local market for these items: people in the village collect incense that they need by themselves, so they don’t buy it from retailers. Around the villages there are trees from which it is possible to collect resins, as the land is managed by the community. The added value by retailers is found in the cleaning of resins and gum. They remove sand, stones and tree particles from resins and gum, then they weigh them, pack them in plastic sacs and finally they store them in a storehouse to keep resins and gum away from moisture and humidity. They can do this kind of activity by themselves, without employing other people, but only with the help of relatives. Retailers don’t cover the cost of bags, scales and similar expenses, because this kind of cost is sustained by the trader. If the retailer doesn’t have a storehouse to keep the resins, the rent of such a place is also paid by the trader. Therefore, the amount received by the retailer from trader’s agents can be considered as a net income, after having deducted the payments to pastoralists.

3. Traders’ agents
In every kebele where is possible to find resins, there is an agent who purchases gum and incense for traders of Moyale. Agents are intermediary people, working as a link between kebele and market in town. The duty of the agent is to collect a certain amount of gum and resins and then to transport them to Moyale. The agent is normally based in the field, in order to visit the different kebele. The frequency of the movement to town depends on the requests of traders and on the amount of collected resins. Traders require a certain quantity of gum and resins and when the agent reaches that amount, he delivers resins to town by truck or public transportation. Traders advance money to their agents to buy the desired amount of resins. When agents deliver the resins to Moyale, traders give them more money to continue to buy resins. Between traders and agents there is a trusting relationship and usually agents are not simply employed by traders, but they knew each other already before starting the working relationship and they may be part of the same family or clan. This is a guarantee for the trader that his agent will behave in a proper manner and he will not waste money.

Agents earn 0.50 cents birr for each kilo of product delivered to the trader, without any distinction if it is gum or black incense\textsuperscript{474}. If the demand is high and the trader requests more

\textsuperscript{474} In February 2008, 1 Euro was equal to 13,65 birr, while one USD was equal to 9, 20 birr. In February 2012, 1 Euro was equal to 22,40 birr and 1 USD was equal to 17, 14 birr.
incense in a short period of time, the trader can pay the agent up to 0.80 cents per kilo, to get him to buy quickly. Agents don’t face any costs, neither the transport costs that are paid by the trader, so their net income is from 0.50 to 0.80 birr per kilo provided.

Agents are more aware regarding quality issues than kebele retailers and pastoralists, because they work directly for traders, therefore the main criteria of good quality resins were well explained to them.

The presence of agents didn’t come out during the interviews in the villages and kebele, but during the interviews with traders in Moyale. The agents were considered to be traders by the interviewed retailers in the villages. Only in Kadaduma village, where around 20 pastoralists sell resins regularly, during the interview it was reported that every retailer of that village sells the same quantity of resins at the same price to another retailer based in that village, who then transport resins to town. The evidence and the further investigation suggested that this retailer was assigned by traders from Moyale to buy incense in that area. This retailer was actually buying resins and gum in also other villages around Kadaduma.

The problems faced by retailers and agents are very similar: they need to be very careful about storage issues, to keep clean and in good quality the resins, in particular to avoid them being contaminated by water or with soil and dust. Properly storing resins and gum is more important for retailers than for pastoralists, because they can concentrate bigger quantities of resins and gum before delivering them to traders, and also on different weeks. A second problem for them is that the prices are decided by the traders. Usually the agents don’t know the price paid by traders to other agents in other areas, neither the price traders receive when they sell the resins. Another problem they face is the poor transportation (both roads and means), especially in the rainy season, that could hamper or delay the collection and then the delivery of the gum and resins. Finally some agents who collect big quantities of resins would like to have the trading license to compete with traders and sell directly to trading companies up-country. Most of them report that they don’t know how to obtain the license.

4. Traders in Moyale

Resins coming in Moyale town are not only from Somali Woreda villages, but also from Hudet Woreda villages and Guchi kebele (Moyale Oromia Woreda). All resins and gum reaching Moyale town end up in the hands of three traders. All of them are based in Moyale and, even if they are not associates and partners, they collaborate, for example one trader sells resins to another one on a regular basis. In Moyale there is also a big retailer who has bought resins for the last 14 years from Somali villages, going there directly twice per month using a
rented truck. He buys black incense, white incense, gum and agarsu from his agents and then he store them. Later he sells them to traders in town, except for the agarsu, which is sold in Kenya. His main customer is the biggest trader of Moyale. He sells also salt for animals, as second income source.

Traders have trading licenses that allow them to bring resins outside the Woreda’s borders. For the first registration the license costs 100-150 birr, it is renewable every year, at the cost of 600-800 birr to the Somali Moyale woreda revenue office475. Retailers don’t need to have trading licenses because they sell items that are locally produced, while the trading license is needed for transporting products outside of the Moyale Woreda to other areas of the country. To bring incense/gum outside Moyale it is necessary to pay an additional tax every time resins leave Moyale, which is 8 birr per quintal to the Somali finance office and 1 birr per quintal to the administration office. After this payment, the Somali Agricultural Resources Office releases an allowance letter for transporting resins out of Moyale to be shown at the kella, the customer barrier at the border of the Woreda.

For traders the quality of resins they buy is very important. One of them suggested that NGOs working in the area should organize training for pastoralists to teach them to collect resins properly. Traders complain that collectors allow resins to drop on the soil, because of this the sand enters inside and the resins change colour and lose their shinyness. Moreover, collectors sometimes don’t just collect resins but also the piece of bark where the incense is found, reducing the quality of the resins. If they could be provided with better quality resins, traders stated that they would be able to pay more for each unit of the product.

The largest trader of Moyale buys and sells not only black, white and gum, but also yellow incense, which he takes from Hudet woreda and Jara kebele, on the Kenyan side. His gross revenue for every kilo of product is around 1,5 birr. He buys not only from agents in kebele but also from a retailer in town and from other traders in Moyale, in particular the gum. The origin of resins is anyway the same; Somali villages. He goes by truck to villages every month to collect resins and gums from his agents or his agents bring resins directly to him in Moyale. Once he takes resins and gums, then he evaluates the grade of every product, assessing colour, smell and weight. He stated that he always recommends to his agents to be careful to provide only clean resins.

The most requested product at national level is the yellow incense, which is a myrrh type, and the gum, after which comes the white incense and finally the black incense. He sells black and

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475 1 euro is around 15 birr in the month of March 2008, but it is very variable and the exchange rate euro/birr is decreasing every month: for example in the month of December the exchange rate euro/birr was: 1/13.
white resins to a company named Ganale I.G. Private Ltd, based in Addis Ababa, while he sells gum and yellow incense to Abbebaye cooperative in Nazareth. He is the only representative in Moyale of this Cooperative. The cooperative is managed by people from Tigray and Sudan, African areas with a big production of resins. He transports incense to Nazareth and to Addis Ababa by truck, going there once per month.

He sells during dry season every month 400-500 quintals of black incense, 200 quintals of white incense and 300 quintals of yellow incense. Regarding gum, he exports it abroad directly (he has an exporting license) or he sells it to the Abbebaye Company, around 1000 quintals per month in total. His main income source is from trading resins. He started 25 years before the interview, but he is completely involved in this activity only during the dry season, because both the quantity and the quality decrease in the rainy season.

The problem that he faces is the concurrency of similar products with better quality. There is a lot of incense and gum from other countries and regions like Sudan and the Tigray Region which decrease the demand for resins and gum from Moyale area. Moreover, the quality of the Moyale products is less than those in other places and the federal government is promoting good market advertising for resins coming from Tigray, but not for resins coming from the south of the country. Finally, incense/gum production in the area is strongly affected by cyclic lack of rainfall, that doesn’t allow trees to produce a bigger quantity, nor a better quality.

There is also another trader, who has a partner. The trader buys resins (black incense, white incense and gum) from agents in kebele when they come to Moyale, while the second one transports the resins by truck to Addis Ababa. He stated that during the rainy season the volume of sales reduces by 60%, but he continues to sell resins and gum at the same price. This trader is also very careful about the quality of the resins, however he doesn’t attribute a grade, because his customer is the one who has that function. He has two different customers: he sells black and white incense to a retailer in Addis Ababa, while gum is mainly sold to the biggest trader of Moyale for the international market. He sells from 200 to 400 quintals of gum during all the dry season, while he sells 50 quintals per month of totally black and white incense during the dry season. He has other business too, because trading resins and gums produce a income only on a seasonal basis, therefore he also buys and sells goat skins from Moyale to Addis Ababa, spices and seashells from Kenya to Ethiopia, and beans from Ethiopia to Kenya.

There is a third trader: he exports gum (he has exporting license), while he sells incense (black only) to two governmental companies based in Addis Ababa: Genale and Durmucha.
He buys from the retailers of kebele at the Somali side, Guchi and Hudet. He wasn’t willing to reply to the survey questions and share information concerning his business.

6.3.2.5 Summary

The following table shows the prices and quantity of gum and resins in the Moyale market.

Table 11. Prices and quantities of gum and resins in the Moyale Somali Woreda Value Chain

<table>
<thead>
<tr>
<th>Products</th>
<th>Collectors</th>
<th>Kebele Retailers</th>
<th>Agents</th>
<th>Traders</th>
<th>Price increase from collectors to traders</th>
<th>Quintals produced during dry season</th>
<th>Value in birr of produced items in dry season</th>
<th>Quintals produced during wet season</th>
<th>Value in birr of produced items in wet season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Inc.</td>
<td>3,7</td>
<td>4,8</td>
<td>5,65</td>
<td>6,15</td>
<td>66%</td>
<td>4.500</td>
<td>2.767.500</td>
<td>900</td>
<td>553.500</td>
</tr>
<tr>
<td>White Inc.</td>
<td>6,2</td>
<td>7</td>
<td>9,1</td>
<td>9,6</td>
<td>55%</td>
<td>1.800</td>
<td>1.728.000</td>
<td>360</td>
<td>345.600</td>
</tr>
<tr>
<td>Yellow Inc.</td>
<td>13,5</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>3.600</td>
<td>5.040.000</td>
<td></td>
<td>1.512.000</td>
</tr>
<tr>
<td>Gum sebansa</td>
<td>6,3</td>
<td>7,5</td>
<td>8,3</td>
<td>8,8</td>
<td>40%</td>
<td>3.600</td>
<td>3.168.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gum wacho</td>
<td>4</td>
<td>5,1</td>
<td>5,5</td>
<td>6</td>
<td>50%</td>
<td>5.400</td>
<td>3.240.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agarsu</td>
<td>6</td>
<td>8</td>
<td>9,00</td>
<td></td>
<td>50%</td>
<td>600</td>
<td>540.000</td>
<td>360</td>
<td>324.000</td>
</tr>
<tr>
<td>Total excluding agarsu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18.900</td>
<td>15.943.500</td>
<td>2.340</td>
<td>2.411.100</td>
</tr>
<tr>
<td>Total including agarsu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19.500</td>
<td>16.483.500</td>
<td>2.700</td>
<td>2.735.100</td>
</tr>
</tbody>
</table>

From the table, it is clearly shown that the total quantity yearly sold from Moyale market is 22.200 quintals of resins/gum (21.240 if we don’t include agarsu), with an associate value of 19,218.600 birr (18,354.600 if we don’t include agarsu). This quantity is comprehensive only of resins and gums reaching up-country, while the quantity locally sold is not included (it is a small percentage anyway, around the 5% and it includes mainly black and white incense of poor quality).
The selling price for every stakeholder and every product was calculated as an average value, coming from the information gathered by interviewing people and visiting markets. From this calculation, the few values that were considered statistical outsiders were excluded. This was because they didn’t fit the methodological tools (for example they were not verified during cross-checking, mirror and triangulation procedures) or because the specific geographic characteristics of the kebele where the interview was performed were considered (for example the distance from Moyale town). The price increase from collectors to traders ranges between 40% and 66%. The following table shows the net profit of the largest trader in Moyale.

Table 12. Costs and profit of the largest trader in Moyale

<table>
<thead>
<tr>
<th>Products</th>
<th>Quintals sold per month during dry season*</th>
<th>Selling price in birr per quintal</th>
<th>Price paid per every quintal of raw materials</th>
<th>Variable and fixed costs per quintal**</th>
<th>Total cost sustained by the trader</th>
<th>Net income per quintal (birr)</th>
<th>Total net income during dry season (birr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Inc.</td>
<td>500</td>
<td>600</td>
<td>450</td>
<td>87.02</td>
<td>537.02</td>
<td>62.98</td>
<td></td>
</tr>
<tr>
<td>White Inc.</td>
<td>200</td>
<td>1000</td>
<td>850</td>
<td>87.02</td>
<td>937.02</td>
<td>62.98</td>
<td></td>
</tr>
<tr>
<td>Yellow Inc.</td>
<td>300</td>
<td>1400</td>
<td>1250</td>
<td>87.02</td>
<td>1.337.02</td>
<td>62.98</td>
<td></td>
</tr>
<tr>
<td>Gum Sebansa</td>
<td>400</td>
<td>700</td>
<td>550</td>
<td>87.02</td>
<td>637.02</td>
<td>62.98</td>
<td></td>
</tr>
<tr>
<td>Gum Wacho</td>
<td>600</td>
<td>400</td>
<td>250</td>
<td>87.02</td>
<td>337.02</td>
<td>62.98</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>755.800,00</td>
</tr>
</tbody>
</table>

* the biggest trader of Moyale doesn’t deal with resins and gums during the wet season

** Fixed costs are the rent of stores both in Moyale town and in kebele, the transportation from kebele to Moyale town and the trading license. Variable costs include the bags, labor costs, the transportation from Moyale to up-country, and the tax per quintal on resins transported out of the woreda.

6.3.2.6 The final step within the country

The final destination of resins and gum is not the same for different products:

- A very small share of black and white incense is sold to a retailer in Addis Ababa. The retailer has a shop in the capital city and he sells resins for local consumption in the city and in rural areas around Addis Ababa.
- Gum is exported abroad, directly by Moyale traders or by passing through Abbebaye P.L.C. in Nazareth. This Company has its headquarters in Addis Ababa, and also an office in Nazareth. This Company processes and sells gum for international markets and a good share of its exporting is directed to China.

- Black and white incenses are partially (not industrially) processed inside Ethiopia, most of all in Addis Ababa, by two governmental cooperatives, (Durmucha and Genale). Genale MIGS PLC is a trading Company, based in Addis Ababa and established in the year 1995. It exports gum arabic (Senegal and Seyerl types), resins and gum olibanum from Ethiopia and its main market is North America. The Durmucha Company is the Amharic name of Natural Gum Processing & Marketing Enterprise. This trading company has its headquarters in Addis Ababa, a branch in Yabello and processing factory (cleaning, selecting quality, sifting, putting grade, storing and packing) in Nazareth. The Company is taking incense from Moyale and Dubluk area for at least 20 years, in order to process them in Nazareth and export gum.\textsuperscript{476} From the documentary "Roads to Resins. How Frankincense Harvesting Can Preserve Pastoralism"\textsuperscript{477}, it came out that this company is a governmental one and it has worked in the trade of resins and gum since long time. It was established in 1976 as an autonomous state owned business enterprise with the objective of marketing resins and gums. Up to 1994, this company had a monopoly on the gum and resins trade, then it continued to be a public enterprise, but it entered into competition with other private companies. Nowadays Durmucha Company’s share of the total country trade of gum and resins is 40%. This makes the Durmucha Company the first in Ethiopia involved in the trade of gum and resins, known not only for the quantity but also for the quality of its products, as it has received some quality recognition\textsuperscript{478}. There are a total of twelve big enterprises, mainly based in Addis Ababa, exporting

\textsuperscript{476} No information has been directly taken by this Company, but all the reported data are from secondary sources (literature and web).
\textsuperscript{477} Roads to Resins. How frankincense harvesting can preserve pastoralism. Produced by LoopService, Increasing People Opportunities, LeFucine Art&Media, LVIA, COOPI, with the financial assistance of European Union.
\textsuperscript{478} The Company mainly processes and markets Gum Olibanum (that is black and white incense surveyed by this study), Gum Arabic (that is the type of gum surveyed by this study), Gum Myrrh and Gum Oppoponex. It buys resins and gum not only by Oromia and Somali Regional States, but mainly by Tigray (where it is produced a very good quality of white incense), Amhara and Beni Shangul-Gumuz Regional States. The Company both sells resins for local market, once processed (20%), and exports resins and gum (80%), specially to Middle East, China, Europe, India, Canada.
gum and resins produced in Ethiopia, and others of smaller scale also exporting these products\textsuperscript{479}.

6.3.2.7 Connection of Hudet Woreda with Moyale Somali Woreda Value Chain

The results from the interview with Hudet Woreda Agriculture Office Head are:

- Items produced and collected in Hudet Woreda villages, such as Walena and Dodo, are black incense, yellow incense and gum.
- The local destination of these products is Moyale town. Before reaching Moyale, resins and gum are collected in Hudet town.
- To allow resins and gum exports from Hudet Woreda, it is necessary to pay taxes to the Woreda Agricultural Office. To elude this tax, very often resins are smuggled from Galgalu kebele, Moyale Somali Woreda\textsuperscript{480}.

6.3.3 Moyale Oromia Woreda

6.3.3.1 Kebele surveyed

The Moyale Oromia woreda is composed of 11 kebele. The population is 31,162 people (16,129 males and 15033 females). The area is 944.92 km\textsuperscript{2}, with a density of 32.98 people per km\textsuperscript{2} \textsuperscript{481}.

Resin and gum production is also quite consistent and the resin business started about four years before the interview, in particular from a concentrated area around Guchi and Gofa kebele\textsuperscript{482}. The resins available are black incense and gum.

From the interview with the Moyale Oromia Woreda natural resources officer, it came out that it is possible to find resins mainly in three kebele: Guchi, Gofa and Dhembi. Guchi and Gofa are far away from Moyale, respectively 50 and 55 kilometers. The distance between them is around 5 kilometers. The distance between Guchi and the border with Moyale Somali Woreda is less than 10 kilometers.


\textsuperscript{480} The survey team tried also to get information on resins and gum quantity produced monthly/yearly in Hudet Woreda, as well as the name of kebele where these items are collected and sold, but the informant didn’t bring the data on these issues with him.

\textsuperscript{481} Central Statistical Agency of Ethiopia - Population and Housing Census of Ethiopia 2007

\textsuperscript{482} While it is supposed that in Oromia side Borana people live, in Guchi kebele the habitants are most of all Gabra.
All the three kebele were visited, but resins were found only in Gofa and Guchi, while in Dhembi the kebele staff reported that resins are present in small quantity around the area, but nobody collects, buys and sells them.

The biggest difference between Gofa and Guchi kebele is the destination of resins: black incense and gum from Guchi are sold to the two traders in Moyale town, so this kebele enters in the value chain already described (paragraph 6.3.2), while resins from Gofa, passing through Erder kebele, reach a trader in Dubluk, entering in a different value chain (paragraph 6.3.5). Because of the fact that the two kebele perfectly fit the other two value chain analysis described in this study, for Moyale Oromia Woreda was not arranged as part of a specific value chain analysis. A brief description of actors and specific characteristics of this area follows.

6.3.3.2 Guchi and Gofa kebele: actors and specific characteristics

The stakeholders involved in the production and distribution of gum and resins in Guchi and Gofa kebele are:
1. Pastoralists
2. Retailers in kebele
3 a. Guchi case: traders of Moyale
3 b. Gofa case: Cooperative in Erder
   Trader in Dubluk

1. Pastoralists

The characteristics of this group of people are the same as these on the Somali side. They started to sell resins in Guchi and Gofa, after the request of retailers living there, while before they were selling to retailers in Somali villages. After the request of Guchi and Gofa retailers, the number of pastoralists who started to collect and sell resin/gum increased. The areas of collection are Kob Bor, Korm Ilu, Har wale, Har Ana, Ana Darimo, Tille, Falti, Tonojilo, Har Dima katana, that are located in the Guchi and Gofa kebele.

By discussing with the pastoralist officer of natural resources department, it was discussed that the biggest problem in the area was that pastoralists were not aware of the importance of collecting resins, especially in the Gofa kebele. Pastoralists didn’t know about the high demand of resins, so most of them collected resins just for their personal use. The pastoralist officer was also suggesting that NGOs working in the area should organize a training in Gofa to create awareness on the market demand of resins and gum, because if pastoralists became
aware of this, they could understand their importance and increase their income. In the Dhembali kebele it was observed that even if resins were available, they were not all collected and sold. In Guchi pastoralists were more aware of the resins market demand, because communications with traders began earlier and this village is close to the Somali border.

2. Retailers in Guchi and Gofa kebele
Both in Guchi and in Gofa, there are only two resins retailers, working together as partners. They buy black resin and gum daily from around 10-15 pastoralists, who come to the kebele. In Guchi the two retailers started to buy and sell resins three years before the interview, because they realised that in Moyale town there was a high demand of these items. They realised also that few pastoralists were collecting resins and gum. They therefore asked to pastoralists to collect resins for them and they also set the price, based on the price they were receiving in town. The two retailers in Gofa started selling resins four years before the interview, because they were requested to do this by a resins cooperative in Erder. Before them, nobody was selling resins in these two kebele. Retailers in Guchi and Gofa sell only resins. They don’t have a shop like retailers in Somali villages and they consider selling resins as an extra activity to increase their income. Their main income source is the livestock herding. They don’t have a storeroom to keep safely resins.
Retailers have to move from Guchi and Gofa to reach Moyale town and Erder. The retailers from Guchi load resins on a donkey and reach Moyale after walking all day and night, doing this three times per month (the two traders travel in an alternate fashion, once the interviewed person, the next time his partner). The retailers from Gofa reach Erder (Dhas Woreda), after walking three hours, five times per month. In both kebele, the gum is in higher demand than the black resin, but they reported not to know the reason for this (neither the uses nor purposes of these two kinds of items). Every month, retailers from Guchi sell about 100 kg of both products in total, while those one from Gofa sell around 30 kg.

The problems they face are concerning:

- transportation, as they reach the location of sale by walking or by donkeys;
- low profit, as they cannot set the price of resins;
- the lack of a storeroom to keep resins;

In this area, the availability of gum and resins is around 70-80% larger in the dry season than in the rainy season, as well as the quality of resins which becomes poor during the rainy season. Retailers reported that the collected amount of resins could be larger than the amount they currently sell, if pastoralists could be mobilised and made aware that resins are requested
by retailers in town. The pastoralist office natural resources department suggested that in this area one resin cooperative should be established, especially in Gofa kebele, to create awareness and allow pastoralists have an income from collecting resins and gum.

3. Goro Cooperative in Erder
Resins collected from Gofa area are sold to a cooperative in Erder (Dhas Woreda) that was established in 2005, purposely to sell resins. The cooperative’s name is Goro, it is composed of 38 members from Erder. The cooperative was created under the suggestion of a trader, based in Dubluk, who is actually the only customer of this cooperative. The trader comes every two month in Erder to buy resins and load them by truck. One of the members of this cooperative was interviewed. He is the owner of a shop selling foodstuff and essential needs. Trading resins is not his main income source but it is an additional one, and the same happens for the other cooperative members. The cooperative sells black incense and in less quantities also gum, most of all during the dry season, because in rainy season resins’ quantity is very small and the sales’ volume decreases enormously. The cooperative buys resins mainly from pastoralists (they meet five-six collectors every day) and also from the two retailers in Gofa kebele. The cooperative sells every two months about 1.000 kg of resins and gum. The resins bought by the cooperative are kept safely into bags, inside a store.

4. Trader from Dubluk
Every two months a trader based in Dubluk, who is also the only customer of the Goro cooperative, comes to Erder to buy resins from them. Every month, the trader transports resins collected in Erder and in other kebele, especially from Dhas and Dire Woreda, to Addis Ababa. He sells also gum (around 50 quintals per month), to the branch office in Yabelo (capital city of Borana Zone) of Durmucha Company. The detailed characteristics of this stakeholder within the chain are described in paragraph 6.3.5.

6.3.4 Moyale town: resins and gum in the local market
Before describing the characteristics of the value chain of Dhas and Dire Woreda, this paragraph will analyse the local markets for resins and gum in Moyale town. Moyale town is located on the border between Kenya and Ethiopia: within the Ethiopian side, Moyale is also divided between two regional states: Oromia and Somali. In Moyale Ethiopia there are therefore two administrations and two markets. Moyale town is connected to Addis Ababa by an asphalt road and to Nairobi by a gravel road. The majority of resins and gum coming from
pastoral villages in Moyale town, are not sold locally for immediate consumption, but they are bought by traders and then transported to Addis Ababa or Nazareth. 90% of resins and gum sold in Moyale market come from other areas of Ethiopia or from abroad. In local markets it is possible to find only black incense collected in Somali villages, but just in very few quantities and in poor quality. This because the black incense that was not selected by traders ends up in the local markets. While visiting the markets in Moyale, it is possible to find good quality black incense, only if it comes from other parts of the country or from abroad. The available white incense in Moyale town markets comes from Addis Ababa.

In Moyale town there are some shops selling resins, among other items, for local and immediate consumption. In particular in one of them it is possible to find three types of white incense, two types of yellow and the black incense. The owner buys most of the incense from an import/export enterprise based in Addis Ababa, arriving there by truck once or twice per month.

He buys black incense from Moyale Somali kebele, in particular from traders’ agents coming in town, while he buys yellow incense from the Mandera area in Kenya, by contraband, and from Somalia. Prices and quantities of different products vary a lot, for example, he sells the black incense at 8 birr per kilo and the yellow at 45 birr per kilo. He sells larger quantities of black incense than yellow. The availability of the last typology has also steadily decreased since the war in Somalia started. Seasons don’t affect the quantity, because he sells imported resins. Resins account for only a part of his income. The retailer has a trading license for selling different kinds of items in his shop, included resins. He pays at the Woreda border a tax that includes all the items sold in the shop. Therefore, he doesn’t pay a specific taxation for resins and gum.

This interviewed retailer reported also that he would like to buy larger quantities of resins from the Moyale area and he finds it quite difficult to compete with traders in town to get resins that are locally collected. On the other hand, he said that the quality of locally produced incense is very low, while the imported one is of better quality and its availability is not an issue.

Another retailer with a shop in Moyale town sells, among different items, black and white incense, both of them coming from Addis Ababa. The customers of this retailer are mainly the open market sellers of Moyale town and Bokuluboma (Miyo woreda), far away from Moyale 61 kilometers to the North. Market vendors are not able to get resins locally collected, because the local production is monopolised by traders in Moyale. The informant reported that the price of incense is stable during the different seasons. Moreover seasons don’t affect
the availability of resins: the interviewed retailer sells from 60 kg to 150 kg worth of black and white incense per month.

Local retailers in open markets sell resins, usually black and white for local consumption, together with other items, like grain, tobacco, coffee, vegetables, etc. When they buy black incense from Addis Ababa, its quality is high, while when it is bought from traders’ agents, it is poor quality because it has been previously rejected by traders. In this case, the quality and quantity of black incense decrease during the rainy season, while the amount of white incense keeps constant, because the source from where it is bought, is different. If retailer buys from Addis Ababa also the black incense, its price, quantity and quality don’t change with seasons. If the incense comes outside Moyale area, it is categorized into grades, while if it comes from Moyale area, it doesn’t have any grade, because traders’ agents don’t apply one. The customers of retailers in the open market are not only local people purchasing for immediate consumption, but in small percentage, they are traders from Kenya, especially for white incense, that is then transported to Marzabit and Nairobi. The quantities of black and white incense sold are quite variable: usually few kilos per day, most of all because it is bought for local uses. Therefore, incense is sold in tins and in spoons. The price of white incense is higher than that one of black (around 30% more).

Small retailers in town complain that resins from pastoral kebele are all bought by traders. They cannot buy in big quantities like traders and this system makes locally produced resins unavailable in Moyale town, but black incense in few cases and in poor quality. Retailers in town, especially those in the open market, would prefer to purchase incense directly from local collectors, because the price is lower, but traders’ agents monopolise the market and don’t reveal information on how to get in contact with the collectors. The biggest problem that open market’s retailers face with white incense is the high price, and for this reason the profit that retailers can obtain is small. For every kilo bought, they can only apply a small increase in the price and also in this way they were able to sell just few quantities. However, this product is always available and easy to buy, because it comes from Addis Ababa. Interviewed retailers in open markets stated that selling only resins is an unsustainable activity and not a good business, because the income generated would not be enough to sustain a family.

White incense is in higher demand than black one, because it is smokier and it has better smell, so families usually prefer to buy it over the black one, if there is the financial possibility. Families are wealthier during rainy season than in dry one, when costs related to water and food increase; moreover livestock during the rainy season are more healthy, so
families don’t face additional expenses for drugs and animal services. All these factors affect the black and white incense demand from local customers.

The supply of black and white incenses from Addis Ababa is around 3 times per month, while yellow incense could be delivered up to every 5-6 months, because the price is high, the use is very specific and the demand is low.

### 6.3.5 Dhas – Dire Woreda

#### 6.3.5.1 Political and geographical characteristics

Dire, Dhas, Miyo and Moyale woreda of the Borana zone are situated in the southern part of the regional state of Oromia. They border with Kenya on south while on the east with Somali regional state. In the north the border is with Arero and Yabelo Woreda and in the west with Teleli Woreda, Oromia region. The longest border is with Kenya (199 km), while the one with Somali region is 100 kilometers. The following table reports the area and the population in these woreda\(^{483}\).

#### Table 13. Area and population of the assessed woreda in the Oromia side

<table>
<thead>
<tr>
<th>Woreda</th>
<th>N. kebele</th>
<th>Area in km(^2)</th>
<th>Population</th>
<th>Density (Pop/Km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moyale Oromia</td>
<td>11</td>
<td>944.92</td>
<td>31,162</td>
<td>32.98</td>
</tr>
<tr>
<td>Dire</td>
<td>13</td>
<td>4,348.32</td>
<td>53,680</td>
<td>12.35</td>
</tr>
<tr>
<td>Dhas</td>
<td>5</td>
<td>3,583.17</td>
<td>19,106</td>
<td>5.33</td>
</tr>
<tr>
<td>Miyo</td>
<td>16</td>
<td>2,531.44</td>
<td>47,678</td>
<td>886.49</td>
</tr>
</tbody>
</table>

The majority of the area is characterised by flat terrains or plains (1100-1500 meters in altitude). This kind of land configuration covers in particular the north-western and eastern part of the area, including Dhas and Moyale woreda. Most of the southern and south-western part of the area is characterised by lowlands (below 900 meters in altitude), especially Dire woreda. Anyway Dire is a vast woreda and its morphology changes in the central and eastern part, like in Mega area, where the altitude reaches up to 2300 meters. The majority of the area is classified as dry lowland, then mid-highland and only a small portion of land is dry high land, mainly in Dire Woreda. The temperature in the area varies from 14°C to 24°C. The highest temperature is around Kenyan bounder and the lowest one is within Dire woreda, around Mega. The land is covered by dense bush (54.4%) and bush (27.5%)\(^{484}\). The vast

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\(^{483}\) Central Statistical Agency of Ethiopia - Population and Housing Census of Ethiopia 2007

\(^{484}\) Dense bush is bush land containing more than 50% of woody plant crown cover.
majority of land supports a big assemblage of trees and shrubs, interspersed with grassland and scattered low trees.\textsuperscript{485}

\textbf{6.3.5.2 Preliminary Assessment}

Before starting the survey in this area, the Dire Woreda natural Resources line department was interviewed, in order to preliminarily assess resin availability in the zone. He confirmed that in Dire Woreda and in the area around it, white incense, black incense and gum are traded. The main resins market is in Dubluk, where there are two traders selling in up-country\textsuperscript{486}. Resins that reach Dubluk market are from kebele of Wachile (Harero woreda), Gayo, Bor Bor, Erder, Gorile (Dhas woreda), Ego, Dambala Baddana, Dokole, Magado (Dire Woreda), Bokuluboma (Miyo woreda).

In every kebele resins are collected from pastoralists. Pastoralists receive some food by the retailers to be encouraged to collect resins. Otherwise pastoralists don’t go out to collect, because they can’t find food while collecting. Resins and gum reach the traders in Dubluk and then they are sold mainly to a company, named Natural Gum Processing & Marketing Enterprise (Amharic name: Durmucha). In Dubluk market during rainy season, the trade of resins is much reduced.

In Mega town, that is the capital city of Dire woreda, there are 20-30 resin retailers. They don’t sell to traders or to company representatives, but just to local people for their own consumption. Usually retailers in Mega only sell black incense (four-five kilo per week), at six birr per kilo, after having bought it at four birr from pastoralists of the area. Pastoralists providing resins to local retailers in Mega, sell resins also to traders, but at 3 birr per kilo, since traders go directly in the villages to buy the incense.

The kebele of Mega, Bokuluboma, Erder, Gayo\textsuperscript{487}, Dhas\textsuperscript{488}, Wachile were assessed.

\textsuperscript{485} Compared with the year 1986, wood land ranged from 9\% to 4\% in 2006, bush land from 49\% to 55\%, and the eroded bush land from 18\% to 25\% - Pastoral GIS Atlas of Borana Zone Oromia Regional State USAID, Save the Children, LVIA, COOPI, EU July 2007.

\textsuperscript{486} Yabelo, Alaba, Shasahmane and Addis Ababa.

\textsuperscript{487} In this kebele it was estimated a resins collection of 600 kg per month in the dry season of 2008, affected by drought. The drought could influence a lot the quantity of resins produced, so in normal dry seasons the production of Gayo could increase a lot, also more than double.

\textsuperscript{488} In this kebele was estimated a resins production of 1000 kg per month in the 2008 dry season.
6.3.5.3 Dhas - Dire Woreda Resins and Gum Value Chain

The main stakeholders of this value chain are:

- Pastoralists
- Collection points
- Traders in Dubluck
- Up-country retailers
- Exporting Companies, as Durmucha Company

Figure 9 - Dhas and Dire Woreda Resins and Gum Value Chain

1. Pastoralists

The pastoralists in the surveyed kebele collect resins from the villages of Dakara, Baké Meras, Kob Adi, Teso Dirbo, Kalafi, Boji, Rocho, Dirib Allo Goddu, Abberaya. Then they reach the kebele centre for selling gum and resins. Pastoralists are supplied with sugar and tea, and are encouraged to collect resins. They are usually daily collectors and they transport on the back about 2-3 kilo of products every day to the collection point. Every day from ten to thirty pastoralists reach the kebele collection point. It should be highlighted that in Borana
communities, collecting resins is generally considered an activity performed only by poorest and by lowest clans and therefore this activity is stigmatised. Many pastoralists don’t collect resins because of this cultural habit. On the other hand, other pastoralists decided to collect resins after having evaluated that it would help increase their income. The availability of gum and resins is estimated to be more than that collected.

2. Collection points
Every kebele surveyed has one collection point. It is managed by a retailer with a shop and a storeroom, who buys resins from pastoralists and then sells them to traders. On the Somali side, the selling system is more widespread, because retailers in every kebele total from two to twenty and in Moyale Oromia the retailers are two, working together as partners. In Dhas and Dire woreda just one person buys and sells resins, so the trading system is very concentrated at the kebele level. Therefore, it is also easier to estimate the produced quantity. Retailers, who trade the resins, also sell other general items, like food, soaps, clothes, etc. The collection point was established when traders from Dubluk asked to one kebele retailer with a shop and a store to buy resins for him. When retailers’ shop started to work also as a resins collection point, traders provided the retailers with tools to weigh resins. This tool was paid in instalments. The trader decides the price for the resins from the retailer, and the retailer decides the price when s/he buys the resins from pastoralists.
Retailers pay big attention to selection and buy only cleaned resins. The problem they face is to try to make pastoralists understand that they have to be attentive and not mix soil, wood and sand with resins and not to get them wet. Another problem is the high temperature that makes resins liquefied and gum sticky. The retailers, after the selection, weigh the resins, put them in bags and then they store them, selling them 2-3 times per month. While the collection point of Gayo was established less than one year before the interview, the one in Dhas was created six years before. The first one was put in place under the request of a trader from Dubluk, while the second one under the request of Durmucha Company. In alternative to collection points, there are cooperatives, like in Erder and in Wachile (Harero Woreda), established 2-3 years before the interview. The first was created under the request of another trader from Dubluk, while the second one because of a AFD (Action for Development) project and they started to sell resins to the Durmucha company. In Bokuluboma (Miyo Woreda) there are 2 retailers selling black and white incense to traders, out of a total of 12 retailers who sell for local consumption. The two retailers buy resins from around ten pastoralists, coming in Bokuluboma from Erder, Bor Bor, Gorile during market days (twice
per week). The two retailers are representatives of the traders in Dubluk and of the branch office in Yabelo of the Durmucha company.

In Bokuluboma around 250 kg of resins per month in dry season are sold to traders from Dubluk and to the representative of the Durmucha company in Yabelo, who visits Bokuluboma every 3 weeks. The quality of black incense in Bokuluboma wasn’t very good and because of this, the price the informant received was less than the average price usually obtained at this step of the chain for the same product.

Bokuluboma is the only place in Miyo woreda where it is possible to find resins, even if it is not produced within the woreda, because most of the resins are from the Dhas woreda villages. Miyo woreda is composed of highlands and the altitude is over 1300 meters, the land is less dry and the climate colder, compared with the other assessed areas.

3. Traders in Dubluk

In the other assessed value chain, the stakeholder is the traders’ agent, who disappears completely in this value chain, as s/he is substituted by the collection point. The collection point accounts for both the retailer and the traders’ agent, who were present in Somali value chain. If in the other value chain, the transport service was physically performed by the trader’s agent, in this one, this step is undertaken directly by the trader. In Dubluk there are two traders, buying and selling resins, in particular black incense and gum. They work separately. Both of them are owners of Isuzu trucks, and their main income activity is truck rental. They buy resins from the collection points of Bor Bor, Dhas, Wachile, Web, Udeth, Erder, Harboji, Matarba, Dambala Baddana, Ego, Gayo, Anol, going there once or twice per week. The value added by them is the transport service, taking resins from the villages and then bringing them to Yabelo, Alaba, Shasahemane, up to Addis Ababa. This service is important also because it is carried out in kebele of different Woreda and far away from each others.

Traders reported that the better quality gum comes from Concharo, Wachile and Balal areas. Traders have customers in up-country: both of them sell and transport gum to Durmucha company in the Yabelo branch office, while black incense is sold to retailers for local consumption in Alaba, Shasahemane, Addis Ababa. The two traders have the trading license. It needs to be renewed and paid every year to the Pastoral Commission Natural Resources Office - Oromia Region. The trading license costs from 0.7 to 0.9 birr per every quintal of resins traded. Moreover, to transport resins up-country, traders have to pay 8 birr per quintal, as a tax, while passing the woreda border.
6.3.5.4 Final consideration on Dhas and Dire Value Chain

The following table shows how prices increase from collectors to traders in Dubluck.

**Table 14. Increase of prices from collectors to traders in Dhas and Dire Value Chain**

<table>
<thead>
<tr>
<th>Products</th>
<th>Selling prices in birr per kilo</th>
<th>Price increase from collectors to traders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pastoralists</td>
<td>Retailers</td>
</tr>
<tr>
<td>Black inc</td>
<td>3,125</td>
<td>4,40</td>
</tr>
<tr>
<td>Gum sebansa</td>
<td>4</td>
<td>4,50</td>
</tr>
</tbody>
</table>

From the table, it becomes clear that while the increment of the price of black incense is similar to that one in the Moyale market (even if this value chain is shorter than that one of Moyale Somali), the increment of the price of gum is doubled. During the interviews and discussing with stakeholders in the villages, the perception was that in the Oromia side the information on market and quality issues was particularly lacking, moreover, cultural habits concerning resin collection interfered with this activity.

Retailers in kebele, from collection points or cooperatives, sell a bigger amount of black incense than gum, and from this product they receive around 1.30 birr per kilo as net profit. From the gum they get a very small unit profit and they don’t seem to expect too much from this product, maybe because they take in few quantities and their resins’ business relies on black incense.

The gum is the product that was more interesting to study, in terms of potential profit for all of the stakeholders, its export and industrial uses and also for its delicacy. The following table reports the quantity of resin, which is traded in the Dubluck market and their value.

**Table 15. Quantities and value of resin traded in the Dubluk market**

<table>
<thead>
<tr>
<th>Products</th>
<th>Quintals collected per month dry season</th>
<th>Quintals collected per month in wet season</th>
<th>Total quintals yearly traded, Dubluck</th>
<th>Selling price per quintal</th>
<th>Value (birr) of resins yearly traded</th>
<th>Revenue per quintal of trader after having bought raw materials</th>
<th>Fixed and variable cost per quintal sustained by trader</th>
<th>Net income per quintal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>1000</td>
<td>100</td>
<td>6.600</td>
<td>525</td>
<td>3.465.000</td>
<td>150</td>
<td>62</td>
<td>88</td>
</tr>
<tr>
<td>Gum</td>
<td>55</td>
<td>0</td>
<td>330</td>
<td>800</td>
<td>264.000</td>
<td>150</td>
<td>62</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>6.930</td>
<td></td>
<td>3.729.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It deserves to highlight that pastoralists on the Oromia side are less aware regarding income possibilities coming from collecting and selling resins. On both sides, Somali and Oromia, pastoralists don’t seem to understand or to be interested in collecting larger amounts of cleaned resins and to keep them safe from water, sand/soil, wood/bark, in order to gain a bigger profit. The potential of white incense is still not completely discovered or exploited. After the gum, it is the most in demand incense, because of its high quality: it is smokier than black incense and it has a good smell; moreover, it is possible to use it for different industrial purposes. The price that is possible to obtain by selling it is higher than the price for black incense. White incense is potentially available in every kebele, but it is produced by Dunkhal tree, as black incense. Pastoralists usually prefer to collect the two resins together, without separating them, to be faster. The white resin is produced in smaller quantities than the black one. However, the result of this is that pastoralists lose the possibility to gain a bigger income coming from selling the white incense separately from the black one.

In Oromia white incense is sometimes confused with the gum by pastoralists, because they have the same colour. Actually, they are two different products and the gum has an economic potential that is superior to that of the white incense.

6.4 The quality issue

The quality of resins and gum seems to be the most important factor to determine the price. Each interviewed person, even if s/he was not able to define the criteria of the quality, reported that this was the most important aspect. From the analysis of value chain, it becomes clear that quality has a significant effect on determining the price of the product. Low quality products are sold at low prices and stakeholders benefit less from the sale of these items. There are two aspects to quality: intrinsic quality, which is a reflection of the chemistry of the particular resin, and the quality which is determined by its treatment and handling subsequent to exudation from the tree. The intrinsic quality is genetically determined at the species, provenance and individual tree level. The collection process itself also leads to variable quality: some pieces of resin have bits of bark and dirt adhering to them and this remain the case even after the cleaning and grading stages. Once it has been collected, the major sources of quality deterioration of the resin are the repeated handling it receives in passing from the collector to the exporter, and the conditions in which it is stored at the various points in the marketing chain. The resins are sorted and graded according to size, colour and state of

489 There are 3 different ways to process white incense: powder, fine particles and gravels/stones.
cleanliness before being bagged for export. The larger, paler lumps used for chewing are more highly valued than the smaller, darker coloured pieces or the powder and siftings. The way resins are kept and stored is very important to safe their quality and to avoid resins coming in contact with moisture and humidity. In particular gum spoils completely with humidity. The store where resins are kept should be well ventilated to keep away the humidity, it should be also dry and the resins shouldn’t receive direct sun. The biggest problem of retailers is actually to avoid resins getting spoiled before selling them to traders or to their agents. Because of this the retailers without storage don’t keep resins more than one week, neither in big amounts: they try to sell them as soon as possible. If resins are kept too long in an inappropriate way, they get spoiled. The problem of humidity is especially true for gum that, in contact with water, becomes not marketable.

Processing of natural gum involves manual cleaning from impurities, selection and grading. In the case of Tigray Olibanum, sieves of different mesh sizes, for example 6, 4 and 2 mm, are used to sort the tear granules into different size grades, while eye-sorting is done by colour. Five major grades are identified at most processing centres and observed in commerce, are as follows first choice grade A, first choice grade B, second grade, third grade and fourth grade. The first choice is a bigger and pure white tear, a second grade is a pea size and whitish tear, third grade is called sifting are fine but white pieces. The fourth grade consists of bigger granules of brown to dark coloured tears, and finally the fifth grade consist a mixture of powdery resins of both darker and whiter pieces as well as impurities like bark that are often left behind. All the grading is normally done manually. While the first, second and third grades are exported, the fourth and fifth grades are sold on domestic market. No grading is done for the Ogaden and Borena quality olibanum. On the other hand, myrrh is sorted into five grades (grade 1 to 5), while gum arabic in most cases is only cleaned but not sorted into different grades.

6.5 Final considerations
The value chain of gum and resins in Moyale area is a quite complex system, where each selling point and stakeholder influences the other elements following relations of cause/effect and reciprocity. This study tried to understand and analyse functions and relations within the chain, that allow pastoralists to sell gum and resins to local retailers and then to traders, until the exporting companies in Ethiopia. Each point of the chain, where gum and resins are sold to the next stakeholder, is made visible by recognizable physical infrastructures, as the stocks and the market’ stands. These points of access, that are transitory and temporary, are linked to
the dynamic demand that requires gum and resins in Addis Ababa in the hands of exporting companies, both public and private.
The geographical delimitation of the chain also needs to be considered; the chain doesn’t investigate what happens to gum and resins outside Ethiopian borders. This value chain doesn’t reach the final step of consumption of gum and resins after their processing, actually the end of this value chain is still before the industrial processing phase in the importing countries. The interest, as already mentioned, has not been to understand how gum and resins rise in value while crossing the different stages of the chain, but most of all is how this value affects the everyday life of pastoralists, taking into account the economical, social and institutional context where pastoralists live and collect resins.

In the different value chains analysed by this chapter, some elements can be highlighted as commonalities. Within this complex system where stakeholders interact with each others, some of them are not aware of the actors taking part to this interaction and mainly which actors effect this interaction produces. Pastoralists and collectors don’t realise how gum and resins are used at the end of the chain. As the chain moves ahead and the number of stakeholders decreases in each step, the level of awareness increases. The awareness is not only in terms of the utilization of gum and resins, but most important it is referring to the quality and prices issues already discussed. This produces the strange effect that even if the demand of resins and gum is higher than its supply, the market power is not in the hands of pastoralists, who are the ones supplying the gum and resins, but it is in the hands of traders and exporting companies, who are the ones demanding and looking for gum and resins.

An effect of this is that the initiative to collect resins is not coming directly by pastoralists but from local retailers and traders, who provide different kind of incentives to pastoralists in order to make them collect gum and resins. For retailers and traders the gum and resins collection is a very hard activity because it is performed in hard environment and by walking long distances. Therefore, they ask to pastoralists to perform it, as this is coherent with their lifestyle, because they walk long distances with their livestock. The shops of retailers work as collection points for gum and resins when pastoralists bring gum and resins to them. Otherwise pastoralists are collecting resins in a very huge territory but in a not concentrated manner. They just refer to one collection point/retailer, the one who encouraged them to collect.

This reflection is important while considering how the price of gum and resins at each step of the chain is decided and in particular which factors influence it. The market awareness is one important aspect of this, but other ones should be considered, as the demand of the items, the
relations among the different stakeholders, their strategies, the flux of the items through the chain and the ownership of the physical infrastructures and the means of production at each step. These aspects are defined by the essential factors by Aragrande\textsuperscript{490}. In his guide he also defines the frame factors and the flux factors. Within the frame factors, the ones related to the economic, social and cultural situation of pastoralists are considered.

In this lack of market awareness, pastoralists follow their economical and social strategies while collecting and selling resins. They get an income from this activity that allows them to increase their resources and livelihoods. They make also some risk-considerations, taking into account the costs of collecting resins and their benefits. Pastoralists know that all the collected gum and resins will surely be sold and they can perform this activity without competing in terms of time and other resources with livestock herding. This last one remains the main income source and the most culturally important one. The decision to never abandon the livestock herding is explained not by economical reasons, as this remains the main income source, but also by social and cultural ones, as already discussed in chapter 1. I didn’t meet any pastoralists who decided or at least who were considering to abandon the livestock herding just to focus on gum and resins’ collection. Only a few of them decided to be more concentrated in resins trading, for example if the trader was asking to become an agent, but in this case they didn’t stop herding livestock, just they rearranged its management, asking relatives to do it. In this case, we are already in the second or third step of the chain.

It is interesting to note how when pastoralists get informed on the importance of providing resins of better quality, meaning to preserve them from getting spoiled or wet, they don’t always follow these instructions. This could also be a part of their risky considerations strategy, as this implies further time spent in the activity that perhaps is not considered cost-benefit convenient by pastoralists.

In this sense resins and gum collection is not only a means to integrate the income coming from livestock herding, but it is also the strategy adopted by pastoralists to maintain the pastoral lifestyle that is, essentially, based on livestock. Without the further income provided by resins and gum, pastoralists would release on livestock to face urgent needs, during dry times, mining in this way their capital, their livelihoods, their sense of what a pastoralist is within the social network. Resins and gum collection offers another alternative which it is possible to utilize during difficult times and most of all this allows pastoralists to protect

\textsuperscript{490} Aragrande M. And Argenti O, \textit{L'etude de SADA des villes dans les pays en developpement, Guide methodologique et operationnel}. Bulletin des services agricoles de la FAO 130, Collection “Aliments dans les villes” 04/98.
livestock, that can be preserved. Preserving livestock means to preserve the stock, the future income from it, but also to protect livelihoods and the position within the community and the society.

Each intervention to improve the efficiency of this chain should also take into consideration this aspect and be pertinent to it. The efficiency of the chain is considered by evaluating the expected results in relation with the utilised resources to get them. Under the pastoralist interests point of view, if resins and gum collection is a way to differentiate livelihoods and preserve livestock in hard times, they meet their objectives.

However, they could increase the value and the amount of these results, while preserving for example the quality of gum and resins and therefore get a higher price. This can be pursued only if it doesn’t interfere with the livestock herding, nor it doesn’t subtract important resources to this activity. Family members’ work can be organized among the different activities, as livestock herding, resins and gum collection, petty trade, charcoal production, etc. This can be done not only to generate new income but also to preserve the livestock. Normally when scholars analyse some value chains, they try to understand how is possible to improve the efficiency while cutting out some stakeholders or steps within the chain. Actually this was not my objective. At this final phase I feel that I can confirm this preliminary statement. Pastoralists don’t have the capacity for example, maybe neither the interest for the above mentioned reasons, to associate themselves to collect resins and then to transport them to town, because they are living in a very spread environment.

The distance between the collection point to the local market is quite far, if not in terms of kilometres, it is in terms of accessibility. Some of these distances can be covered only during dry season and only by a 4x4 vehicle. Covering these distances implies a means of transport, spare parts, purchase of fuel and the possibility of spending some days and nights in town, either Moyale or Dubluck. This means a substraction of resources for livestock herding, as well as an initial big investment, that can be afforded only if a big number of pastoralists join together. These services are however already provided within the chain and what pastoralists can really do to improve their position is providing better quality resins, on a constant base and utilise these two elements to bargain on the price. They need to adapt their supply as much as is consistent with their lifestyle and strategic considerations, to the market requirements.

Finally, the need for livelihoods’ diversification is always identified as coming from causes related to climate change and population pressure, but as shown by the analysis in the previous chapters, this research concludes that this need is mostly a consequence of a more
ancient process, started with the governmental pressure to settle. Gum and resin collection is a livelihood option able to react to this process, because its performance requires mobility and flexibility. This livelihood option at the initial phase of the value chain, can be carried out only in a production system that still preserve, even if only partially, mobility and an alternative to settlement. Gum and resin collection, analysed as livelihoods, is not an anachronistic response to the increasing settlement process, but a way to cope with it within an environment that was regulated by mobility and regulated free access for centuries.
ANNEX 1

**Questionnaire for Survey - Value Chain**

**Black Incense - Yellow Incense - White Incense - Agarsu - Arabic Gum**

Location of market/place (kebele & woreda) ........................................ Date ..............

<table>
<thead>
<tr>
<th>General information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Questions</strong></td>
<td><strong>Answers</strong></td>
</tr>
<tr>
<td>1 Name of the informant</td>
<td></td>
</tr>
<tr>
<td>(person interviewed)</td>
<td></td>
</tr>
<tr>
<td>2 Contact (tel. num. katana/olla)</td>
<td></td>
</tr>
<tr>
<td>3 Type of informant (inf./job)</td>
<td></td>
</tr>
<tr>
<td>(up to 2 answers, but better just 1)</td>
<td>input producer/supplier, collector</td>
</tr>
<tr>
<td></td>
<td>pastoralist</td>
</tr>
<tr>
<td></td>
<td>processor: 1. local</td>
</tr>
<tr>
<td></td>
<td>2. institutional</td>
</tr>
<tr>
<td></td>
<td>open market holder,</td>
</tr>
<tr>
<td></td>
<td>shop/kiosk keeper,</td>
</tr>
<tr>
<td></td>
<td>trader,</td>
</tr>
<tr>
<td></td>
<td>retailer,</td>
</tr>
<tr>
<td></td>
<td>manager of firm,</td>
</tr>
<tr>
<td></td>
<td>institutional buyer,</td>
</tr>
<tr>
<td></td>
<td>importer/exporter,</td>
</tr>
<tr>
<td></td>
<td>other (specify).......................</td>
</tr>
<tr>
<td>Gender: F M</td>
<td></td>
</tr>
<tr>
<td>4 Type of product</td>
<td></td>
</tr>
<tr>
<td>1 Black Incense</td>
<td></td>
</tr>
<tr>
<td>2 White Incense</td>
<td></td>
</tr>
<tr>
<td>3 Yellow Incense</td>
<td></td>
</tr>
<tr>
<td>4 Agarsu: a) white, b) brown, c) black</td>
<td></td>
</tr>
<tr>
<td>5 Gum</td>
<td></td>
</tr>
<tr>
<td>5 Type of market/place (up to 2 answers)</td>
<td>Collection place</td>
</tr>
<tr>
<td></td>
<td>Local Selling: 1. kebele 2. centre</td>
</tr>
<tr>
<td></td>
<td>Trading - transporting</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
</tr>
<tr>
<td></td>
<td>Retailer</td>
</tr>
<tr>
<td></td>
<td>Supermarket</td>
</tr>
<tr>
<td></td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>International</td>
</tr>
<tr>
<td></td>
<td>Niche</td>
</tr>
<tr>
<td></td>
<td>Other (specify) .................</td>
</tr>
<tr>
<td>Questions</td>
<td>Answers</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6  Product price per measure unit</td>
<td>Product</td>
</tr>
<tr>
<td>Black Inc</td>
<td></td>
</tr>
<tr>
<td>White Inc</td>
<td></td>
</tr>
<tr>
<td>Yellow Inc</td>
<td></td>
</tr>
<tr>
<td>Agarsu</td>
<td></td>
</tr>
<tr>
<td>Gum</td>
<td></td>
</tr>
<tr>
<td>7  Source: previous seller (name &amp; contact: tel num or katana/olla etc)</td>
<td></td>
</tr>
<tr>
<td>8  How product has been brought to the market (transport facilities)</td>
<td>Product</td>
</tr>
<tr>
<td>Black Inc</td>
<td></td>
</tr>
<tr>
<td>White Inc</td>
<td></td>
</tr>
<tr>
<td>Yellow Inc</td>
<td></td>
</tr>
<tr>
<td>Agarsu</td>
<td></td>
</tr>
<tr>
<td>Gum</td>
<td></td>
</tr>
<tr>
<td>9  Price paid by the inf. to buy the product from the p.s</td>
<td>Product:</td>
</tr>
<tr>
<td>Black Inc</td>
<td></td>
</tr>
<tr>
<td>White Inc</td>
<td></td>
</tr>
<tr>
<td>Yellow Inc</td>
<td></td>
</tr>
<tr>
<td>Agarsu</td>
<td></td>
</tr>
<tr>
<td>Gum</td>
<td></td>
</tr>
<tr>
<td>10 Frequency of product supply (daily, weekly, monthly, other etc)</td>
<td>Product:</td>
</tr>
<tr>
<td>Black Inc</td>
<td></td>
</tr>
<tr>
<td>White Inc</td>
<td></td>
</tr>
<tr>
<td>Yellow Inc</td>
<td></td>
</tr>
<tr>
<td>Agarsu</td>
<td></td>
</tr>
<tr>
<td>Gum</td>
<td></td>
</tr>
<tr>
<td>11 Quantity usually bought by the inf. in every season, quality (good or poor) and price per unit measure (u.)</td>
<td>Season:</td>
</tr>
<tr>
<td>Ganna</td>
<td></td>
</tr>
<tr>
<td>Agaya</td>
<td></td>
</tr>
<tr>
<td>Bona</td>
<td></td>
</tr>
<tr>
<td>Hadolesa</td>
<td></td>
</tr>
<tr>
<td>Season:</td>
<td>Quantity</td>
</tr>
<tr>
<td>Ganna</td>
<td></td>
</tr>
<tr>
<td>Agaya</td>
<td></td>
</tr>
<tr>
<td>Bona</td>
<td></td>
</tr>
<tr>
<td>Hadolesa</td>
<td></td>
</tr>
<tr>
<td>Season:</td>
<td>Quantity</td>
</tr>
<tr>
<td>Ganna</td>
<td></td>
</tr>
<tr>
<td>Agaya</td>
<td></td>
</tr>
<tr>
<td>Bona</td>
<td></td>
</tr>
<tr>
<td>Hadolesa</td>
<td></td>
</tr>
<tr>
<td>Season:</td>
<td>Quantity</td>
</tr>
<tr>
<td>Ganna</td>
<td></td>
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<tr>
<td>Agaya</td>
<td></td>
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<tr>
<td>Bona</td>
<td></td>
</tr>
<tr>
<td>Hadolesa</td>
<td></td>
</tr>
<tr>
<td>Season:</td>
<td>Quantity</td>
</tr>
<tr>
<td>Ganna</td>
<td></td>
</tr>
<tr>
<td>Agaya</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Product quality in the current season</td>
</tr>
<tr>
<td>----</td>
<td>---------------------------------</td>
</tr>
<tr>
<td></td>
<td>Colour</td>
</tr>
<tr>
<td></td>
<td>Smell</td>
</tr>
<tr>
<td></td>
<td>Size</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td>Criteria</td>
</tr>
<tr>
<td></td>
<td>Colour</td>
</tr>
<tr>
<td></td>
<td>Smell</td>
</tr>
<tr>
<td></td>
<td>Size</td>
</tr>
<tr>
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<td>Weight</td>
</tr>
<tr>
<td></td>
<td>Criteria</td>
</tr>
<tr>
<td></td>
<td>Colour</td>
</tr>
<tr>
<td></td>
<td>Odour</td>
</tr>
<tr>
<td></td>
<td>Size</td>
</tr>
<tr>
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<td>Weight</td>
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<tr>
<td></td>
<td>Criteria</td>
</tr>
<tr>
<td></td>
<td>Colour</td>
</tr>
<tr>
<td></td>
<td>Odour</td>
</tr>
<tr>
<td></td>
<td>Size</td>
</tr>
<tr>
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<td>Weight</td>
</tr>
<tr>
<td></td>
<td>Criteria</td>
</tr>
<tr>
<td></td>
<td>Colour</td>
</tr>
<tr>
<td></td>
<td>Odour</td>
</tr>
<tr>
<td></td>
<td>Size</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13</th>
<th>Factors influencing quality (ex: climate – humidity, temperature - storage, transport, container, time deterioration)</th>
<th>Products</th>
<th>Climat</th>
<th>Stora</th>
<th>Trans</th>
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<th>14</th>
<th>Which kind of incense/gum is in highest demand?</th>
<th>Products</th>
<th>low</th>
<th>medium</th>
<th>highest</th>
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<th>15</th>
<th>Handling product (value added)- treatment before selling and how to keep safety</th>
<th>Products</th>
<th>Value added - quality</th>
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<th>16</th>
<th>Who are your customers? (name, contact etc)</th>
<th>Customers</th>
<th>Name, contact</th>
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<tr>
<td></td>
<td>Customers</td>
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<td>Companies</td>
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<td>Consumers</td>
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<td>Exporters</td>
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<td>Traders</td>
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<td>Retailers</td>
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<td>Purposes/uses (medicine, prayer, traditional ceremony, food, other)</td>
<td>Other</td>
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<td>Products</td>
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<th>Quantity of product sold per day/kilo in the current season</th>
<th>Product:</th>
<th>Quantity</th>
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<th></th>
<th>a) Compared with last year, at the same season, how is the sales volumes of the product?</th>
<th>Products</th>
<th>Equal</th>
<th>Greater</th>
<th>Less</th>
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<th></th>
<th>b) If changed, to what extent?</th>
<th>Products:</th>
<th>Not too much</th>
<th>Greatly</th>
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<th></th>
<th>c) If changed, why in your opinion?</th>
<th>Products</th>
<th>Supply</th>
<th>Quality</th>
<th>Demand</th>
<th>Other</th>
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<th>Problems/reasons for complaining usually occurring during collecting/buying, handling and selling, by the informant</th>
<th>Products</th>
<th>General problems</th>
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<th>a) Which kind of supplier (cooperative, local collector, traders etc) is highly preferred?</th>
<th>Products</th>
<th>Cooperat</th>
<th>Loc collect</th>
<th>Trader</th>
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<th></th>
<th>b) Referred to last question, why?</th>
<th>Products</th>
<th>Why</th>
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Any comments/remarks

241
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256


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