



Social Protection for Inclusive Development in Afar Region of Ethiopia: Participatory Rural Appraisal Report

Research Consortium

Adigrat University (ADU), Ethiopia

Development Planning Unit (DPU), University College London (UCL), UK

Pastoral and Environmental Network in the Horn of Africa (PENHA), UK

Research Supported by

The Netherlands Organization for Scientific Research (NWO)

**Zeremariam Fre, Gabriel Temesgen, Zaid Negash, Selamawit T. Araya, Bereket Tsegay,
Araya M. Teka and Bisrat Weldesilassie**

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Disclaimer

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Map credit: Zubairul Islam (PhD), Adigrat University, Ethiopia

Photo Credits: Front cover photo Afar Woman in Wealth Ranking and Page 25 Afar man engaged in wealth ranking in Anderkelo, Ethiopia, by Bereket Tsegay PENHA; Page 34 Community discussions on institutions during the PRA of the SPIDA, Da’ar, Ethiopia by ADU

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All are members of the Social Protection for Inclusive Development in Afar of Ethiopia (SPIDA) research project.

About Consortium Members

Adigrat University (ADU): A public university located in Eastern Tigray of northern Ethiopian highlands, an area adjacent to the study site of the Afar Region which is predominantly inhabited by the Afar pastoralist communities. Located in close proximity to the study area, the University has had good links in terms of academic and social relationships with Afar communities as well as with young academic institutions, including Samara University. A number of cooperative endeavors are being initiated between the Adigrat University and this newly established University in the neighboring Afar region. As part of such cooperation, many students from the study area are enrolled in Adigrat University, while the best achievers from high schools in Afar Region also attend in its summer school programs. The university retains close ties with communities throughout the area, focusing on knowledge development in the region.

Pastoral and Environmental Network in the Horn of Africa (PENHA): An African-led organization established in 1989 by a group of research and development workers from the Horn of Africa. PENHA has been involved in action-oriented research related to pastoral and agro-pastoral development throughout the Horn of Africa and has an established track record in the field of pastoral research, project implementation, gender studies and policy advocacy among pastoral peoples throughout the region. Hence, since its creation, PENHA and its associates have produced a significant amount of research and consultancy reports. PENHA values Indigenous Knowledge and Practices; and Afro-centric perspectives on African contemporary development issues. It promotes systemic and multi-disciplinary approaches, looking at both national and regional development issues with a view to promoting approaches to policy and program design and implementation that emphasize outcomes. PENHA has long experience of developing policy and governance approaches to social protection, with a strong emphasis on pastoral communities.

University College London (UCL): Established in 1826, is ranked amongst a handful of the top research universities in the world, and UCL's Development Planning Unit (DPU) has more than 60-year history of consultancy, research and teaching in and about the Development sector. In this consortium, UCL's DPU takes primary responsibility for ensuring that the highest standards are maintained in research design and conduct, working in close partnership with other consortium members. In recent years, DPU has established strong partnerships with tertiary institutions in Tigray, Ethiopia, using annual student exchange program as a foundation for research-focused activities. The consortium includes as a key member a Senior Lecturer at DPU, whose role has been to anchor UCL's role in supporting the two African-lead institutions, drawing on UCL's global research experience and DPU's long history in the Development sector. UCL provides oversight for the research process, including ensuring that strong ethical standards are incorporated into the project, as well as facilitating training in social science research approaches and methods.

Acknowledgement

Conducting the Participatory Rural Appraisal (PRA) among the targeted Afar communities of Ethiopia is one of the key components of the SPIDA research project. It was the first research activity carried out among the six villages of Zone 1 and Zone 2 of the Afar Regional State with the aim of engaging the community members in the process of identifying their socio-economic situation and enriching the research outcomes. In order to effectively conduct the PRA, a guideline manual with special emphasis on pastoralism and agro-pastoralism was developed, based on the experience of one of the principal investigator in Tigray region of Ethiopia and the guidelines for discussion produced by PENHA Regional staff with inter-communal learning approach where they brought the experiences gained from working in the Horn of African countries in general and Somaliland in particular. UCL was instrumental in maintaining the research standard.

During the process of conducting the PRA study, the research consortium benefited from the positive contribution of various stakeholders in Ethiopia. On this note, on behalf of the SPIDA team I would like to thank those who contributed towards the success of the PRA study conducted among the Afar communities. On behalf of the consortium, I would like to thank the Afar Regional Administration, Samara University and the Productive Safety Net Program (PSNP) office in the Afar region and the village administrators for their unreserved support shown to the project. Indeed, the team thanks the Afar community members a lot who offered their insights and practical reflections about their engagement with PSNP and its impact, and reflected their livelihoods through actively participating in the six PRA sessions. In addition, I would like to acknowledge the role of the interpreters who eased our work in understanding the discussion held in Afar language. I thank also Amsale Shibeshi and John Livingston, PENHA Regional staff for their contribution at the initial stages of the PRA processes. My gratitude also to Dr Angela Raven-Roberts for reviewing the report and sharing her comments and to Naomi Dixon PENHA research associate for her editorial roles and other professional support.

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Finally, special thanks to Dr Zubairul Islam who helped us to produce the map of Afar region in general and the research sites in particular.

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Acronyms

ADU	Adigrat University, Ethiopia
CRDC	Camel Respiratory Disease Complex
DANIDA	Danish International Development Agency
DFID	UK Department for International Development
DPU	Development Planning Unit
E.C.	Ethiopian Calendar
FDRE	Federal Democratic Republic of Ethiopia
FGD	Focus Group Discussion
FSTF	Food Security Task Force
HABP	Household Asset Building Program
ICF	ICF International
IGAD	Intergovernmental Authority on Development (East Africa Region)
KFSTF	Village/Kebelle Food Security Task Force
KETB	Village/Kebelle Education and Training Board
NGO	Non-governmental Organization
NWO	The Netherlands Organization for Scientific Research
PENHA	Pastoral & Environmental Network in the Horn of Africa
PPR	Peste des Petits ruminants
PRA	Participatory Rural Appraisal
PSNP	Productive Safety Net Program
PSNP- PAP	PSNP- Pastoral Area Pilot
PSNPV	Productive Safety Net Program - Fourth Phase
PTA	Parent-Teacher Association
SPIDA	Social Protection for Inclusive Development in Afar, Ethiopia
TB	Tuberculosis
UCL	University College London
UK	United Kingdom
UNDP	United Nations Development Program
USD	United States Dollar

1. Introduction

The Afar region of Ethiopia experiences an arid and semi-arid climate with fairly low and erratic rainfall. It is prone to drought, with mean annual rainfall below 500mm in the semi-arid western escarpments and 150 mm in the arid areas of the East. In terms of altitude, the region ranges from 120m below sea level to 1500m above sea level. Temperatures vary from 20°C in higher elevations to 48°C in lower elevations. The production system is dominantly pastoral (90%) with a small degree of agro-pastoralism (10%) lately emerging through efforts to introduce sedentary living along perennial and non-perennial rivers. Nearly 95% of the region's 1.5 million population depends almost entirely on livestock production for its livelihood.

The Social Protection for Inclusive Development in Afar region (SPIDA) Ethiopia has been assessing the impact of social protection programs in the welfare of the Afar people. The Productive Safety Net Program (PSNP), which commenced in 2009 in the Afar region, is the largest social protection scheme in pastoral areas of Ethiopia designed to ensure food security and reduce poverty. However, the impact of the PSNP in pastoral areas, particularly in Afar region, was unable to achieve its ultimate impact level as compared to other regions of Ethiopia.

To understand the regional disparity, it has become SPIDA's interest to consider the difficulties in designing and implementing appropriate social protection strategies and modalities within the Afar region and furthermore, to determine whether the extreme weather conditions and predominantly pastoralist livelihoods in the study area have impacted the effectiveness of the PSNP.

In order to address the problems facing the community and to understand the livelihoods dynamism, SPIDA has adopted the Participatory Rural Appraisal (PRA) method. The team has identified and selected six possible research district sites among which three were selected from zone 02 and the remaining three research sites were from zone 01, namely, Da'ar-Berhale, Urkudi-Abala, Bekelidaarna-Abelidera-Mile, Anderkelo-Chifra, EruhnaAdegahnu-Koneba and Alasa Bolo -Afambo. Sample villages were selected based on the nature of their livelihoods including their varied socio-economic status, mobility and community based governance system. The researchers also selected the villages of Bekelidaar and Alasa Bolo, which differ from the other selected study areas due the sites' off-pastoral source of income and sedentized type of livelihood.

1.1 Productive Safety Net Program (PSNP): An Overview

Ethiopia's Productive Safety Net Program (PSNP) is a large national social safety net program that responds not only to chronic food insecurity among Ethiopia's poor, but also to short-term shocks, mainly droughts. Provision of social protection practices in Ethiopia has constitutional support where article 41 (5-7) of the Federal Democratic Republic of Ethiopia (FDRE)'s constitution becomes the basis for social security policy formulations and program interventions. It is the largest social protection scheme on the continent outside of South Africa. It commenced in 2005 in highland of Ethiopia and in 2009 in low lands (pastoral areas) of the country which makes Ethiopia the first country in Sub-Saharan Africa to extend a social protection instrument- the PSNP. The program target group consists of people facing predictable food insecurity as a result of poverty rather than temporary shocks (UNDP, 2007). PSNP has four major goals and these are:

- Support the rural transformation process;
- Prevent long-term consequences of short-term food inaccessibility;
- Encourage households to engage in production and investment; and
- Promote market development by increasing household purchasing power.

The program also has two components which include: labor-intensive public works and direct support for labor-poor households. Able-bodied members of PSNP households must participate in productive activities that will build more resilient livelihoods, such as rehabilitating land and water resources and developing community infrastructure, including rural road rehabilitation, building schools and clinics. In 2014, the program was able to reach 8.3 million beneficiaries in 319 districts in both categories of the public works (80%) and direct supports to the elders, disabled and sick members of the community (20%) (Zoellick, 2014).

PSNP in Afar region was started in 2009 with the launching of a government-donor joint initiative; the PSNP- Pastoral Area Pilot (PSNP- PAP) in 6 districts, including Awash and Berhale districts by government and the remaining four districts by joint initiative of the government and NGOs. With the inclusion of roll-out districts since then, the program coverage has progressively expanded and recently covered all districts in the region. As Johan (2015) stated, more than half a million people were enrolled in the PSNP in Afar region, who got their basic ration for half of the year for major proportion of the population.

PSNP operates in Afar, Amhara, Dire Dawa, Harare, Oromia, SNNP, Somali and Tigray Regions. As World Food Program (2012) stated, WFP and eight other development partners (the Canadian International Development Agency, Embassy of the Kingdom of the Netherlands, European Commission, Irish Aid, Swedish International Development Agency, United States Agency for International Development, UK Department for International Development (DFID), DANIDA and World Bank) contribute to PSNP. The Ministry of Agriculture's Disaster Risk Management and Food Security Sector, along with regional governments, is responsible for program coordination, management and implementation.

With the aim of improving food security of poor people in rural areas, Ethiopia has reached its fourth phase of the program. The four phases include: PSNP phase One was launched in 2004 with worth USD 70 million; followed by PSNP Phase Two worth USD 1.04 billion and PSNP Phase Three worth USD 1.7 billion were launched in 2007 and 2009, respectively.

PSNP Phase Four was approved in 2014 with a total cost of USD 2.6 billion secured in the form of a loan from World Bank. The interest-free loan will be repaid after 32 years. The World Bank signed a USD 100 million loan agreements with Ethiopia to support the latter's fourth phase. PSNP Phase Five which is planned to be implemented in 318 districts and reach to 4.5 million beneficiaries across the country will cost £2.216billion, funded by the Government of Ethiopia (14%) and nine donors. For instance, DFID will contribute £276m (11% of the total), of which £176.2m (64%) will be financed from the ICF. PSNP Phase Five is expected to further reduce extreme poverty and promote resilience among the poorest households where it aims to make regular transfer of cash or food to eight million chronically food insecure people in areas most often hit by drought. It also supports scalable response mechanisms, sustainable community asset building, human capital investment and capacity enhancement for crop and livestock production to improve the livelihoods of farmers. It also intends to support in response to the El Niño-induced drought to chronically insecure households. Moreover, it will expand access to safety net and disaster risk management system.

1.2 Objectives and Aims

The objectives of the PRA study are:

- to enable rural people to organize their knowledge, share experience among themselves and gather information on resources they have;
- to enable the community to identify their problems, the causes of these problems and possible solutions;
- to enable the community to develop their capacity to produce a community action plan to address their problems;
- to understand the rural environments and social as well as economic dynamism;
- to comprehend the trends in the rural socio-economic conditions;
- to understand the role of informal as well as the formal social protection mechanisms.

In order to limit the PRA to the objectives set and to have consistency in conducting the participatory process in the different villages, a PRA manual was prepared by the SPIDA team members with an input from PENHA regional team. In line with the manual, emphasis was accorded to the following topics:

- a) Pastoralism, Agro-pastoralism and Alternative Livelihoods: The initial Focus Group Discussion (FGD) of the PRA was allocated to the source of livelihood which enabled participants to easily and comfortably discuss their way of life.
- b) Health and Education: FGDs were made on health and education including the problems encountered and possible solutions.
- c) Market, Credit Services and Cooperatives: FGDs were made on market, credit and cooperatives including the problems encountered and possible solutions.
- d) Gender and Youth: FGDs was performed on the role of women and men in the community, including the associated problems. In addition, youth and unemployment were also discussed.
- e) Village institutions: Institutions with which the rural communities interact, including those that are formal/informal and those internal/external to the village, have been discussed. The means of communication among the Afar communities was also covered.
- f) Seasonal Calendar and Trend Lines: Seasonal calendar of the whole year and trends in food availability for human and animals, forest cover and poverty status were addressed in this section.
- g) Wealth Ranking, Problem Analysis, and Community Action Plan: After identifying the means for wealth assessment, the participants ranked the community on the basis of its wealth, discussed the major problems and formulated an action plan.

1.3 Methodology

1.3.1 Research Sites and their Brief Profiles

Participatory Rural Appraisal (PRA), the method of data collection and analysis used in this study, is a qualitative and participatory approach. As Chambers (1994) argues, the methodology has ‘evolved and spread from beginnings in Ethiopia, India, Sudan and elsewhere...’. PRA emphasizes the use of local knowledge and enables local people to make their own appraisal, analysis and plans. According to this method, data collection and analysis were undertaken by local people within their villages, with the help of the facilitators. PRA consists of a series of participatory exercises which help community members better assess their overall situation, challenges and possible solutions for the problems at the community level.

The Afar ethnic communities are differentiated from the neighboring communities because of their cultural features, the nature of the ecology and their predominantly pastoral and agro-pastoralist livelihoods. Considering these peculiarities, the PRA was conducted in six villages of Afar region from both Zone 01 and Zone 02. The selection of the villages was made in such a way that the different livelihood systems of the region are represented and also the different implementation achievements of PSNP among the villages were considered. The key variables taken into consideration in the site selection process include PSNP implementation status, and livelihood systems of pastoralists versus agro-pastoralists. Accordingly, six villages - three from Zone 02 (Da'ar, Urkudi and EruhnaAdegahnu) and similarly three from Zone 01 (Anderkelo-Kelaelo and BekeliDaarna-AbeliDera and Alasa Bolo) were selected.

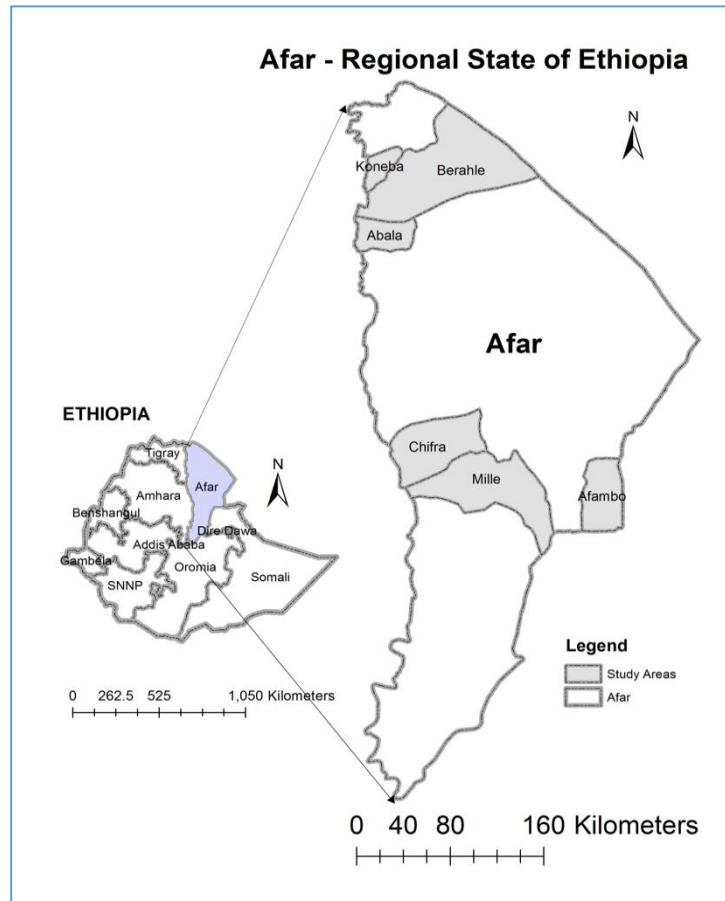


Figure 1: Afar Regional Map, the Selected Districts and village

Alasa Bolo Village: is a peasant association located in Afambo District of Awsi-Rasu of Zone 01 where agro-pastoralism, animal husbandry and agriculture makes up the main livelihood system. Unlike the other villages surveyed, it does not have a clan system and administered by the local leaders named as *Fi'ima* who serve the community equally regardless of their clans. The village has 6 *kushets* (*gots*) [*gots/kushets are small units of a village*], namely: Badu, Udura, Bayanto, Erobona, Abrantubukus and Sahaytu. Having 984 households, it has a total population of 5705, where 2897 are males and 2808 are females. Alasa Bolo is located in lowland of the Afar region where it is characterized by largely flat and to some extent mountainous landscapes, and high humidity with annual temperature range between 27°C to 45°C. Alassa Bolo has 826 PSNP beneficiaries whom 400 are women and 426 are men.

This particular Region of the Afar, receives limited annual rainfall once during summer but it has access to the Afambo River, which often flows throughout the year. Due to its suitable/plain landscape and the existence of Afambo River, cultivation of different irrigated crops mainly maize, sesame, vegetables and cash crops like palm tree are common in the village. However, their vast grazing land which serves large number of livestock from different parts of the Afar region is being threatened by the invasive species called *Prosopis*.

Anderkelo-Kelaelo Village: is located in Chifra District in Zone 01, in a distance of 7km from the center Chifra (connected with a feeder road). Predominantly populated with pastoralist Afar while some Amharas are residing there as well. The principal mode of production is pastoralism with some farming practices. The area has been affected by frequent droughts and flood occurrences, especially since 2007. Besides the recent intervention of the Emergency program, PSNP is the most established government

scheme that is being used in ensuring household food security. There are around 1200 households in the village and all these households are PSNP beneficiaries, *Tabias* [small units of a Kebele] within the village include Anderkelo, Kelaelo, Gelaekelo, Bedatu, Ugbu and Waida.

BekeliDaarna-AbeliDera Village: is one of the 12 villages found in Mile District of Zone 01. Rainfall is low with dry hot temperature. It has 271 households among which 1356 are individual beneficiaries of the PSNP. There are four *kushets* in the village namely: Fiya Elu, Bekelidaar, AbeliDera and Hiris. Pastoralism is the principal mode of production, mainly with a herding composition of camels, cattle and sheep/goats while selling firewood as secondary and PSNP as third source of livelihood. The people's dwellings consist of traditional hats and mobile nomadic hamlets that can be easily dismantled and re-fixed and are consistent with mobile grazing pattern. But, for the past 14 years the people have been sedentarized in Bekelidaar, limiting seasonal migration.

Da'ar Village: located in Berhale District of Zone 02 is characterized by very dry area where there is very limited rainfall and/or no rainfall throughout the year. Mostly the area gets a rainfall of once or twice a year and on average less than 200mm per annum. Temperature usually ranges from 27^oc to 45^oc. The village is located at 11km from Berhale town and is divided into four *kushets* (*gots*) including Kulili, Keremedera, Katoita and Aduli. The total population of the village is 8303, of which 4687 are male while 3616 are female. In the village there are 2368 PSNP beneficiaries among which 1085 are women while 1283 are men. PSNP supports, emergency food aid and remittance, labor work and petty trading in a manner which complement their pastoralist livelihoods.

Eruhna-Adegahnu Village: located in Konoba District in Zone 02, is an agro-pastoralist village bordering with the Atsibi Wenberta of the Tigray regional state. It is also relatively far from the Konoba market because of poor road conditions connecting the village with the District and Atsibi Markets.

The village has nine *kushets*, and it is estimated that out of 1600 households 3395 individuals are PSNP beneficiaries. The main sources of livelihood in the village are pastoralism and agro-pastoralism followed by apiculture, PSNP and remittance respectively. In the past households owned up-to a hectare of land because of fair redistribution of land to enable them to grow, but in recent years recurrent drought and shortage of rainfall, negatively affected agricultural productivity leading to food shortages.

Urkudi Village: found in Abala District, Zone 02 of Afar Region is near to the Abala – Berhale main road. It is one of the 13 villages of the Abala District and is located about 10Kms from the district's center of Wuhdet. It constitutes a total of four *kushets* including Rageso, Urkudi, Kerayto Korma and Higilta. It is one of the agro-pastoralist areas of the region. There are 700 households in the village and all these households are PSNP beneficiaries. Accordingly, the PRA participants were selected from all of these four *kushets*.

PRA: FGD participants and Sampling

PRA methods enable local people to share, enhance and analyze their knowledge of life and conditions, to plan and to act (Chambers, 2005). Participatory methods include focus group discussion, matrix scoring, seasonal calendars, trend analysis, wealth ranking and grouping, and analytical diagramming. The PRA appraisal took place within August 2015 to August 2017.

The PRA participants were selected in consultation with the village administrators. Composition of the participants in the four districts (Berhale, Aba'la, Koneba and Afambo) were 20 members with an equal number of men and women, except within the Mile and Chifra districts with male to female ratio 16 to 10 and 12 to 10 respectively. In the PRA, a total of 128 participants (of whom 68 men and 60 women) were actively engaged and participated in demonstrating their problems and possible solutions. The PRA participants were selected from the Afar members of the Kebele Food Security Task Force –

KFSTF [*which is a village level committee that oversees the overall food allocation of the PSNP*]; the mosque, clan, and *kushet* or *tabia* leadership in order to facilitate their process of engagement. The remaining participants were selected from different areas of the village, economic groups and clan groups to represent the majority of the people living in the district. In addition, two local interpreters were also used, i.e., one in each PRA session for the two parallel sessions. With these PRA participants, engaging discussions were undertaken concerning their pastoral life style and herd movements, agricultural practices, health service provisions, their access to education, marketing, credit, their off-pastoral/farm activities and also regarding other important areas of the livelihoods.

The researchers understand that the patriarchal nature of the Afar society and the cultural barriers prohibit women's full participation in general community discussion so separate sessions have been organized to enable women to express their ideas openly, especially on issues related to health and maternity. In some limited cases, groups of men and women were also interviewed together but only when the men or elders allowed it.

2. PRA Findings

2.1 Pastoral, Agro-pastoral and Alternative Livelihoods

As mentioned before, the livelihoods and the production systems of the Afar community mainly dependent on pastoralism and agro-pastoralism as there is very limited scope for agricultural production. The population proportion of pastoralists and agro-pastoralists among the Afar is said to be 90% and 10 % respectively. According to the FGD participants in three villages, pastoralism is the principal production system that accounts for an estimated 90% to 100% of their entire living. In the other three villages namely Urkudi and Eruha agro-pastoralism dominates whereas in Alasa Bolo there are more opportunities for agriculture and livestock production. The main asset accumulation feature in their livelihoods is livestock but the number may differ according to the wealth of the household while almost everybody owns a goat or sheep.

2.1.1 The Afar social fabric and Pastoralism

The Afar ethnic communities are differentiated from the neighboring communities because of their cultural features, customary life style and the nature of the ecology. They are predominantly pastoral in their way of life. Afar settlements are composed of a mixture of clans although each locality is identified with a major clan and affine. This makes it easier to organize social, economic and political support in times of crisis. Clans are represented by clan heads. Clan heads are entrusted with the responsibility of regulating the behavior of clan members. They are also expected to mobilize clan members for some positive pursuits, including co-operation in certain domestic activities and raising money for compensation for any physical or psychological damage caused upon others during violent conflicts. They make sure that every clan member is socially, economically and politically secure.

Drought and water scarcity has become more frequent and tends to be a major problem in terms of asset loss and resource depletion. The main asset accumulation feature in their livelihoods is livestock and they said although the livestock numbers may differ, almost everybody has got a goat or sheep. Given the level of drought, the PRA participants clearly stipulated that over the last ten to fifteen years, both livestock herd size per household and agricultural productivity have diminished. Consequently, both income from livestock (sales of live animals as well as livestock products) and consumption of livestock products (particularly milk, butter and meat) have declined, which has had adverse effects on the nutritional status of the most vulnerable groups (children, pregnant mothers and elderly people). The

main root causes of livestock low productivity in the area include decreasing level of feed and water, and pervasive animal diseases.

Drought, its consequences and pastoralists coping strategies

The Afar people, as in other pastoralist communities, are facing extreme challenges to continue their traditional way of life because of the increasing impacts of climate change. Afar regional state has been repeatedly affected by drought and this is so in the past few years due to the East African drought crisis and El Niño. The El Niño weather pattern is triggering food shortages, hurting pastoralists' ability to earn income, and impacting the health and nutrition of the household. On top of this, El Niño is also impacting the people through the high price of grains and low market price of livestock, which is exacerbated by the lack of alternative income sources. This leads to poor households experiencing food shortages and, due to the lack of animal feed, high rates of livestock loss. The impact is not limited to famine, which is induced by water shortages and failed harvests, but also to outbreaks of diseases like malaria and cholera. This, along with its concomitant vulnerabilities, has severely affected livestock and crop production of Afar communities. For the agro-pastoralists, crop failure, lack of animal feed and animal disease in the absence of vaccination. The FGD participants claimed that though district Bureau of Agriculture is in charge of vaccinating livestock, due to lack of the vaccine, their animals have not been vaccinated in which hundreds of animals die yearly. Compounded with other types of shocks including- increased demand due to population growth, natural resources, but most importantly, water; livestock and agricultural production - their situation has worsened over the last decades. This all together, have compounded the communities' vulnerability recently intensifying seasonal mobility of the people in search of rangeland and water.

Seasonal mobility is one of the key strategies enabling the pastoralists and agro-pastoralists to utilize variety of resources with different seasonal rangelands. Afar pastoral people adopt patterns of mobility to gain access to water and pasture. Their destination, schedule of mobility and the distance travelled each day all depend on the water availability. Based on the discussion made in Zone 01 and 02 of the Afar region, as tradition and in most cases, herders (male) only migrate in search of pasture and water while the other household members remain at their locality.

Migration of herds in search of grass and water takes place during March to May but mobility patterns may temporally and spatially vary in scope and destination being very much dependent on grazing and water resources. For instance, traditionally in Anderkelo, the community used to move to places next to Kombolcha, Chefe, Awash (Adayto), Awra, etc. in search of grazing land and water during the dry season. In some cases, such journeys could take up to 15 days. The traditional mode of mobility (by walking the herd to new grazing land), is found to be difficult as the livestock regularly perish on arrival due to illness and long distance travels. Those herders who can afford it, started to aggregate their livestock so that they can use hired tracks to move their livestock to the new grazing areas. In the case of the Da'ar village pastoralists have discontinued their traditional migration patterns and move with their livestock towards the Abala foothills in particular towards Desea and Atsbi districts in Tigray region. The main reason for not migrating this year (2016-017) is because of the drought in all the surrounding areas 'drought is everywhere' as many of the FGD participants underscored.

As the PRA participants repeatedly indicated, the main causes for the livestock production decline are drought, lack of rain and lack of animal feed. The availability of animal feed for the livestock is key for the Afar people who primarily depend on livestock production. Thus, the lack of grazing land is forcing them to buy animal feed or fodder, mainly wheat bran (*frusca*) where the researchers observed cattle and oxen eating the wheat bran during the Anderkelo PRA sessions. Participants were concerned as both large livestock (cattle/camels) and small ruminants rely on these types of food sources, which cost

them between Ethiopian Birr280 and 300 [*in local currency*] for only half a quintal. The only months they do not buy animal feed during the two summer months of rainy season, when forage availability could be better depending on seasonal rains.

2.1.2 Agro-pastoral Livelihoods

The PRA study has selected two sites which practice agro-pastoral livelihoods namely Urkudi and Alasa Bolo. The Urkudi population is categorized as agro-pastoralist, based on their livelihood systems and social set-ups. Their livelihood system combines both farming and livestock rearing where rich households have an average of two hectares of cultivable land and the poor households have only half a hectare. However, on average the community members own a hectare of cultivable land. Though most of the households have cultivable land, about 20% of the community members do not own farming land. In Urkudi, land was last distributed in 1981. Village administrators conducted land reallocations and arrangements which shifted ownership from those who do not have descendants in the village to landless households for crops cultivation. Household heads bequest their lands to their children in case of marriage.

The community members mainly produce sorghum, maize, barley, *Teff*, beans and other vegetables. They also need to protect their crops from animal damage especially camels and cattle. PRA discussants said that they sow sorghum in April, maize in May to June, and barley in July; *Teff* is during July-August and beans and other crops in September.

The PRA participants from Urkudi village said that their land is known for its fertile soil but they have explained that in order to have adequate agricultural output, they need flood water diversion as the rain is not enough for cultivation. In a good year, rains should start in June and end in mid of September. Clearly, the village has the potential for river-based irrigation, though the regional government has so far been unable to install the irrigation infrastructure. There is one pond in the village which lasts for three months of the year and the community uses it for livestock drinking.

Alasa Bolo, like other parts of the region is also affected by the drought but due to its location in the Awash basin, it is endowed with a river which is a source of water for the people, animal and irrigation purposes and this makes the area relatively better than other lowlands areas of the Afar region. Some households own plots of land but there is land shortage which does not satisfy the community demand for land which made it worse by the growing number of households and newly married youth who do not have land.

Alasa Bolo area has been practicing an irrigation since long time and the common crops cultivated include, maize, sorghum, date palm tree, and to some extent, *Teff*, animal feed and vegetables. Though the area has a significant potential for large scale irrigation, partly, there is fear of losing grazing land in the community but more importantly technologies and infrastructures needed are not in a place. Farmers use animal dung/manure and crop residues as organic fertilizer to enhance soil fertility. Whenever pests and insects attack their crops, the farmers call for help from the local Bureau of Agriculture but the local Bureau does not have the capacity to help the famers.

An increased access to improved, quality seed is essential for farmers to raise enhanced productivity. The combination of fertilizers, improved seed varieties can significantly influence the crop yield. However, as the case of Urkudi shows, residents do not use high yielding varieties and fertilizer inputs for their agricultural activities for two reasons. Firstly, there is low supply of inputs (i.e. high yielding varieties and fertilizers) from the agricultural offices to the farmers. Secondly, the community believes their land is good enough for crop production without government inputs like fertilizer and high yielding varieties. The discussants argued that using high yielding inputs could have adverse consequences for their agricultural production. They believe that in case of drought, those lands with high yielding inputs

would dry faster but in a good season farms with high yielding varieties grow and mature faster with the risk of being eaten by birds. The farmers also tend not use improved seeds and fertilizer because of the common religious belief system which discourages paying interest on borrowing, which would be required for purchase of government provided inputs.

Urkudi residents have difficulty in controlling weeds and they may be forced to use of pesticides, but they are also witnessing a new types of weeds which are not responding to pesticides. The agricultural development agents in the area are not in a position to help and eradicate these weeds. However, wealthier farmers can buy pesticides from elsewhere while poor framers lose their crops because of lack of pesticides.

PRA discussants highlighted that communities from Urkudi in the past used to sell 25% of their crops to the market but now most of them have stopped selling their products. Based on their experience, if there is one good harvest season it will be followed by two consecutive bad harvest seasons so rather than selling agricultural products to the market, they prefer to store them for drought periods.

In Urkudi, drought conditions force the communities to sell their livestock and income from livestock sales alongside the aid relief provided from the government helps the communities to survive. The government also provides some animal fodder to the community which is not enough for their livestock, thus the youths and their livestock are migrating to Enderta District of Tigray region. Furthermore, the community discussed their main challenge of animal health because there is only one veterinarian in Urkudi with very little capacity to treat the number of diseases which affect domestic animals, however animals' vaccination in Urkudi is carried out once in a year.

Compared to Urkudi, the Alasa Bolo area which is located in the lower Awash basin, has better water availability as well as high agricultural and pasture potential. Yet, even these communities practice seasonal mobility, once or twice a year with their animals. The frequent practice is, that young male migrate to upper Awash, with livestock of their extended families and sometimes, few young men also migrate their own but also including livestock of their sub-clan for up to three months or so depending on the availability of grass and water.

In other parts of the Awash like the Eruh settlement, the agro-pastoralists have cultivable land of one hectare (on average) per household and for those who cultivate crops; the agriculture office of the district is giving improved seeds of maize.

To summarize, with the exception to Alasa Bolo, the most fundamental problem for the pastoralists and agro-pastoralists is the lack of potable water, followed by the proliferation of malaria disease at a household level. In general, water shortages, frequent drought, food insecurity, shortage of grass/fodder, outbreak of human disease, malaria and livestock disease, electricity problems, among others, are the source of vulnerability that challenge the lives of the people.

2.1.3 Alternative Livelihoods: Off-pastoral/farm Activities

In the sampled villages the main economic activities or the main source of livelihood and income of the community are: 1) Animal husbandry followed by 2) sale of charcoal and firewood 3) Safety net 4) remittance, 5) daily labor work, 6) petty trading and 7) Agriculture (except in Urkudi and Alasa Bolo which depend on farming produces) respectively.

Most of the people in the sampled villages do not do much off-farm activities, because there is little opportunity to do non-farm activities in their villages. The off-farm activities practiced in the villages include: selling firewood and charcoal, daily labor when there are construction activities and unloading the PSNP grain sacks from the tracks. For instance, in Eruh, migration is the sole way of accessing non-pastoral income activities. The youth primarily migrate to Djibouti, Saudi Arabia and Yemen. In

Anderkelo, some youth are participating in daily labor jobs. Usually a laborer receives Ethiopian Birr 80 per day by working in water construction projects or in digging the foundation of the 120 newly erected houses in the area. On the other hand, working in unloading the PSNP grain sacks from the tracks is creating casual labor opportunity, for which they receive Ethiopian Birr 2 to unload a grain sack of 50kg. In Bekeli, the non-farm/pastoral activities are limited and so the people get most of their alternative income from selling firewood and honey.

In Da'ar and Urkudi villages, activities such as charcoal and fuelwood production are not allowed and such limited opportunities force the youth to migrate elsewhere in search job opportunities. Remittance payments sent home from Afar migrants (who work within Ethiopia or abroad) are increasingly becoming a means of livelihood for many Afar communities. This is a growing phenomenon among the Afar which requires detailed study on its own right.

Village Name	Livelihoods and Economic Activities				
	Livelihoods 1	Livelihoods 2	Livelihoods 3	Livelihoods 4	Livelihoods 5
Da'ar	Animal husbandry	Cash for work (Aid)	PSNP	Remittance	Salt Trade
Urkudi	Agriculture	Animal husbandry	Trade	PSNP	
Bekeli	Animal husbandry	Firewood sales	PSNP		
Anderkelo	Animal husbandry	PSNP	Agriculture		
Eruh	Animal husbandry	Apiculture	PSNP	Remittance	
Alasa Bolo	Agriculture ¹	Animal husbandry	PSNP	Emergency food aid	Remittance/petty trade

Table 1: Livelihoods and Economic Activities

To summarize, the construction sector has been boosted in the villages like Anderkelo; however, the lack of skills among the Afar, along with cultural barriers, prevent the Afar youth from being able to fully take advantage of such opportunities. All the tasks that require construction skills are predominantly carried out by the highlanders who come from the neighboring areas in search of employment. Skill development training for the Afar people could enable them to engage in similar construction activities and it therefore would provide the alternative sources of income to the local people.

Unlike in other parts of the Afar region such as Urkudi, the Anderkelo community does not engage in selling fuelwood and charcoal. Thus, traditionally and as it stands now, it is not an alternative source of income for their households but such tradition in part contributes towards tree conservation.

In Alasa Bolo, the combination of the environmental and manmade challenges has weakened agricultural and livestock production. Afar communities are mitigating such challenges through seasonal mobility, cross border migration of particularly, young men and women; PSNP and to lesser extent, petty trade of fire wood, charcoal, *quat or kat* [leave of the shrub which is chewed like tobacco has stimulant], etc. are currently being used to diversify source of income and minimize risks.

There are also changes in the types of trade residents can engage in. For instance, some years ago, community members in Da'ar area were actively participating in the salt trade. In the Abala District, an average price of a camel is Birr 10,000.00 for the young camels and Birr 20,000.00 for the adult ones. But nowadays, their herds of camels have been vastly depleted, due to multiple factors. Camels are the

¹Maize, pepper, onion and tomato were among the major agricultural products produced in the village. On average, one household owns 1 hectare to 2 hectares. They produce once a year.

means required to engage in the salt trade and as a result, they currently have difficulty in selling salt. Beyond its economic value, the camel is also an important indicator of wealth and prestige and thus, social status.

To conclude, in relation to the PSNP, methods of improving food security and building alternative sources of income should be studied systematically in the Afar region. An integrative approach to asset building, such as supporting the creation of small and medium enterprises, as well as community credit services, could achieve and see how far it contributes to household livelihood improvements. Therefore, the policy should enhance this area in order to reduce pastoralists and agro-pastoralists vulnerability to shocks and strengthen their resilience, which will be vital in future adaptations to climate change.

Lowland Highland Interdependence

The Afar people have strong social, economic and cultural interactions with their surrounding highlanders, mainly the Amharas, Tigrigna and the Somalis. They transact goods and services in both highland and lowland markets. This encourages the lowlanders and highlanders to engage in employment and promotes alternative sources of income to both pastoralists as well as highlanders (See Box 1). Such collaboration as indicated above deserves a detailed study on its own right because there is still a major knowledge gap.

Conflict Management

Conflicts between pastoralists and highlanders were less frequently mentioned during the FGDs but problems of herder quarrels at grazing lands were raised mainly in connection with seasonal mobility. However, the problems are solved usually using traditional conflict resolution forums. The highlanders and the lowlanders established *Peace Committees* to solve problems that arise with grazing land disputes.

As a mechanism to overcome conflict related vulnerabilities, ensuring fair use and access of resources like grazing land, rivers, etc., and promoting peaceful coexistence can be very helpful. Unlike the other villages surveyed, Alasa Bolo village does not have clan system where the village is administered by the local leaders named as *Fi'ima* who serve the community equally regardless of their clans.

Box 1: Lowland-Highland Relations: The Case of Anderkelo

The Anderkelo people have strong social, economic and cultural interaction with their surrounding highlanders, Amara people. Both Afars and Amara transact goods and services in both markets. The Anderkelo people sell their livestock and buy some food stuffs in the Amhara market, mostly on Thursdays. The same is true for the Amhara people where they visit Chifra market on Sundays.

Anderkelo is a Tabia for the Afar but the people of the Amara origin have also been settling in the village. The Afar provide them housing land (a slot of land is being provided for the Amhara ethnic group members with Birr 300) where they have already built approximately 120 iron sheet roofed houses in the Tabia. Having consistently lived in the Tabia for six months, the Amhara maintain the right for constructing residential houses, which enables them to access residence and land status.

The main objectives for providing housing land to the Amharas, as the village head said, includes encouraging the Afar to learn from Amharas (farming practices and petty trade); promoting trade and markets (the bigger the Tabia there is a possibility of creating a larger market that can stimulate the expansion of the Tabia), promoting employment (housing construction, especially digging the foundation of the houses) and promoting alternative source of income to the pastoralist livelihoods to reduce drought vulnerability.

In general, as the participants of the FGD said they live in peacefully together, sharing their resources, and engaging in social activities including digging graves and collaborating in taking sick people to the health center. They said that 'we get married with the Amhara women, though they do not take our girls'. They insisted that they live in peaceful coexistence.

Source: SPIDA PRA Study, 2016

Alasa Bolo community have their own fairly inclusive, partly clan based social organization whose leadership is often assumed by councils of elders, clan leaders, *Fi'ima* [literally stands for 'peers or equals' and represents a local social organization active in administering land and water resources and settling conflicts among the Afar community members] and local wise men as necessary. Criminals are sent to court if they were found guilty, but less serious cases are handled by the old people who may solve the conflict through negotiation.

2.2 Social Protection

Traditional informal support mechanism

Afar people are known for their strong social bonds and sharing resources among the clan members but due to the concurrent drought almost all the families are now in a position of only sustaining themselves and not helping others. As one FGD participant put it 'the drought made us equal or to stand on the same foot'.

The traditional social protection uses mosque and clan system for transferring safety net support. As a religious value of Islam, *Zakat* is also a duty to contribute part of your asset or income to those who are less capable of helping themselves during Ashura (*mewlid*). Islamic followers give in-kind or in cash to the religious/mosque leader '*Qadi*' where he channels the contributions collected to those who are poor or in need of support. These people could be blind, elderly, children left without father and/or mother, physically weak, etc. Moreover, according to them they give *Zakat* for people who came from far places. The people give one goat if they have five camels and/or they give one goat if they have 40 goats. Likewise, they give one goat as *Zakat* if they have 30 cattle.

The community members were able to provide cases where the role of informal safety net support is needed:

- a) The clan members support people who are less able to work and engage in pastoral or farming livelihoods. If someone is chronically sick, then the clan members provide support to the day-to-day living, buying medication and/or covering the cost of health related expenses.
- b) If a member of a clan dies, then the funeral and other related expenses are covered by clan members including by contributing goats during the mourning for the deceased. Among the Afar communities, mourning lasts for about seven days and people usually bring to the bereaved family things like house utensils (cups), goats, cattle, etc. according to their ability to support it.
- c) If a member of a clan has killed someone, then the clan members contribute livestock in settling the issue through their customary laws. However, the contribution of livestock differs from village to village. For instance, in Anderkelo village, in the case of killing, members of the community decide on the details of the settlement. That is, if the person kills a close kin or clan member he/she settles the issue by giving 50 cattle while if the person who is killed is from another clan then he/she needs to give 100 cattle. For this purpose, as a single family cannot afford the requested number of cattle, it will be the responsibility of the entire clan to contribute and share their resources in settling the issue.
- d) If a person has lost his/her livestock during the drought or migratory season (such crisis can leave the family from having 50 cattle to none). In this case, the members of the clan contribute goats in rebuilding the asset of the family. Such support is vital as it supports the person emotionally and psychologically. The family and the clan's contribution plays a key role in rehabilitating the family with socio-psychological and asset support.

- e) The clan members help in covering the engagement and marriage ceremony expenses either in-kind or cash while also extending their help to the newly married couple in starting their own independent living.
- f) The communities (like Alasa Bolo village), regardless of their clans, they offer milk and sugar to the child bearer mother whereas in wedding ceremony they give Birr 50 –Birr 100 according to their economic capacity. On the other hand, if it is funeral service the people take to the household either rice, sugar, goat, cattle or money.

Formal Social Protection (PSNP)

PSNP is a formal social protection mechanism in Ethiopia which helps food-insecure societies by providing them with resources via payments or in-kind. It has two components, namely Public Works and Direct Support. Public works is part of the PSNP program where the beneficiaries are able to participate in community roads; social infrastructures like school, health posts and toilet building; major soil and water conservation; water supplies, terracing and so on. On the other hand, the PSNP has a direct support part for incapacitated households including disabled people, elderly, pregnant and kids. PSNP resources, unlike in some other parts of Ethiopia, are transferred in-kind (food items) in the Afar region which is preferred by the communities to cash in order to reduce the risk of high inflation and the real value of the currency. The transfer size (for both the direct support and wage rate of those who participate in public works) is equivalent to 3 kg of grains per day per person for five days a month, for six months of year. The transfer is provided to households on a monthly basis for the six consecutive months from January to June of the year (alternatively the beneficiaries receive a two or more months' transfers in a single transfer). According to the FGD discussants, attendance and follow up tasks are undertaken by the public work activities supervisor. Though there is variability in the hours work per day from village to village, on average men work six hours a day while women work five hours a day. Mostly the tailored public work activities are carried out based on the priority given by the community through their prepared action plan and the following are some examples:

- Pastoral centers were built in Da'ar and Eruh villages;
- In Urkudi, the agro-pastoralist village, erosion control task of gabion construction was the main prioritized activity;
- In Da'ar, building public latrine in each village was completed;
- In the Bekelidaar and Anderkelo villages, the works for deep water wells were carried out;
- In Eruh the houses for teachers and also for a generator were constructed;
- In Alasa Bolo, community roads, school buildings and soil and water conservation activities were among the major public works done in the village.

The PSNP participants are selected using the target criterion as in accordance within the program implementation manual where they are announced in a public meeting in which the entire PSNP client list is read out and discussed. Beneficiary selection and transfer size are determined by the Food Security Task Force (FSTF), not by clan leaders. Furthermore, the system has an appeal mechanism for clients screened out from being beneficiaries. Their appeal is presented to the KFSTF. Unlike the highlanders, clan leaders have a big role in screening residents, within the appeal committee and regarding beneficiary selection in all the visited villages. They work side-by-side with the formal task force to smooth the PSNP transfers and public work activities.

In Da'ar, out of 8303 individual residents, 2368 are PSNP beneficiaries. In Eruh, from an estimated 1600 resident households, there are 3395 individuals that comprise the PSNP beneficiaries list. Similarly, in Bekeli of the 271 households, 1356 are individual beneficiaries of the program. However, in Anderkelo, all of the estimated 1200 households are PSNP beneficiaries.

The productive elements of the safety net program, as raised by the PRA participants, are:

- a) It has a demonstratively positive effect in the villages by shifting communities away from a humanitarian response to a more development oriented approach in addressing the food gap.
- b) The program enabled the people to not only to live together but also encouraged them to work and protect their common resources together.
- c) It increased the welfare of the community since most of the public works cannot be carried out by a single household.
- d) It prolonged the asset protection of the households as the people are not selling their livestock in periods of food shortage.

Generally speaking, of course, PSNP intervention has contributed positively by providing at least one predictable source of income for the vulnerable households and helping those most needy and unable to work. The PSNP has an overall positive effect on reducing the vulnerability of the households. Despite the advantages of PSNP in temporarily fulfilling the food security, the people have some criticism against the program or its components:

- a) The PSNP support is only for six months of the year and does not consider what can happen in the remaining six months, which is problematic since most of the villages (except Urkudi and Alasa Bolo) have no other agricultural activity and/ or crop production throughout the year. On top of that, there is mismatch of demand and supply (fewer quotas) and delay of transfers as reported by many respondents.
- b) The PSNP program operates on one household basis (i.e. total number of family members of five as one household) and because of such limitation, polygamous households receive only as much as one household.
- c) Supply of conservation tools and equipment is not matched with the demand of the public work participants.
- d) The PSNP only provided food to sustain the daily life of the beneficiaries and does not provide credit or related asset building interventions. The safety net program should be supported with different income diversification opportunities like off-pastoral income generation and asset building activities e.g. cooperatives.
- e) The PSNP is not tailored to the production and livelihood system of the people, that is, the PSNP transfers and public works do not consider the environmental condition and seasonal patterns of mobility among the villages. Moreover, its effective sustainable environmental rehabilitating role was also questioned as the Alasa Bolo participants said most of the public work activities often involved clearing of Prosopis, which revives immediately.
- f) The KFSTF sometime selects monthly salary earners and individuals with better livelihood status, as opposed to the poor.

2.3 Education Services

Education is one of the most important sectors for economic, social and political development. In the Afar region, there are traditional and modern educational systems that complementarily exist in the villages.

Regular Education

Early childhood education is not only a recognized right of a child, but also as there is evidence of the formative significance in the way that early childhood care and education contributes to a later life success of the child. In line with government development policy, the six selective villages of the PRA study had initially accessed formal educational services at different times. In the cases of Urkudi primary schools [*Grades one to four*] was opened in 1994 and in Anderkelo in 1999, but in Bekeli in 2001/02. In all the surveyed villages there is good distribution of primary school education but into two

of the villages a school feeding program is also included. Bekeli village is known to be a model school with residents also having access to mobile school services.

In most of the sampled villages there is low enrolment and higher dropout rate of boys than girls in primary schools. The situation is reversed in high school because some girls get married at early age and they find themselves in a difficult situation to spare their time to both domestic activities and commute far for schooling. As for the boys, the dropout is primarily because they look for additional household income (in search of jobs) and participate in seasonal livestock migration in search of pasture and water for their herds, especially during a dry season and agricultural tasks during the rainy season. But there are some exceptions to this situation as in the case of Alasa Bolo (high potential area) shows, where primary school drop outs are relatively less significant. According to the communities in Alasa Bolo, appreciable attention and follow up being made by the government (regional and district experts), Kebele Education and Training Board (KETB) members, Parent-Teachers Association (PTA) members and school leaders created more conducive situation for the primary school education.

In general, the ratio of girls to boys, in all the schools is higher as follow.

- In Urkudi out of 343 students, 196 are girls and similarly in Bekelidaar out of 460 students, 240 are girls.
- In Alasa Bolo of the about 520 students, boys assume the higher percentage as a majority.

However, students who finish their eighth grade studies in their home area need to travel to continue their high school education. This is a real challenge especially for poorer families who cannot afford to send their children to other towns because of financial constraints.

Attitudes towards girl education among the Afar is improving but there is still major reluctance to send girls for secondary education which are located in far away from their settlements so in some ways boys are still at an advantage, because families are willing to send their boys too far away secondary schools provided that such families have the resources to do so.

Adult Education

The role of adult education in eradicating the illiteracy rate among the rural people is instrumental. The Government of Ethiopia, through its Education Sector Development Plan and Adult and Alternative Basic Education Strategies, places the focus of the non-formal education program to be on 'literacy, numeracy and the environment so as to enable learners to develop problem-solving abilities and change their mode of life' (Ministry of Education, 2006). These skills are expected to support other aspects of life, such as agriculture, environment, health including disease prevention, HIV/AIDS, civic education, cultural education, marketing, banking, gender, etc. (Ibid).

As the PRA results of the sampled Afar villages revealed there are varied experiences related to accessing adult education and literacy programs. As to the estimates of the FGD participants, only about 10% of the adults are literate whereas the 90% are illiterate. This gap is exasperated due to the lack of adult education services along with the communities' unwillingness. For instance, in Eruh case, there is an adult educational program which includes training for improvement of livelihood conditions, better healthcare and so on. The teachers are trained by NGOs.

In the case of Da'ar village, the local government started adult education during 2015 which contributed towards the improvement of writing and reading in their own mother tongue (Afarigna). There is huge interest for adult education in the area in Anderkelo where there is no adult education center in the village. Highlighting this need, the FGD participants said that 'we need adult education; it is like a dream to come true'. However, in Urkudi, though adult education has recently started by the regional government, the community did not start attending because of drought and lack of willingness.

In line with National Government policy, in Alasa Bolo there is adult education and two local teachers, a male and a female who are assigned for this purpose. Different associations, including youth and women, etc. are used as channels through which such education is offered on a twice weekly basis. The locals claim that the skills gained are being applied in their day-to-day activities including in agriculture, health issues, environmental and their petty trade activities and yet the focus and attention given to such programs by the local communities is minimal. Thus, only few adult men and women follow it to the extent of reading and writing. But the Afar communities greatest desire is in learning new things largely lies in techniques of Prosopis management, animal health, and better irrigation and business skills.

Religious Education

Islam is the dominant religion among the Afar communities and religious education (*Quran*) runs in parallel with the formal education in the six villages surveyed. Religious education is provided to males and females starting from the age of seven. The *Quran* classes take place in the morning and evening time, but in some villages like Da'ar, *Quran* education is given at night only, while formal education is delivered during the day time. The Islamic teachings of the *Quran* plays an important role in increasing literacy as some people are able to learn reading Arabic which the medium for religious instruction. Arabic is not the mother tongue for the Afar and only a limited number of the Afar people can read and write in Arabic. So despite the religious education, the adult literacy rates in general still remain low, ranging from 2% (in Da'ar) to 10% (in Bekelidaar) villages.

PSNP and School Feeding Roles in Educational Development

The PSNP program includes a public work activities package, which plays a key role in capacitating some of the schools in the sampled villages. For instance, the Da'ar school has eight classrooms of which four classrooms were built by the Rehabilitation Development Fund, whereas the remaining four classes were built using the PSNP labor force provided by the community. Moreover, in Da'ar, the community built houses for teachers who are working in their schools. Similarly, in Eruh, the community members built houses for the teachers by utilizing the public work component of the PSNP. It is also common to see the community members fetching water and firewood for the teachers in almost all of the sampled villages including Da'ar, Eruh and Anderkelo. The communities' commitment and support in-kind shows their role in advancing the educational services in their localities.

The FGD participants in both Bekeli and Anderkelo villages underlined that the school feeding program is encouraging both the girls and youth to attend the lessons regularly. For instance, taking the case of Anderkelo, all the students from grade 1 to 8 are supported by the school feeding program. Edible foodstuff and powdered milk are given to students during breakfast time. Assessing the school feeding, the FGD participants are happy to have this service in their community as it is contributing towards improving the nutritional level of the children and supporting the household food security, as some of students only get their breakfast at the school.

Key Challenges in Education

In all the sampled villages, PRA discussants raised their concerns and the key challenges they face in accessing educational services which are hindering the quality of education provided, including:

- a) Concurrent drought and its impact which makes the communities more vulnerable and their livelihood unstable, in which case sending your children to school becomes less of a priority for families.
- b) Absence of local secondary schools is affecting some students as they cannot commute to the district centers. Early marriages lead to higher dropout rates, though it is declining. Moreover, the mobile nature of their pastoral livelihoods is affecting the students from fully committing

their time to education, exacerbated by the absence of mobile schools that suit their livelihood style.

- c) Shortage of exercise books for grade 5-8 and teaching books (a single book being shared between several students).
- d) Lack of classrooms, library and laboratory was also reported in some cases.
- e) The majority of parents do not have the financial resources to cover all educational expenses since most of the households have many children. This is especially true when parents have to send their children to attend secondary school in district centers far away from their homes.
- f) Teachers' absence from their workplace (partly due to harsh living conditions in Afar rural areas) was reported as a major problem in undermining education in the rural areas (this has been particularly noted in Urkudi).

2.4 Health Services

The distribution of health facilities and the quality service provided to rural communities are crucial factors in decreasing both maternal and infant mortality rates and creating healthier society in general. Before the expansion of modern health services in the Afar region, the Afar were known for their traditional healing practices. But nowadays, there is a highly reduced level of using traditional practices, with the exception of traditional midwifery which is still very important.

In all the surveyed villages, there is at least one health post staffed with a few health workers (one each in the case of Alasa Bolo and Urkudi whereas four in Bekelidaar). There are also health extension workers who treat and provide health education services to the community using home to home services, including teaching hand washing before eating and after toilet use, building basic sanitary facilities such as latrines, encouraging the disposal of items which pose serious health threats and educating families on the negative impact of poor nutrition. The common diseases mentioned by many communities include: Typhoid, Malaria, Tuberculosis and vomiting.

People also often prefer traditional healers to modern clinic and this is especially true, if it is a case suspected evil spirit (*Jinni*) which can only be dealt by traditional healers. For example, there are about 10 traditional healers in Alasa Bolo village and they charge Birr 50 to Birr 100 depending on the type of the disease to be treated.

Women: Delivery and Contraceptive Practices

As the result of the FGD held in the six villages indicated that Afar mother produces an average of 6 to 7 children while some have up to 12 to 14 children. Besides their religious beliefs, as in many agrarian societies their justification for having many children is that they expect children to be future assets. In this case, during the contagious diseases the families can remain at least with some of children – reducing the risk of losing them all. Among the Afar women, birth spacing is not common and using any contraceptive method is strictly forbidden due to religious restrictions. They neither utilize contraceptive methods nor practice birth spacing if the woman is healthy. She may also be pushed by her family to have as many children as possible.

The health extension worker gives training on how to use contraceptives and interestingly the religious leaders allow women who have child delivery problems to use contraceptives, as the case of Da'ar shows.

All the health posts and centers (with the exception of Bekeli village which has two midwives), lack professional midwives in practice, so villagers highly depend upon the traditional midwifery services. According to the FGD discussants in both Urkudi and Bekeli, there are more than 20 midwives in each village where a single midwife helps on average of ten mothers in times of delivery (in Anderkelo, there

are 12 midwives who are trained for a year in association between the Lutheran and Health Office). Using the trained traditional midwives, most women deliver their children at home but if the women experience delivery complications they are referred to the health post. In general, the practice of delivering babies at health centers is low, though improvements are recorded at this time.

The case of Urkudi is interesting as the recently built health center in Abala District has reduced the travel distance for expectant mothers and they can now access health services in their district and this has reduced the risk of death among women and children. However, in Urkudi, out of ten women, four are sent to hospital due to complications which are beyond the midwife's capacity. In cases of serious complications, patients go to the nearby town hospitals including Mekelle, Dessie, Weldiya and Asaiyta but which hospital the women go to depends on the location of their settlement.

Access to ambulance services varies in the villages depending on where the ambulances are located in the district center (mostly one ambulance for each district). If ambulance arrives late during time of emergency, residents usually use a traditional carrying bed (*Qareza*), to take the patients to the nearest hospital but such arduous journeys could take half a day to two days. One major problem is the delayed arrival of ambulances and the fact that there are not enough of them to reach out to those Afar communities.

During the FGDs the participants were able to discuss the prevalence of HIV/AIDS. For instance, in Urkudi some of the participants stated that HIV/AIDS is not common and it is a rare case'. Furthermore, the three villages of Da'ar, Urkudi and Bekeli underlined the need for the mandatory HIV blood test before marriage, and the reasoning behind this is if anyone of them is found to be HIV positive then the marriage is annulled. Religious leaders allow marriage after checking the certificate of HIV/ AIDS (Da'ar). As the case from Da'ar shows, HIV/ AIDS carriers receive free medication from the district health center, as seen in Berhale. Regarding the stigmatization of the HIV/AIDS, some years ago carriers were stigmatized by the community. Nowadays, due to the different awareness creation training programs provided by the government, the residents claimed that their attitude has been greatly changed.

The communities in Da'ar village have acknowledged that, the general accessibility of health services has improved, though there remains a widespread shortage of nurses and medicines. In the eyes of the community in Bekeli, their health center has sufficient medicines and manpower which includes four permanent workers, two of which are midwives and the rest are two laboratory technicians and a health extension expert. In the case of Alasa Bolo, there is a health center which does not provide adequate health service and people are therefore exposed to health related problems like waterborne diseases, Typhoid and cerebral malaria.

PRA discussants argue that the most challenging health deficiencies in the villages are in prenatal care (especially at times of delivery), malaria (with seasonal occurrence from October to December) and for the common cold where children are particularly vulnerable (eye disease was also a reported issue in Bekeli). Other challenges also include the inability of nurses and health workers for not being qualified to treat certain diseases (which they need to refer for treatment in town hospitals). Also on top of these obstacles, there is no access to electricity in many of these settlements and the lack of refrigerators is feared to lead to high risk of medicinal contamination.

Birth Spacing

As aforementioned, birth spacing is not a common practice in all the villages. They do not use contraceptive methods to control or space births if the women are healthy. In Da'ar, Anderkelo and Eruh villages on average, a woman delivers 6 to 7 children while in Urkudi village a single mother can deliver about 7 children. Exceptionally in the villages including that of Alasa Bolo, there are some

mothers who give birth to up to 14 children. In Bekelidaar, the PRA women group participants discussed that there is a norm of using contraceptives to plan their family which differs from the other five villages. Despite this, the average delivery of children is 6, with exceptional cases up to 12 children. Their primary justification for having many children is that contraceptive mechanisms are strictly forbidden in the community due to religious restrictions, except for those women who experience birthing difficulties. However, at this time, the health extension worker gives intensive trainings on how to use contraceptive tools for birth spacing and family planning.

Babies depend on breast milk for up to two years of age, unless the mother immediately gets pregnant. In the case of Bekeli, the participants also mentioned that they feed their babies' breast milk for the first six months and instead supply them with supplementary foods for up to 2 years. However, as it is indicated in Eruh, they believe that breast feeding for years hurts the mother. All the six villages stated that they practice routine vaccinations for their children. In all of the surveyed villages, women primarily deliver their children at home by the traditional midwives but will visit the health post in cases of illness or complications. Besides being low, the practice of delivering babies at health centers is showing an improvement.

A polygamous family is common in the villages and a man can get married up to 4 or 5 wives. But before marrying another, he has to convince his first wife and also it is practice for him to provide her gifts for moral compensation. The compensation can be either money or something else, based on the decision of the clan leaders.

Nutrition

One of the adverse impacts of the concurrent drought and El Niño phenomenon in Ethiopia is its diminution effect on the nutritional composition of household food security among the Afar and other communities in the country. The PRA participants emphasized the shortage of livestock products as a consequence of the drought which hugely changed their nutritional composition. The typical traditional diet of the Afar people in the past included meat, dairy products and '*Gonfo*' [*porridge*] which is prepared by using flour, butter and milk. But nowadays, they are simply preparing bread using only a flour (either maize's or wheat's flour) which they eat with '*Shiro*' [*powdered chickpeas*]. In addition, they said they eat similar types of food three times a day.

Livestock Health

Four of the six surveyed villages are predominantly pastoralists and animal health is critically important to them and in all the villages surveyed, animal diseases are widespread. The livestock mostly affected in the villages are goats and sheep but in times of drought, donkeys and camels are also prone to diseases.

As the PRA participants underscored there is an urgent need for action to be taken in regards to the animal health. Among the common animal diseases affecting donkeys, sheep and goats, the primary cases are Peste des Petits ruminants (PPR), Pasturellosis, Shoaat pox, external parasite, ORF (contagious eathyrma) and diarrhoea. There has also been an outbreak amongst camels of external parasites and Camel Respiratory Disease Complex (CRDC), while Pasturellosis and external parasites outbreaks for cattle are the common challenges facing the people. There are veterinary clinics in many of the villages surveyed but there are series shortages of veterinary staff, facilities and veterinary medicine. In some cases (e.g. major diseases outbreaks), the government provides free vaccinations.

Water

The six villages have shared mixed experiences in regards to accessing water and its sources, with the issues raised including the distribution of pipes into their houses, the availability of public water points and their reliance on ponds and rivers.

In Alasa Bolo, there is one hand pump water point located a kilometer away from the village. They use this hand pump and Awash River which is source of water mainly for livestock and irrigation. Drinking water in Da'ar and Bekelidaar villages is not available. The residents use water from the river for drinking and other purposes such as washing clothes but both humans and livestock use the same river. However, in Anderkelo, there is only one public water distribution center which works with solar energy; that is usually functional in the middle of the day where using solar power. In the absence of the solar power, women are obliged to go to a nearby river which is two hours walking distance for round trip. The solar tanker is the only public water source available for most of the people which is being used by both humans and the livestock. Furthermore, comparing to the other PRA villages, Eruh has a serious problem in accessing potable water, which results in people relying on water from unsafe sources, often travelling for four hours to reach rivers and ponds. On average, in most of the PRA villages, females fetch water four times a day.

Unlike the other PRA villages, drinking water is available in each house in Urkudi. In this village the water utility has expanded seven years ago. The people use these water sources for both the community and their livestock. As the PRA discussants said however currently they are experiencing a mismatch between the amount of water supplied and the demand required, where water is now only available through the pipes every 3-4 days.

Sanitation

According to the communities in the villages in Da'ar and Eruh latrine coverage is low. This poses a high risk of direct exposure to excrement and results in high chances of water contamination, consequently exposing the villages to disease outbreaks. Health extension workers expend a great deal of effort in an attempt to increase the knowledge amongst the households on the importance of improved sanitation; however, the community's adaptation is low. Hygiene and sanitation activities seem to be limited, thus, only a small number of households in the villages have access to sanitation facilities. Most of the households use open defecation. Due to the shortage of water, poor sanitation and limited hygiene, the residents of the villages have been repeatedly affected by waterborne diseases.

In contrast, Alasa Bolo is in a better position of building toilet and solid waste management. There is a health extension service for sanitation like washing hands before eating a meal and after toilet usage. They also encourage and acknowledge those households who build toilets by giving them mosquito net and bucket as an incentive. Similar success experience is witnessed in Urkudi and Bekelidaar villages as well and in Urkudi in particular, PSNP coordinators have been playing a significant role in introducing and expanding latrines. There are individual latrines for about 40% of the households in the community (i.e. one latrine per household). The remaining use open areas for defecation which is a cause for contaminations and consequently can expose them to different diseases. Because no public latrine is available in the village, the PSNP coordinators have also been trying very hard to create awareness on the benefits of improved sanitation among the residents. In settlements like Bekelidaar, each household has its own latrine built out of wood while in Anderkelo as the FGD participants have reported; more than 50% of the communities have individual latrines at their homes.

In all the villages, there is extensive coverage of health extension services focusing on awareness creation training on hand washing before eating and after toilet use, building basic sanitary facilities such as latrines, encouraging rubbish disposal to prevent serious threats to health and ultimately promoting good community health.

2.5 Market, Credit Services and Cooperatives

Market

The Afar people use district markets as their principal opportunity for selling their products and buying their necessities. In all the selected villages, their market day is once a week. Mostly, to get into the market, people travel on foot and using animals but rarely, they use car transport. Most of the people sell livestock and livestock products and in return they buy food items like wheat, clothes and shoe, domestic utensils and *quat*. Unlike other villages, the residents of Bekelidaar sell firewood in their nearby village on the main Addis Ababa-Samara road. Similarly, Alasa Bolo, due to its better access to irrigation, in addition to the livestock and livestock products, maize is also sold while they buy tomatoes, potatoes, onions and other food items from the market.

In most cases, men are responsible to visit market places to buy and sell goods while women mostly visit to the markets only if they are widowed or divorced. The main market challenges raised by the FGD participants are the distance, lack of transportation and not enough items to be marketed. On top of these, because of the concurrent drought, livestock prices were reduced while food items price was increased.

Credit Services

In all the PRA selected villages the people do not take loans, firstly, because there is no formal microfinance institution which provides credit to the people and also interest-bearing lending and borrowing is forbidden due to the religious values. However, people use an informal system to take loans from their relatives, neighbors and their clan members both in cash and in kind. Though there is commercial bank at the district towns in all the surveyed villages, the people only use the bank services for saving, remittance and other money transfer services.

In the issue of credit, the researchers faced different views from place to place. In Da'ar, Urkudi, Bekelidaar and Eruh villages, the people want to take loans without interest rates and service charges, whereas in Anderkelo and Alasa Bolo there is a different experience from the above four villages because people want to pay service charge for the loans provided.

For instance, they shared the experience of a female saving and lending group called as *Darra Women Association [literarily meaning a stream or source of water]*. When a woman takes a loan of Birr 4000 from the association and then after ten months she needs to repay the loan with a total amount of Birr 4400. Similarly, in Alasa Bolo, a loan of usually Birr 2500 a year is provided by the only formal microfinance institution known as *Afar Microfinance Institution*. The borrowers return the money on monthly basis with a total interest of about 10% which an equivalent of Birr 233. This is a new experience gained from the field visits made. The people are encouraged to take loans and start small businesses in order to diversify their income sources and PRA participants strongly emphasized that loan default is not the culture of the community, but in case of loan default, his/her clan members can share and repay the loan.

Cooperatives

With regards to cooperatives in Da'ar village, there is a cooperative which was established in 2015 to provide sugar and edible oil to the community. In the case of Eruh village there is a cooperative with fifty members who provide credit and saving services and such a cooperative provides edible oil and sugar. However, the communities at large do not have any information about the status of the cooperative and they are not aware of the benefits of the participating members. Both cooperatives in Da'ar and Eruh are owned by the communities.

In Anderkelo and Alasa Bolo, as indicated above, there are similar experiences where with having one women's cooperative in each known as *Darra Women Association* and *Hekyaiya Saving and Credit Association* respectively.

In Anderkelo it was established seven years back by paying Birr 50 registration and Birr 10 monthly membership fee contributions. The women's association has 58 members and the microcredit service loaned 25 members with Birr 4000 each for the year and, according to the FDG participants they managed to repay it. In Alasa Bolo, there are 50 members and save Birr 30 per month with a total capital of Birr 100000 with the help of PCDP. The credit and saving association provides credit from Birr 1000- Birr 3000 to its members and they penalize Birr 5 for late payments. In both cases, loan was taken mainly for household asset building like buying goats, animal feed (wheat bran) where in Anderkelo trade activities including cloths, honey and butter business, etc. were also reported. The rate of repayment in both villages was appreciable but both associations also give loans for any unprecedented event that can happen to the family. One example being a recent incident in which a family was asked by traffickers in Yemen to pay a ransom of Birr 25,000 as an exchange for a captured son and thus, the Anderkelo women micro-credit association was able to lend part of the money for the family in trouble. The loan is given only to the members of the association.

2.6 Gender Roles and Youth Employment

Gender Roles

The Afar is a patriarchal society and household division of labor is based on gender as well as age. Women and men share tasks, with a gendered element to assigning responsibilities. Accordingly, in most cases, male adults in the villages manage the herd and the household and in the case of farming they participate in agriculture, work that demands labor, herding and security guard at night to the community. Men are also responsible for milking, selling and buying of animals, and seasonal mobility with animals for water and pasture. Household decision making is often also men's domain – that is managing all matters pertinent to the household and the community at large. Women on the other hand, participate in taking care of children, preparing food, grinding grains, fetching water and collecting fire wood. Women also greatly contribute to domestic chores but also engage in looking after and milking small ruminants, support farming activities through weeding as well as selling of some livestock by-products such as butter and ghee.

Here are some of the main activities of male and female do separately.

Women	Men
Building Traditional huts and making domestic furniture	Responsible for decision making of most family matters
Fetching water and collecting firewood	Keeping livestock such as camels
Keeping livestock	Livestock rearing and milking
Cooking food to the family	Fetching fodder from far places especially in drought seasons
Looking after children	Taking livestock to the market
Washing cloths	Attempting to engage in farming practices (in the agro-pastoralist areas only)
Purchasing household items like food etc.	Digging tombs and participating in funeral services

Table 2: Gender roles among the Afar communities

The construction of houses can be assigned to both women and men depending up on the type of housing. The construction of the dominant traditional mat house (*Goli*), typical of many mobile pastoralists, is the sole task of women. Men build houses if, and only if, the house is intended to be built

using stones and iron sheet, as it uses modern method of construction. Women are also engaged in handicraft activities like preparing materials such as water containers, making mats to cover up the outer part of their traditional house and engaging in different jewelry making activities. Children also assume a prominent role in herding and related activities but boys and girls are also assigned different gender based tasks.

The participation of women in household decision making activities is critical in understanding their role in the families and the society. Among the Afar communities, men are dominant in several aspects of the livelihoods and as mentioned earlier, the key resources (i.e. livestock and land) are mainly under the control of men who are also responsible for the major economic decisions of purchasing and marketing. Though women also participate in decision makings such as moving to another grazing area, the number of children to have, sending of children to school and the marriage of their children, the final decision is made by the men.

Youth and Employment

In many parts of the Afar region, local infrastructure and economic opportunities are very limited and the youth that participated in the FGDs mentioned that there are little opportunities for young people to earn alternative incomes in the villages. Some limited economic opportunities include, daily labor, cart driving and selling firewood but in the villages there are many unemployed young people. Some youth left their village in search of employment abroad, usually to Saudi Arabia and Djibouti, as a sole opportunity to change their life and their family life. Young women who remain unemployed have no opportunity other than marriage.

The PSNP creates temporary employment for the youth in unloading the grain sacks off the tracks. In addition, the youth participate in public work activities for six months and in return they get food stuffs from the program. Though it is on an ad hoc and temporary basis only, this helps the youth partly to continue their studies and find a short-term solution to their unemployment problem.

The PSNP design however, did not include the youth as a special group who may need a more tailored intervention within the broader safety net program. In making the PSNP effective and have an impact beyond the mere objective of increasing the level of household food, the program needs to engage the youth actively and appreciate their ambitions.

2.7 Communication

Afar communities have a very common, distinctive and rich means of traditional communication and information exchange system called '*Dagu*'. It is based on oral and interpersonal exchange which they perform when people meet one another. Such informal network relays information from one place to another. When two people meet up on their way, they can say to each other '*Dagu*' which refers to 'what is new?' The information exchanged for instance could be about a car accident, or reports of weather changes which can reach the whole district and beyond within a couple of days. However, as the FGD participants highlighted, information that could lead to potential conflict is not exchanged. A case was given during one of the FGD discussions that if someone killed another person and if the family members of the killer are not aware of the killings, then the person is supposed to withhold the information from the family of the victim. This prevents the family from becoming aware of the killing and makes the necessary preparation for any possible revenge. In *Dagu*, men to men or men to women can exchange information, but youth are not allowed. This helps the community to strengthen the social cohesion and protect themselves from enemies, in the case of potential attacks or conflicts.

Recently, the emergence and access to mobile telephone services has reduced the role of *Dagu* for exchanging information. Most of the household heads in the six villages of the PRA study use cell phones for receiving and sharing information (See Box 2 for the changes brought along accessing this service in Anderkelo). Besides the traditional mode of communication and mobile services, the Afar communities get information from the village council and also other public institutions like the mosque.

2.8 Wealth Ranking

Wealth ranking was conducted based on the local perceptions and the criteria to analyze the relative well-being of the community. Wealth ranking is a useful tool for identifying different socio-economic groups and the potential impact of the PSNP role on those different groups. The research team held discussions with community members to determine the wealth ranking within such communities.

In the PRA study, wealth ranking has two aims where the first and for most is to identify the locally perceived criteria for distinguishing households according to their wealth, status and power. The second aim is to understand the social protection mechanisms (i.e. informal and formal), practiced by the community and to substantiate whether the poor are benefiting from the formal productive safety net program.

In the three villages as shown in the figure below (Urkudi, Bekeli and Eruh), the PRA participants categorize the wealth of the households in their community into to three categories namely poor, moderate and better off. However, in the three remaining villages of Da'ar, Anderkelo and Alasa Bolo the PRA participants categorized the people into to four groupings, namely poor of the poor, poor, moderate and better off.

Box 2: Mobile Phone Services: The Case of Anderkelo

In order to assess the role of mobile phone services in pastoral livelihoods a deeper discussion was held in one of the sampled villages – Anderkelo. Mobile services in the area was introduced in about 2008 in the district center Chifra and then in about 2012 in Anderkello area. The role of the mobile phone in the Afar is very plausible and the pastoralists are very happy for accessing this communication technology. They mentioned several advantages of the technology and its impact on their livelihoods especially its role in reducing their travel time is much appreciated. The highlighted advantages include:

- Able to communicate with family members in a very far places
- Able to easily exchange information on the where about of the grazing land and water points, and also with the people who migrated to these places (they easily know the situation of their herds and if the person is in need of any help including food/medicine)
- Able to call health staff in case of any sickness or child delivery occurring
- Able to have updated livestock prices in the nearby markets
- Able to search and find lost goats without exerting too much efforts
- Able to let the family members on the death of a kin and calling them to attend the funeral

In general, mobile phone service saved their time, energy and enabled them to fulfil their day-to-day activities easily and efficiently. Weighting the contribution of mobile services, they said it has positively contributed by more than 90% towards their livelihoods. However, mentioning its disadvantages they said when information reaches fast, it can cause harm as well. For instance, people now can inform the family members of the victim in killings so that they can take a revenge on the family of the killer. This may cause a revenge happening well before the reconciliation process starts and the community members have taken the necessary action.

Source: SPIDA PRA Study, 2016

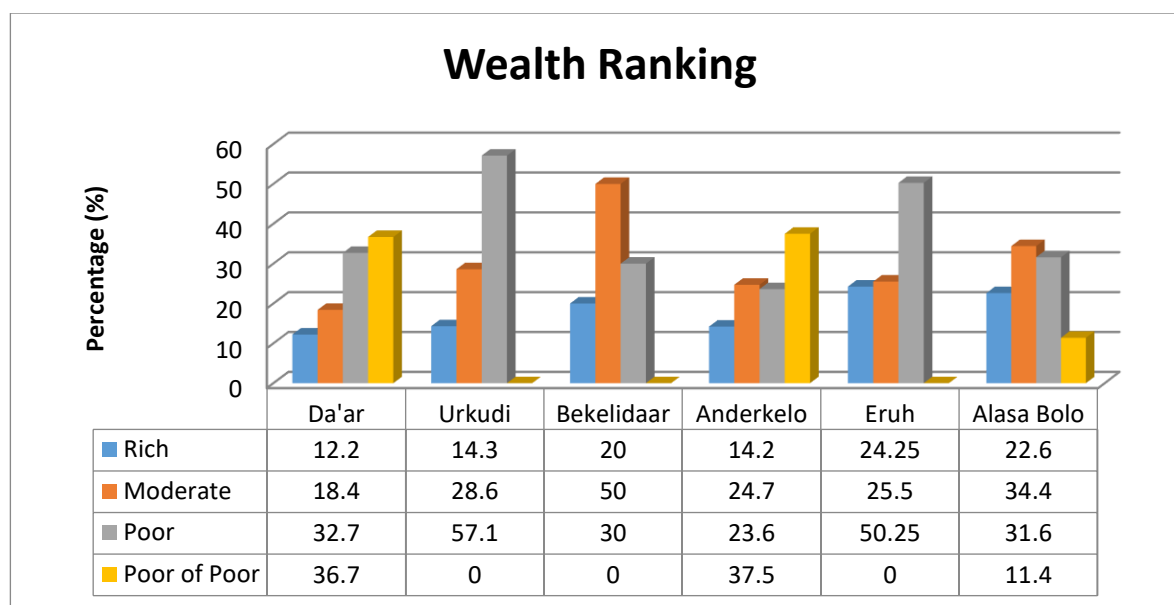


Figure 2: Wealth ranking in the five villages

To conclude, the PRA participants in most of the surveyed villages perceive that the number of poor of the poor is above 50 % of the total village population, but the Bekelidaar and Alasa Bolo villages could be as exception as indicated in figure 2 above.



Afar man engaged in wealth ranking, Anderkelo, Afar region of Ethiopia by Bereket Tsegay, PENHA (2016)

Participatory wealth ranking is helpful in line with the program implementation manual which can enable to identify the poorest households and to ascertain their program eligibility on the basis of clear inclusion/exclusion criteria. As the participants indicated, most of the three lower categories identified in the FGD are part of the PSNP support mechanism. Even those identified as 'well off' may also be involved either in the PSNP or other emergency relief programs depending on their transitory level of poverty.

3. Community Problem Ranking and Analysis

The study used a ranking matrix to identify the major problems facing the people. The PRA participants were allowed to list down the problems they face related to health, agriculture, water supply, environment, culture and religion, and infrastructure. Accordingly, all the selected villages listed the problems on the level of impact they have on the community. See Annex A for the detailed community problem analysis and action plan.

Problems	Da'ar	Urkudi	Bekelidaar	Anderkelo	Eruh	Alasa Bolo
	Water shortage problem	Supply of gabion is limited	Shortage of water access	Limitedness of PSNP quota	Shortage of drinking water	Water Problem
	Community road problem	Unavailability of irrigation	Limitedness of PSNP quota	Health center problem	Lack of access to road	Lack of Electricity
	Health related problems	Sudden attack of grasshopper/locust and the wide spreading of weed	Recurrent drought	Lack of Animal feed	Lack of electricity	Community road problem
	Shortage of access to food	Inadequate quota of safety net	Shortage of animal fodder	Shortage of water access	Lack of cooperatives and credits and saving association	Lack of irrigation infrastructure
	Electricity problem	Unavailability of formal interest free credit services	Animal diseases	Recurrent drought	Recurrent drought	Shortage of agricultural tools and inputs

Table 3: Community problem ranking and analysis

3.1 Seasonal Calendar

In order to understand the amount of time the community members devote to different activities, an analysis of their seasonal calendar is very important.

During the FGDs, the PRA participants reviewed the seasonal calendar of their pastoral activities (including timing of herd movement, sales and purchase of livestock and livestock by-products); productive safety net activities (both direct support and public work); agricultural activities; trade and other activities (see Annex B for details).

As discussed in previous sections pastoralism is the principal mode of production in most of the villages whereby the people with their livestock follow seasonal migration patterns in search of rainfall and pasture availability. The decision to migrate and the distances covered depend on the availability of the grazing land and water.

Marketing of livestock and livestock products is one of the major activities for many of the Afar communities and an important source of livelihood in the Afar settlements whether nomadic or sedentary. The people mainly derive their food and income from livestock cum livestock products and

livestock are purchased during the summer season when animal fodder is available. Livestock sales usually increase during the season when there is shortage of water and fodder. Livestock prices fluctuate seasonally depending on the conditions of the livestock and some people buy when prices are cheap and sell when livestock price increases hoping to make some profit margin. According to the discussants, availability of animal feed and water has progressively declined from time to time. The situation is made worse by recurrent droughts, soil erosion, degradation of vegetation coverage, limited area of rangeland and population pressure (overgrazing) where these are found to be among the leading causes of animal feed and water shortages.

During years of adequate rain and pasture, the communities are able to sell livestock by-products throughout the year but in years of drought there is no livestock by-product to be sold throughout the year. During extreme drought situations, livestock may be decimated and people are forced to sell skinny animals which do not fetch much money in the livestock markets.

The other activity of significant importance is agriculture which is only practiced in Urkudi and Alasa Bolo villages and the cycle falls within December to December of the following year with some interruptions in the middle due to lack of rain. In other words, agriculture offers only limited economic opportunities.

PSNP, with its Direct Support and Public Works components, is provided to all the six villages during six consecutive months (January to June) and was adjusted in such a way that it does not overlap with the farming activities of the agro-pastoralists (July-September).

Discussions were also conducted with the PRA participants regarding trade and other activities of the community members. Petty trade is practiced in all of the villages throughout the year and is a permanent job for those who do it every day. Salt trade is only practiced in Da'ar, because the source of the salt is found near that village.

In addition to the seasonality of the community activities, the discussion with the people also included some analyses as to which months of the year are best and which ones are worst for the food security, human and animal health.

The responses at the different months of the year were classified as high, medium and low where in all the depicted graphs below high is represented by '3', moderate by '2' and low by '1'.

Seasonal calendar and access to food

The six villages investigated are amongst the most drought prone areas in Afar region. Most of the households depend on livestock herding and products, PSNP and food aid given by the government. As it is depicted in the graphs below, in most cases, except in Anderkelo, a better access to food is recorded from January to June when the PSNP resources are provided. Medium and lowest access to food is recorded in the remaining months because during these time households do not receive any assistance from the government and also food items price increase. Furthermore, most cases of the pastoral and agro-pastoral communities do not produce agricultural crops which in return affects food intake at the household level.

[See the six figures of the villages in the next page]

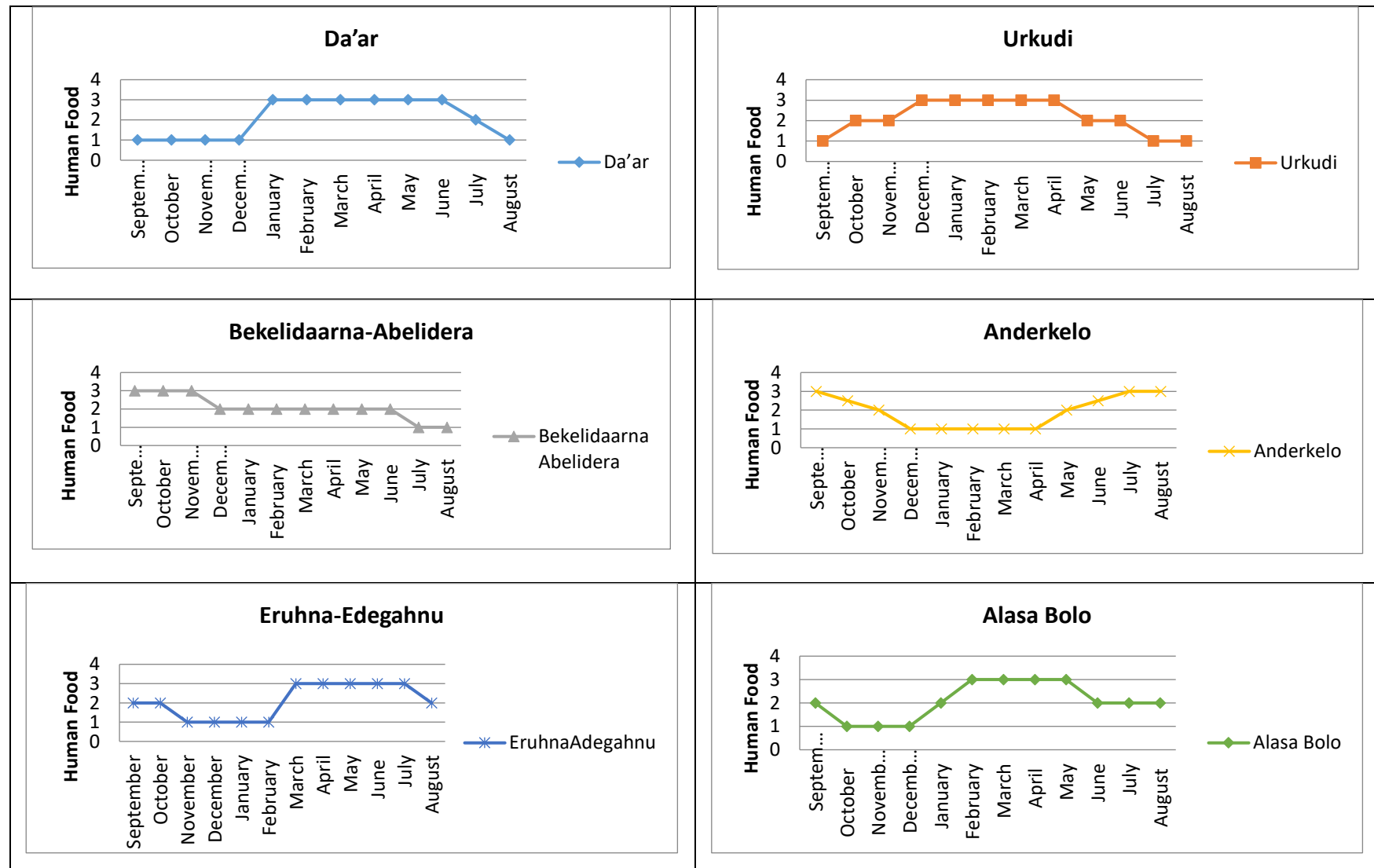


Figure 3: Access to food of human beings

Seasonal calendar of access to fodder of livestock

In most of the villages, such as Da'ar, Urkudi and Anderkelo, animal fodder increases at times when food for humans is scarcer. During the rainy season between July to September grazing and pasture conditions improve which are good for livestock, but in that season many families do not get adequate food till the harvest season which is from October onwards.

Between October and December some of the Afar area gets some rainfall which improves the grazing and pasture conditions for livestock in some parts of the Afar Region. But from December to May access to human food and their livestock grazing /water is much more challenging and people are forced to move with their herds to other districts.

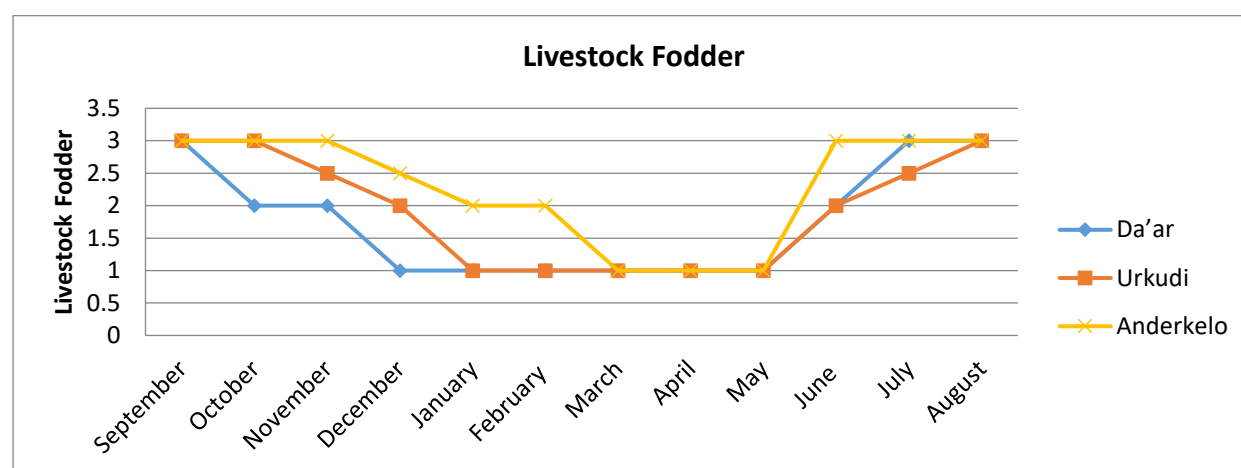


Figure 4: Access to livestock fodder

However, in Alasa Bolo and Eruh areas, conditions are relatively better for the livestock and people because people live near the Awash River Delta. Livestock can get good pasture and adequate water in seasons between December and April and this is particularly the case in Alasa Bolo, which also receives some rainfall between January and February.

In Bekelidaar, livestock get sufficient pasture and water from the extended rainy season especially between September up to December due to the availability of sufficient rangeland and vegetation cover.

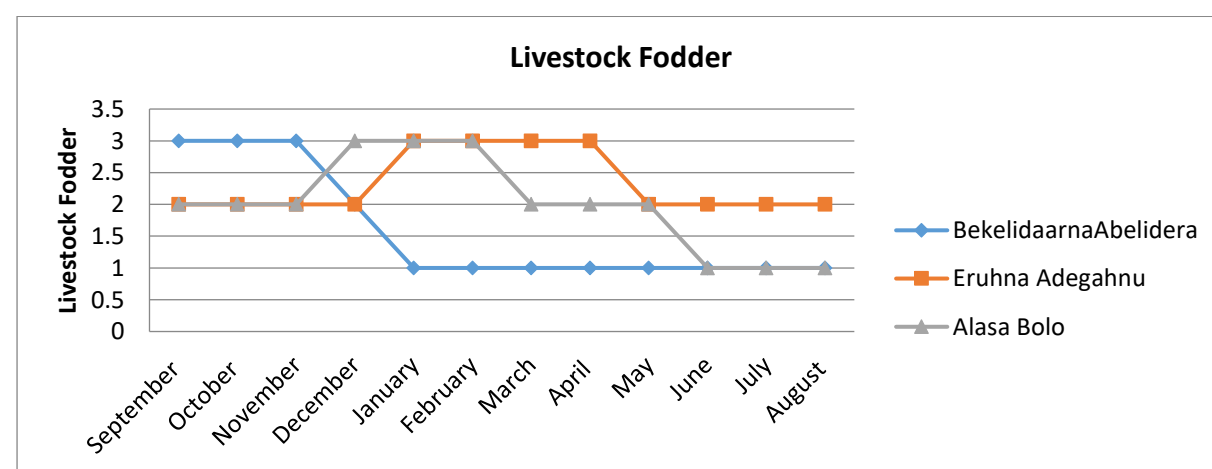


Figure 5: Access to livestock fodder

Seasonal calendar of good health for human beings

Human health conditions between December to April (dry season months) are fairly good but when the rainy season starts, especially between the months July up to September, there is high prevalence of malaria and common cold which are the main health threats among the Afar communities.

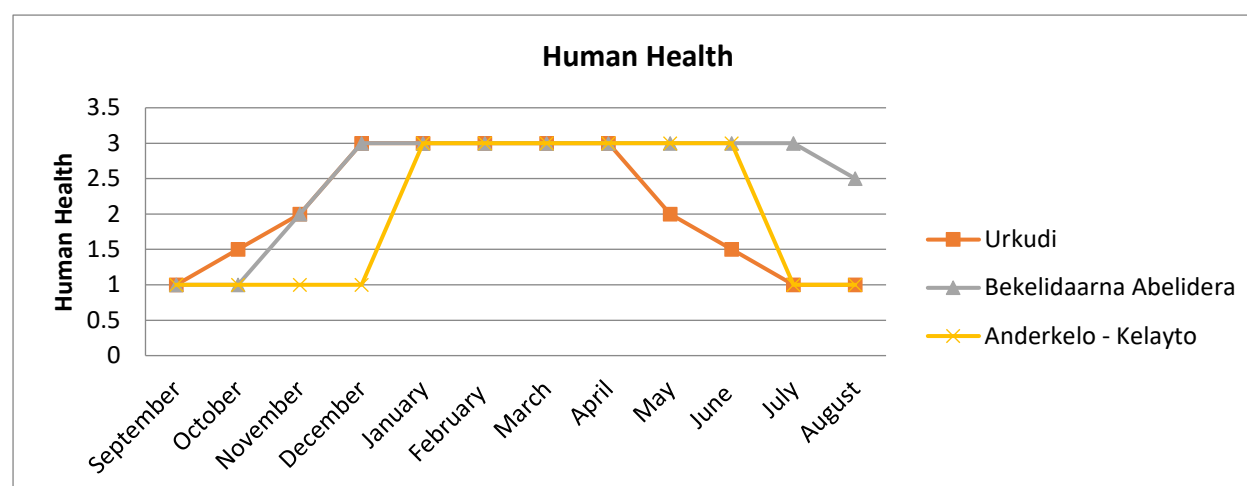


Figure 6: Health of human beings

In addition, in Alasa Bolo, Eruh and Da'ar villages, outbreaks like typhoid and other waterborne diseases are also aggravated during the dry season. The seasonal diseases like malaria are also prevalent during November-December and January.

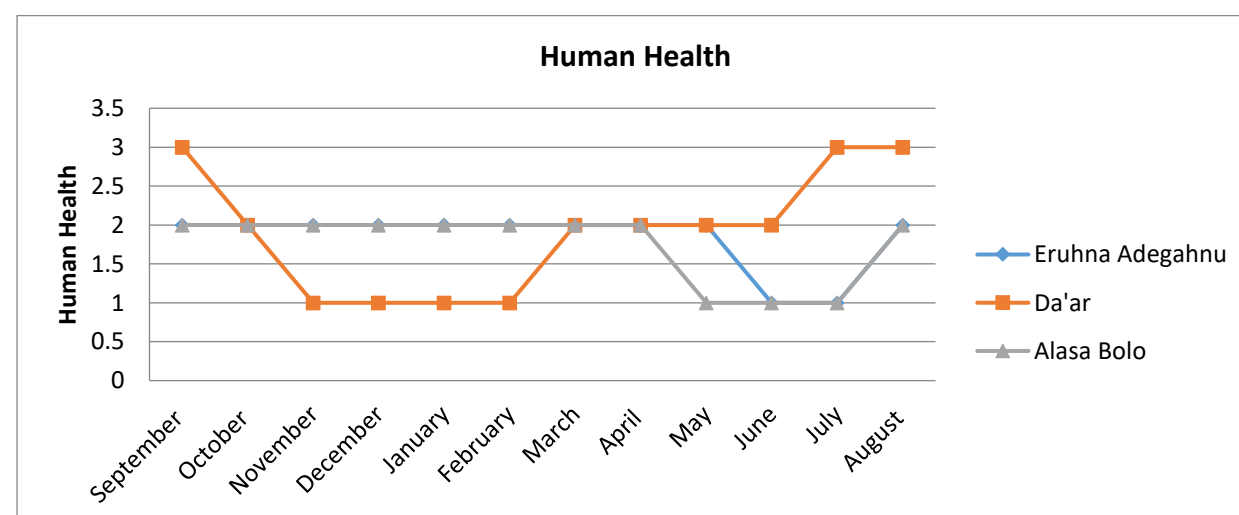


Figure 7: Health of human beings

Seasonal calendar of good health for livestock

Livestock health fluctuates annually but generally livestock health is better during the rainy months and declines in the dry season. In most of the villages, livestock health becomes peak from July to September while health of livestock in the other months declines because of fodder and water shortages. In the dry season there is high rate of animal disease and loss.

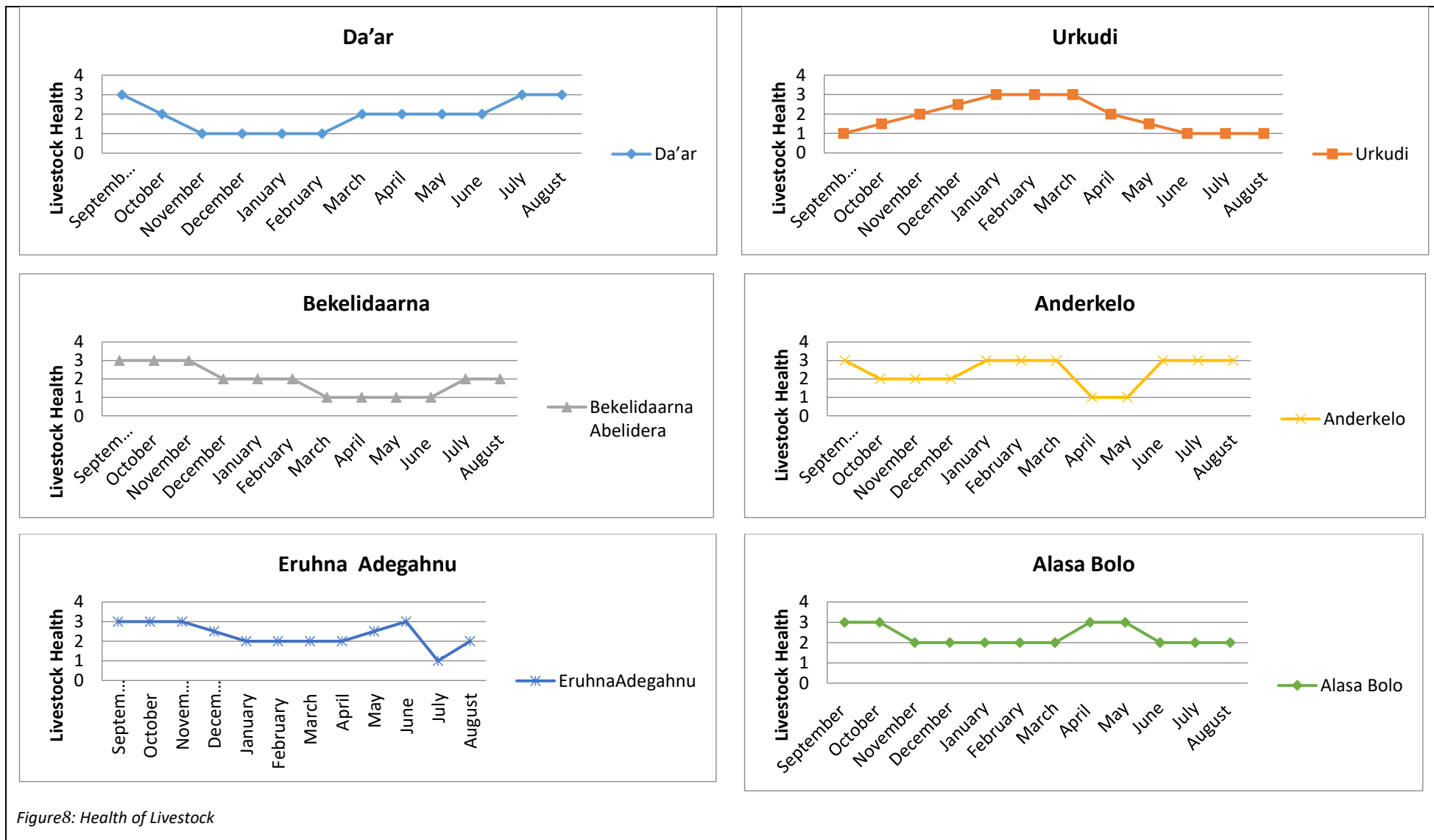


Figure8: Health of Livestock

3.2 Trend lines

To analyze the changes on poverty level, drought and forest cover in the area, trend analysis was carried out in each of the villages in consideration of the last sixty years. But both the poverty and drought trends were found to be the same amongst the communities so that has been presented by an overlapping with the poverty analysis as follows.

Trend lines on Poverty level

Trend analysis was carried out to assess the poverty condition of the six villages for the last six decades within two broad categories.

As presented in the graphs below, the community elders of Alasa Bolo, Bekelidaar and Eruh villages argue the level of poverty among the communities has been increasing from time. In 1950s there was rain and adequate animal feed, people were better off having many livestock, had a good source of food and income to be able purchase other consumer goods. The drought situation worsened in the seventies, eighties and nineties but got worse in 2000s. Such conditions have been aggravating the vulnerability of the people to poverty and food insecurity by reducing the herd size and livestock products, and crop failures. On top of that, there is also high inflation on consumer goods. All the challenges mentioned above led to decrease in herd size, and poor pastoral and agro-pastoral households were forced to sell their animals in order to fulfill their household needs.

Regarding the contribution of PSNP to poverty reduction, they argued that although the program has contributed in reducing food poverty, its overall impact on poverty was minimal, because it is provided for only six months with limited quota and not complemented with other asset building schemes.

Looking at the impact of public work in reducing the level of poverty in the community, they commented that there is electric power supply, health and education services, clean and potable water supply (at least in some of the settlements etc.) which contributes toward accessing basic needs and having a better living standard. They claim that ‘such works cannot put money into our pockets and cannot be automatically converted in to cash’. The communities greatly value formal education up to university level, because through education the Afar youth could gain knowledge and skills which would enable them to have a better future and incomes.

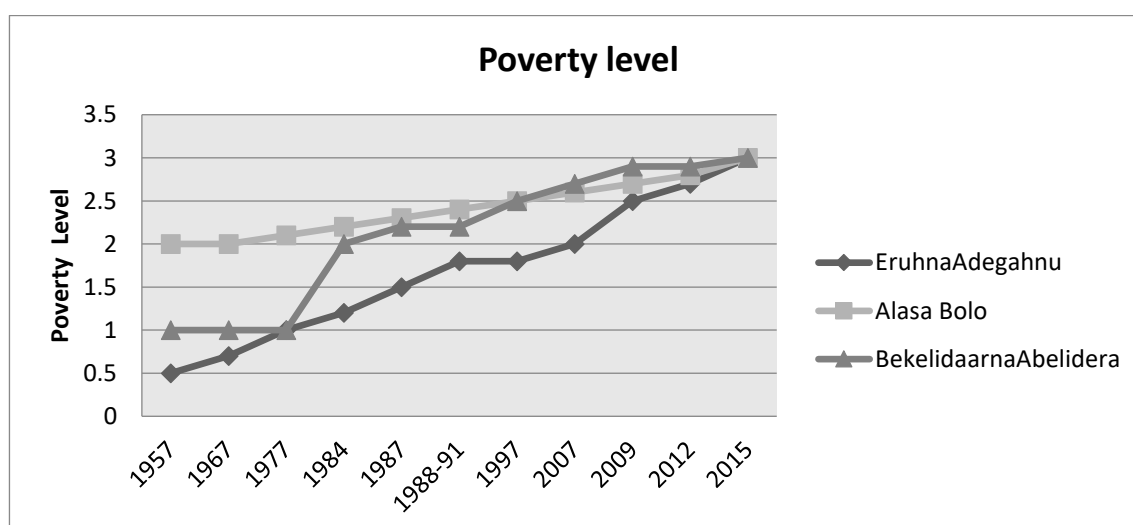


Figure 9: Poverty trend line

The community elders in Da'ar, Urkudi and Anderkelo villages argue the level of poverty was relatively low in 1950s, in 1960s and even in 1970s because they had many livestock and sufficient agricultural productivity but lesser human capital and infrastructural development. The poverty level peaked in seventies, eighties and nineties as well as 2000s due to prevailing drought conditions.

More recently and with the help of PSNP, the elders believe that their way of life have improved because of the use of latrines, sending their children going to school, improved hygiene and sanitation for themselves and the community. They believe that nowadays, even though the agricultural productivity, the number of livestock and their by-products have decreased, human capital and infrastructural facilities on the other hand have increased which they think is positively contributes to poverty reduction.

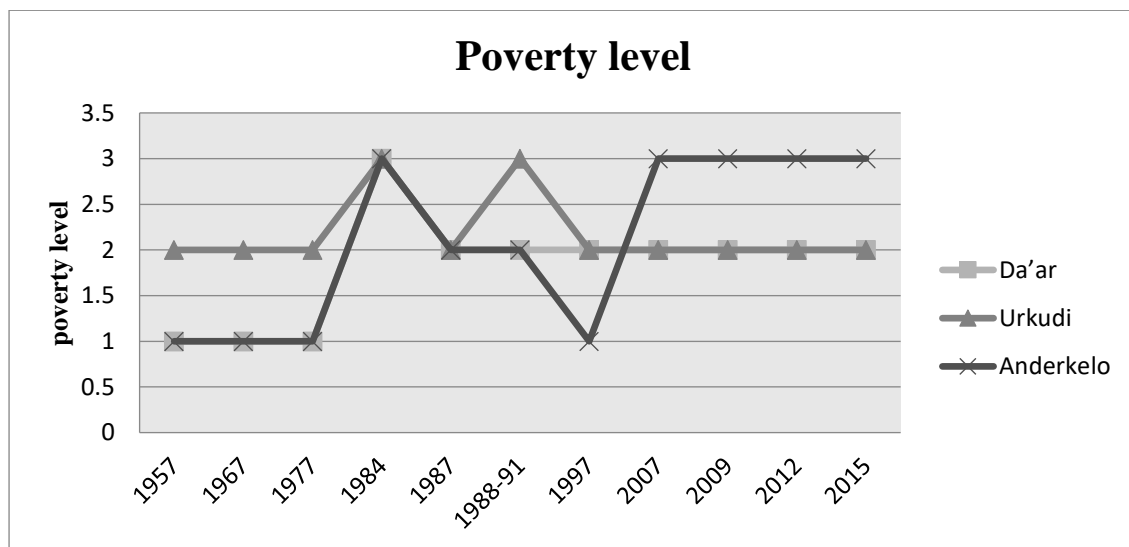


Figure 10: Poverty trend line

Trend line of forest cover

The PRA participants in the six villages agreed that the vegetation cover and their rangeland potential have significantly degraded and deteriorated over the years (see Fig. 11). The community members argue that the main causes for the persistent reduction of forest cover in their communities to be;

- Climate change: - includes low and variable rainfall amounts, and heavy seasonal rain with flooding;
- Overgrazing of the rangeland and deforestation due to population growth: -for the purposes of house construction and firewood collection (both for domestic use and sale);
- Drought: - that forces the residents to cut the trees so as to provide fodder for their livestock and charcoal sales which in turn deteriorates the natural environment.

As a unique case, Afar community in Alasa Bolo stated that, 'Afar regional state is not completely desert as often perceived because there are thick forest areas reserved as Federal forest areas by National Government'. But in recent years the invasive *Prosopis* plant (unpalatable and aggressive) became wide-spread over vast areas of Afar, significantly diminishing the pastoralist rangelands and crops as well. PSNP public work, which typically involves clearing of *Prosopis*, contributes in recovering some of the land taken over by *Prosopis* but there is more work to do in eradicating *Prosopis* fully given its invasive nature.

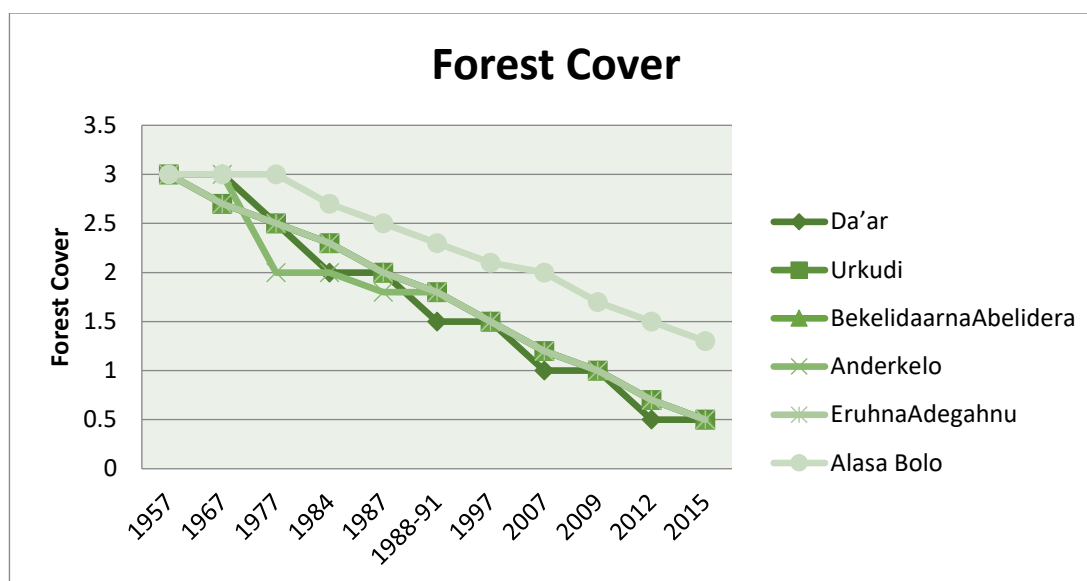


Figure 11: Forest cover trend line

3.3 Institutions

Village institutions refer to both formal and informal institutions that play important roles in the pastoralists and agro-pastoralists livelihoods.

Most of the FGD participants prioritized the significance of the key local institution including the mosque, village administration, school, pastoral office (agricultural office in the case of Urkudi and Alasa Bolo), Afar People Democratic Party office, village federation office and community grinder (mill). As shown in the diagram of Fig. 12, institutions within the circle are those that exist within the village and those outside the circle are institutions found outside the village. Moreover, the diagram shows the inventory of the existing institutions in and out of the villages with different type of relationship, importance and correlation of strength with the community. The first institutions mentioned below are the most important to the communities which is based on the majority of the sampled villages.



Community members participating in scoping the institutions in Da'ar, Afar region of Ethiopia, by ADU research team

information on how to prevent HIV/AIDS, tuberculosis, malaria and other diseases. The post also provides training on pre and post-natal actions, hygiene and sanitation.

Afar People Democratic Party office: Problems of a political nature are addressed by this office but the office also offers political education. The office follows up the activities of the different associations in the village including: women groups, youth associations, and rural focused saving and credit associations. Party leaders also visit the community members and ask them about the problems they daily encounter.

Village federation office: They meet monthly and serve as the main link between the district office and the community.

Grinding Mill: Traditionally, women used to crush the grains using the grinding stone in their home. Grinding machine in Anderkelo was first introduced four years back and it is the most visible privately owned business in the village which provides milling grains services. The introduction of the milling machines in the villages has reduced cost of transportation and travel time, and enabled communities to access the service anytime in their locality. Grinding mills have also been introduced in Da'ar village which avoided the more than four hours travel to Berahle.

The introduction of grinding mills is a huge relief for Afar women because it was one of arduous and time consuming domestic tasks.

Women Association: In Anderkelo, the association is promoting saving habits among its members and helping women to be economically self-sufficient. The members take loans from the association and use it mainly for petty trade which enables them generate alternative income. Partly due to Afar tradition of not having direct access to women's groups and their need for more economic and social active role, this issue deserves a proper research on its own right.

b) Institutions outside the village

These institutions are mostly located adjacent or outside of the village but positively contribute towards the wellbeing of the communities. These include non-governmental organizations (NGOs) who focus on emergency relief services /development oriented programs and government institutions that are available to support with local matters.

Police: There are community police in the village but the well-equipped office is found at district level and if there is a problem within the community, the community police deal with such problems. The district police also train the community on how to reduce crime in their communities. People usually use their own traditional problem solving mechanism, but they call police if the problem is beyond the capacity of the clan or *Fi'ima* leaders. Thus, sometimes, the people use police for dispute management and settlement.

Pastoral community development program (PCDP): They have relations with the World Bank and their intervention areas include education, water, feeder road and health. For example, they work on four projects in Da'ar village and the projects include: a health post, community road, water well and a school.

NGO: The community members have also mentioned the presence of NGOs in their villages. Some of the NGO's are only present in a single village or in a few villages. Mentioning the notable three can give an overview of their activities. **Relief Ethiopia** works on vaccinating children, prenatal care advice, medication and also other health awareness campaigns. **Baza** works in Berhale District only and its main activities include teaching on how to prevent diseases like tuberculosis, cancer, HIV/ AIDS, providing trainings for the village administrators and also to provide consultancy services. **Save the**

Children mainly works on nutrition. In partnership with the health posts, they work to reduce the incidence of malnutrition, through dry take home rations of supplementary food, growth monitoring and delivery of medicines. Save the Children also runs an immunization campaign with particular emphasis on the prevention of measles and the need for Vitamin A supplements.

District pastoral/agricultural office: PSNP beneficiaries were selected with the help of district pastoral/agricultural office. They give expertise to the village pastoralists' agricultural office.

District Markets: The people use nearby markets to sell their animals and buy household items. For instance, in Da'ar village people travel to Mile market to transact goods and service every Thursday.

District Health center: The people use the district health center for difficult health problems and the health center works to improve health, hygiene, nutrition practices and childcare among the communities.

District High School: In most of the villages students need to travel to continue their education in district high schools like since Bekelidaar elementary school is up to eighth grade, students who pass to ninth grade need to go to Mile high school.

University: There are students from the Afar villages who are studying at different universities throughout Ethiopia.

4. Conclusion and Policy Recommendations

Based on the findings of the PRA study, the following policy recommendations and concluding remarks can positively contribute towards the process of strengthening the social protection policy on pastoral and agro-pastoral communities in Ethiopia and beyond.

Recommendations

- The Afar pastoralist communities are known for coping with the natural and man-made disasters in a climatically harsh environment of the Horn of Africa due to their mobile livelihood systems and their informal social network. However, the frequent drought since 1990s, coupled with the recent El Niño phenomenon, is challenging their resilience to shocks. Though at small scale, there is emerging evidence among the Afar people that they are diversifying their economy and adopting new survival strategies including trade, wage labor, urban employment and so on.
- The Afar communities ensure that better-off households adopt traditional social responsibilities that assist disadvantaged groups, mostly through kinship networks of reciprocal solidarity and religious practice of *Zakat*. Alasa Bolo has its own governance system called *Fi'ima* where such traditions are worth investigating and building upon.
- PSNP's public works beneficiaries work on labor-intensive projects for six months of the year (January to June) to build community assets and to reverse the severe environmental degradation. However, public works with a focus on soil and water conservation, terracing and so on seem to have been introduced from the nearby highland models which may not be appropriate for Afar conditions in the arid lowlands.
- Integrating the Household Asset Building Program (HABP), part of the food security policy in the other regions of Ethiopia that has not yet been implemented in the Afar region. The reasons provided include the risk associated with loan default from the government side, and the limited experience of interest bearing of lending and borrowing for religious reasons.
- There is some evidence that the PSNP has not included the youth as a group with peculiar needs and priorities, and this needs further investigation.

Policy messages

- *Significance of informal social networks:* Social protection interventions should consider the relevance of the already built-in informal social practices (e.g. mutual sharing) whether they support or compromise the effectiveness of the transfers. Indeed, there should be recognition for the critical relevance of traditional resource sharing practices and coping mechanisms.
- *Understanding pastoral livelihood production system:* The study proposes that the transfer period, public work schedule and activities and payment of transfers should be tailored to the pastoral communities.
- *Providing animal fodder and marketing opportunities:* Currently, El Niño is depleting the livestock of the people thus, providing adequate animal fodder can enable pastoralists to retain their precious assets or help them to sell their animals before they die of starvation. Moreover, the availability of mobile livestock clinic services can help them to retain their assets, especially during their mobility season.
- *Targeting and updating the list of beneficiaries:* The PSNP transfers should update the number of beneficiaries to include the newly born children and take account of polygamous households to improve their level of food security. Because of the recurrent drought, the vulnerability of the people is aggravated thus, PSNP transfers should have to be extended to eight to ten months.
- *Emphasis on alternative income generation approaches:* As the resilience of pastoral livelihoods declines due to droughts, serious consideration should, therefore, be given to the establishment of financial and credit institutions that reflect greater understanding of the needs of pastoralists.
- *Emphasis on youth and gender:* It is recommended that PSNP includes a package that reflects the needs of youth and women.
- *Need for integrated approach, not piecemeal:* There are multiple interventions going on in the Afar region mainly the PSNP and Emergency Aid. Thus, it should be better in exploring ways of bringing them together.

Conclusion

Given the presence of both the traditional and modern practices of social protection in general and the safety net in among the Afar particular, the Afar region is ideal for investigating the complementarities and implications of these practices in promoting resilient livelihoods. Considering the huge similarities in Afar cultural, religious and ethnic affiliation; there is high degree homogeneity, despite some of the localized differences. In relation to the PSNP, methods of improving food security and building alternative sources of income should be studied systematically and an integrative approach to asset building can contribute to household livelihood improvements. Indeed, the PSNP intervention among the Afar people needs more orientation towards the Afar conditions in order to boost the resilience of the pastoral and agro-pastoral communities; enabling them to move on from subsistence conditions to a robust livelihood which can cope with both predictable and unpredictable risks, and can be vital in future adaptations to climate change.

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Annexes

Annex A: Community Problem analysis and Action Plan

Problem	Cause	effect	Solution		When
			Who will do what		
			Community	Government, NGO and Others	
Water shortage problem	<ul style="list-style-type: none">• Inadequate and erratic rainfall• Not given enough attention from the government• Dispersedly living system of the people• Lack of perennial rivers• Lack of irrigation system• Lack rain harvesting system• Though underground water available, lack of skilled professionals	<ul style="list-style-type: none">• Migration aggravated• Waterborne diseases increased and hygiene related problems• Crop production not practiced• Aggravates women’s workload• Affects household’s food dependency• Increases death of livestock• School dropout increased	<ul style="list-style-type: none">• Establish water and sanitation committee• Provide training for sustainable operation, maintenances, management and utilization of the water points• Reconstruct the road and arrange for transport• Protect water project items• Guide the experts to historical water points• Supplying labor force	<ul style="list-style-type: none">• Develop and improve potable water sources• Supplement enough materials for digging out water• Community awareness rising on personal hygiene, sanitation and potable water• Conduct detailed hydro-geological survey and specifications for water supply development activities• Constructing dams and river diversions• Provide generator and professional support	2017-2018 onwards
Community road problem	<ul style="list-style-type: none">• Flooding• Community roads were constructed without plan• Shortage of construction tools and materials like cement• Bad topography• Easily susceptible to erosion	<ul style="list-style-type: none">• Death of pregnant women• Difficulty in transporting sick people, food, fodder aid and also medicines for human and livestock• No regular buses are passing through the villages	<ul style="list-style-type: none">• Protect the construction materials• Supplying human resource• Awareness creation for some community members if the road passes through their home	<ul style="list-style-type: none">• Conduct detailed survey and prepare specific designs• Supply all the required materials and professionals for the road construction	2017-2018 onwards
Health related problems	<ul style="list-style-type: none">• Limited services by the health posts• Shortage of health professionals• Inadequate medicines• Low consultancy service	<ul style="list-style-type: none">• Prevalence of mothers and children mortality• Malnutrition problems	<ul style="list-style-type: none">• Protecting and using well the available medicines• Protecting the health centers from theft and other problems• Supplying labor force to build health center and other health posts• Awareness rising on hygiene and sanitation to communities• Building communal latrines	<ul style="list-style-type: none">• Build health center and additional health posts• Provision of mosquito nets to households• Equipping the health institutions with professionals, medicine and health related inputs• Launch a campaign to inform the community about the importance of using latrines, nutrition, HIV/ AIDS and others	2017 or 2018 onwards

Problem	Cause	effect	Solution		When
			Who will do what		
			Community	Government, NGO and Others	
Recurrent drought	<ul style="list-style-type: none">Shortage of rainfall	<ul style="list-style-type: none">Increment in seasonal animal diseasesDeath of animals	<ul style="list-style-type: none">Provide free labor force when askedHaving protected area (through fences)	<ul style="list-style-type: none">Provision of animal healthDevelopment of Irrigation systemSupplying livestock fodderFencing herd area	2017 or 2018 onwards
Shortage of livestock fodder	<ul style="list-style-type: none">Shortage of rainfall	<ul style="list-style-type: none">It made the community prone to poverty and huge expenditure of buying fodder	<ul style="list-style-type: none">Using the aid properly	<ul style="list-style-type: none">Supplying animal fodder especially in times of shortage	2017 or 2018 onwards
Electricity problem	<ul style="list-style-type: none">The ground is salty and the poles are woodWind problem	<ul style="list-style-type: none">The health post does not have refrigerator due to lack of electricityCharging mobile phones is not possibleStudents cannot study at night timeThe community cannot follow mediaDeforestationLimited access to non-pastoral business	<ul style="list-style-type: none">Announcing to the responsible body on time if there is problemDigging halls for the polesProtecting the poles	<ul style="list-style-type: none">Change the wood poles to cement (tailored to the area)When a pole falls the responsible bodies have to come and fix itFrequent follow-upAwareness creation on how and when to pay utility bills	2017 or 2018 onwards
Limited supply of gabion	<ul style="list-style-type: none">Mismatch between materials supplied by the government and the demand by the community	<ul style="list-style-type: none">Highly extensive and frequent soil erosionA farmland has now been totally changed to a dry and eroded area where occasionally rain water runs through it.	<ul style="list-style-type: none">Committed to provide its labor in having a conservation area	<ul style="list-style-type: none">Provide sufficient amount of gabion with its expertsSupplying drinking waterSince there are different types of stone the government officials and experts has to help in identifying the stone type appropriate for water conservation.They do play a great role in other areas, but in the village, since they are not available their role is unpredictable	2017 or 2018 onwards
Unavailability of irrigation	<ul style="list-style-type: none">Less attention given to irrigation by the government	<ul style="list-style-type: none">Unavailability of water is exposed the community to be aidIn the presence of adequate water, communities can	<ul style="list-style-type: none">Committed to provide its labor in having irrigation systemProtect the irrigation areas from destruction	<ul style="list-style-type: none">Conduct a water availability study and get underground waterSupplying electric power and generator	2017 or 2018 onwards

Problem	Cause	effect	Solution		When
			Who will do what		
			Community	Government, NGO and Others	
		harvest more than once a year so that their productivity and income increases <ul style="list-style-type: none">There is a river which takes all available water far from us so that it can protect us from such a loss	<ul style="list-style-type: none">Fulfilling what has not been fulfilled	<ul style="list-style-type: none">Constructing a dam for the river ‘Murga’ which can serve as a huge irrigation enough for all of the village farmlandsMaking a follow-ups and post construction management	
Sudden attack of grasshopper/locus and weed expansion	<ul style="list-style-type: none">No pre harvesting prevalence mechanisms has been used yet	<ul style="list-style-type: none">The weed makes the grain not to grow upThe grasshopper/locus destroys all the farmBut once it is removed it takes a long time for it to come back again	<ul style="list-style-type: none">If the government is able to supply it with free of charge, the people are ready to spread it by their own	<ul style="list-style-type: none">Supplying pesticides free of chargeManual and automatic spraying materials	2017 or 2018 onwards
Shortage of access to food	<ul style="list-style-type: none">No agricultural land for crop production and animal feedPSNP transfers are not enoughUnavailability of food items in the nearby marketExpensive price of agricultural products	<ul style="list-style-type: none">All resources transferred to food consumption only.Destocking livestock to buy food items	<ul style="list-style-type: none">Loan provision.Off-farm/pastoral businessesResettlement programs	<ul style="list-style-type: none">Establish cooperativesIrrigation development	2017 or 2018 onwards
Inadequate quota of safety net users	<ul style="list-style-type: none">PSNP resources and budget are not enough to all householdsMaximum number of beneficiaries in a household is fiveNumber of poor is high	<ul style="list-style-type: none">The shortage creates disagreement among the users as well as between the coordinator and the community	<ul style="list-style-type: none">The community desire to accomplish the safety net tasks properly	<ul style="list-style-type: none">Increase quota to each villageIncrease PSNP monthsThe in-kind transfer should also provide other kinds of food items rather than being only wheat or maize	2017 or 2018 onwards
Unavailability of formal interest free credit services	<ul style="list-style-type: none">The credit service that a government had provided them was with an interest which they completely resist	<ul style="list-style-type: none">The community could not work off-farm/pastoral activities such as trade which would definitely help them earn profit, improve their income and livelihoods	<ul style="list-style-type: none">The community to use the money for the proposed objective and repay their loan on time	<ul style="list-style-type: none">Supplying interest free credit even with no commission and other service payments with full of formalitiesFrequent follow-up	2017 or 2018 onwards

Annex B: Seasonal Calendar

So as to know the time the community members in the six villages devote for different activities, a seasonal calendar analysis has been undertaken which is presented as follows.

Activities	Village	September	October	November	December	January	February	March	April	May	June	July	August
Pastoral activities													
Timing of herd movement (migration)	Da'ar			✓	✓	✓	✓						
	Urkudi	✓				✓	✓	✓	✓	✓	✓	✓	✓
	Bekelidaar									✓	✓	✓	✓
	Anderkelo		✓	✓	✓	✓	✓	✓					
	Eruh								✓	✓	✓	✓	
	Alasa Bolo								✓	✓	✓	✓	
Sales of livestock	Da'ar						✓	✓					
	Urkudi	✓							✓				
	Bekelidaar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anderkelo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Eruh	✓	✓	✓	✓							✓	✓
	Alasa Bolo	✓	✓									✓	✓
Purchase of livestock	Da'ar	✓									✓	✓	✓
	Urkudi			✓	✓	✓						✓	✓
	Bekelidaar												
	Anderkelo												
	Eruh	✓	✓	✓	✓							✓	✓
	Alasa Bolo	✓	✓									✓	✓
Sales of livestock products	Da'ar			✓								✓	✓
	Urkudi	✓							✓	✓	✓	✓	✓
	Bekelidaar	✓	✓	✓									
	Anderkelo	✓	✓	✓									
	Eruh	✓	✓	✓									
	Alasa Bolo	✓	✓	✓									
Agricultural Activities													
Land cleaning	Urkudi				✓								
Ploughing						✓	✓						
Weeding									✓				
Harvesting			✓										

Storage and selling	Alasa Bolo			✓	✓								
Land cleaning					✓								
Ploughing		✓	✓	✓		✓	✓						
Weeding			✓	✓	✓				✓				
Harvesting						✓	✓	✓					
Storage and selling				✓	✓			✓	✓	✓			
Productive safety net activities (PSNP)													
PSNP (public Works)	In all the 6 villages					✓	✓	✓	✓	✓	✓		
PSNP (direct Support)	In all the 6 villages					✓	✓	✓	✓	✓	✓		
Trade and other activities													
Petty trade	Da'ar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Urkudi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Bekelidaar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anderkelo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Eruh	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Alasa Bolo (including animal trade)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Daily labor	Da'ar	✓	✓	✓	✓							✓	✓
	Urkudi					✓	✓	✓	✓	✓	✓		
	Bekelidaarna					✓	✓	✓	✓	✓	✓		
	Anderkelo					✓	✓	✓	✓	✓	✓		
	Eruh					✓	✓	✓	✓	✓	✓		
	Alasa Bolo					✓	✓	✓	✓	✓	✓		
Salt trade	Only in Da'ar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓