PAFDESO REPORT

FAR EAST DISTRICTS OF SOOL REGION MULTI-SECTORAL ANALYSIS
WATER, HEALTH AND EDUCATION REPORT
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INTRODUCTION

This report analysis by PAFDESO organization covered the Far Eastern districts of SOOL Somaliland. Sool is a big region and as such the regions covered are Far East parts of Sool, which are Taleex, Awrboogays, Xudun, Xalin, Carooley, Godaalo, Shaxda, Saxa Geba Gebo, and Lasacurdin. Pastoralist whose major occupation and source of livelihood is livestock rearing inhabits the towns. The region is underdeveloped due to political and inter-clan differences and difference with the government (which in one way neglected development of most essential components which are health, education and sources of livelihoods) while geopolitical factors, environmental degradation, climatic change, and poverty have negatively impacted the communities living in these regions causing great needs.

Synopsis of happenings in chronological order on the focused towns

The region has undergone the worst drought in the recent past (2015/2017) contributing to loss of livestock, livelihoods, environmental degradation, and increased poverty. Environmental degradation has largely contributed to desertification and arid lands while in the past charcoal burning aggravated the whole problem adding to already degraded land enabling soil erosion further exacerbating lands that could be turned into arable lands.

Water is a major problem while coupled with lack of prolonged period without rainfall; the region and the communities have been reduced into beggars waiting for humanitarian aid, which is also limited. High number of malnutrition, Lack of berkads, or water harvesting structures or rainwater harvesting structures lack of intervention synergies for water have seen further deterioration of situation. Water points established back in 2011 cannot cover the village or district they are located due to deterioration of generators, pipes, solar panels and lack of repair. Water quality in over 90% of the sources has heavy mineral content making it inconsumable water for both human and animals. Tension due to business rivalry, competition, politics and inter-clan differences and have contributed to under-development of the region, suffering of communities due to lack of humanitarian services or solution to reduce climatic change impacts.
Peace and reconciliation synergies
In the light of underlying problems in the region concerned citizens, the government and local leaders set up the Awrboogays conference to settle the issue affecting the region, the conference was held in July 2016. Adhicadweye conference was held in August 2016 to facilitate the further talks and seal the loopholes that remained in Awrboogays conference. The meeting saw the end of conflict and tension and ended inter-clan differences and regional clan difference with the government of the day. Ainabo conference held on April 2017 was the last meeting and ended the remaining issues, which were still not completed but ended historically with agreement of peace and development for the region.

In 2017 notable international and local organizations started both humanitarian and other projects focusing on the local communities in the region and have continued an abated without risks being encountered.

Late last year Somaliland held its presidential elections and the regions though having differences took their patriotic duty seriously by engaging in voting and electioneering showing the stability of the region.

DATA COLLECTION STRATEGY AND PREPAREDNESS
The report takes an analytical approach in taking mixed data to enable it give a comprehensive representation of the situation on the ground as concerning the regions focused. In consideration the organization is focusing to have information on population, water, health, security and education. Data was compared with existing data collected from documents shared by other NGOs to authenticate the data. An analysis was carried out on each segment to determine the percentage of aid or services offered largely by other non-governmental organization in the regions and the immediate need at present. Based on the premise of the existing problem the organization took into consideration of the information needed and strategized on the way forward.

THE ORGANIZATION STRATEGY
• Data collection team, training and delegation of responsibility
• Data collection tools (camera, video camera, stationary, laptops and mobile phones)
• Transportation
• Mapping out of the villages to be visited and collecting logistics (Arrangements of the local leaders to meet)
• Data analysis and tabulation
• SPSS and excel (Data tabulation)
• Report writing
PAFDESO on its task in carrying out the risk analysis and data collection took a wholesome approach to ascertain that they have every risk into consideration and devised ways of mitigation aiming to focus and manage them at any one time.

The organization divided its teams into three, data collection, community mobilization, information and data gathering. On the top of management of the whole activity was PAFDESO strategic team, which coordinated every component of the exercise.

On data collection the strategic team developed a set of questionnaires aiming to get data on:
   i. Population
   ii. Health
   iii. Education
   iv. Water
   v. Security

**BACKGROUND OF THE ANALYSIS REPORT**

Given the above description of the Far East districts in Sool region, PAFDESO focused on undertaking an in-depth analysis of the districts aiming in analyzing some of the underlying factors that has greatly affected the communities in the Far East districts in the region contributing to humanitarian crisis.

PAFDESO organization on its strategy carried data collection and analysis on health, education, water, security and population and focused on both qualitative and quantitative methods in analysis and reporting of the findings. The analysis is an attempt to analyze the existing problems in the context of various constraints, opportunities and relationship dynamics between different stakeholders.

**Objective of data collection and analysis**

The data collection and analysis is aimed at:

Having detailed discussion with the communities to have improved understanding about the existing issues as concerning water crisis, security, food, low production of livestock, and current crisis of increased IDPs in the region.

Having detailed discussion with other players in this case government officials as representatives in the region in order to understand their level of involvement, and to authenticate some of the information which are not in line with the actual picture on the ground.

Developing strategies for interventions in order to create and develop sustainable livelihood, water, education, health and security solutions.
**Investigative team for the data collection and analysis**
The team that was involved in the data assimilation consisted of professionals from PAFDESO who were collectively the field officers and field program managers.

The team members were involved in the process of developing the structured questionnaire for the analysis. Several rounds of discussions were held for understanding the framework of the study in the context of livelihoods assets, vulnerability factors, policies, and structures.

The members, particularly the field staffs were briefed on the objective of the project its activity components and the approach. They were also trained on the methods and tools of data collection. The first design of the schedule was pre tested in the field and the necessary modifications were made before finally administering it in the sample villages.

**The frame of data collection**

i. Conceptual clarity of the population, water, health and education framework. Population, water, education, health, and security frameworks, questionnaire design, staff orientation and pre-testing of interview schedule.

ii. Information collection at village and district level

iii. Compilation of information and reporting

Based on the parameters set 11 districts/villages were selected. The demographic details of these villages are given below including IDPs and feeding programs.

<table>
<thead>
<tr>
<th>S.N</th>
<th>Village/District Name</th>
<th>No of Residents /HH HHs</th>
<th>IDPs/HHs</th>
<th>No of Feeding HHs</th>
<th>No of Surrounding Population</th>
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<tbody>
<tr>
<td>1</td>
<td>Taieex</td>
<td>1600</td>
<td>600</td>
<td>200</td>
<td>10,000</td>
</tr>
<tr>
<td>2</td>
<td>Xalin</td>
<td>800</td>
<td>400</td>
<td>30</td>
<td>3500</td>
</tr>
<tr>
<td>3</td>
<td>Sarmaanyo</td>
<td>600</td>
<td>100</td>
<td>100</td>
<td>700</td>
</tr>
<tr>
<td>4</td>
<td>Carooley</td>
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<td>280</td>
<td>0</td>
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</tr>
<tr>
<td>5</td>
<td>Godaalol</td>
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<td>300</td>
<td>70</td>
<td>400</td>
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<tr>
<td>6</td>
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<tr>
<td>7</td>
<td>Hol-Hol</td>
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<td>200</td>
<td>80</td>
<td>700</td>
</tr>
<tr>
<td>8</td>
<td>Saaxo</td>
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<td>110</td>
<td>500</td>
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<tr>
<td>9</td>
<td>Lasacurulin</td>
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<td>80</td>
<td>60</td>
<td>800</td>
</tr>
<tr>
<td>10</td>
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<td>1200</td>
<td>500</td>
<td>15000</td>
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<tr>
<td>11</td>
<td>Awr boogays</td>
<td>600</td>
<td>375</td>
<td>480</td>
<td>18000</td>
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OBSERVATIONS

A synoptic description of Far East Sool (districts/villages)
The project analysis areas Sool region is a contiguous area
with a common topography characterized by flat planes and
terrains, undulating landscape, spaced valleys, isolated hills,
salted valley landscapes, scattered acacia trees, dry savannah
grassland with cactus bush tracts. The region is sparsely pop-
ulated with agglomerated inhabitance, extreme climatic con-
ditions and perennial streams and rivulets (now completely dry
or drying because of massive deforestation). There are a few
weather roads to significant number of villages. Awrboogays,
Xudun, Xalin, Carooley, Godaalo, Shaxda, Saxa Geba Gebo, and
Lasacurdin districts have an estimated population of 92, 925
in total with 2% of the population living in IDP camps. The
major precipitation period is between May to June (gu) and
September to November (dayr), during which there are nor-
mally 60 rainy days but in the current past it has not been the
case rainfall level have dropped to around 80 to 100 mm. The
humidity varies from 20% to 35%.

Livelihood and drought impacts

About 60 percent of the population in Sool consists of nomadic
pastoralists. The main source of livelihood is livestock man-
agement.

The lack of diversity makes the economy fragile even at the
best of times and extremely vulnerable in times of drought.
as was experienced in 2015/17 The region offers substantial potential of livestock pasture in the past but due to environmental degradation, climatic change impact, soil erosion, prolonged periods without rainfall in the past two years and drought it adversely affected livestock keeping due to loss of animals during drought, and pasture while the larger percentage of camel herders moved their livestock in search of fodder and water in other regions. One of the major observations in terms of growing of crops has been in Xalin district due to underground water but in the current past and present Xalin underground water has dried out and former vibrant crop production stopped.

Concentration of IDPS and residential housing (HH)
According the data collected the feeding program run in some of the districts visited and run by external partners both local and international NGOs cover very little in relation to the population in terms of percentage. The communities particularly the pastoralists who live in the wild and on the go are seriously affected and not covered by the humanitarian activities, which also includes some villages that are far inland.

Micro-economics activities
On micro-economics there are no tangible income generating activities which are vibrant largely due to the region is known its large herds of camel (Las-Anod means lake of milk) statistically this is the clear picture on the ground anymore during 2015-2017 the region has been greatly affected by drought and prolonged periods without rainfall coupled with lack of any synergies in water conservation, water storage, or surface runoff water harvesting which contributed the communities losing large numbers of their cattle and camel herds and have been reduced to dependent of whatever humanitarian aid that is available to them while some of the camel owners have moved to other regions in search of pasture and water (and this is a small number and only those with financial capability).

Environment degradation and its effects to the communities
Large tracks of land which was abundant of life, vegetation and sources of water have massively been degraded due to human activity mainly charcoal burning and tree cutting, soil erosion agents have greatly eroded the arable soil which could have held any vegetation leaving the land barren. Lack of education and community capacity building in terms of livestock rearing, and partial agricultural coupled with climatic change the communities have been left with no alternative to turn to and many have been made IDPs living in concentrated camps depending on humanitarian aid. In every district visited there were over 70 (490 people) in IDP camps.
Poverty levels
Poverty levels are low with communities living under half a dollar a day according to PPP (purchasing power parity index). The market places mainly open market do not exist anymore they have small shops while the camel milk which used to be sold and loved by masses has been replaced by imported powdered milk and other related imported milk products, of which is sold at exorbitant prices.

To understand the extent of poverty, water severity, and social deprivation in the districts in a comparative context, it is imperative to compare some of the key economic, social and development indicators with the major districts in Sool region.

Feeding HH reached

Health Synopsis
The districts are malnutrition zone. Emerging health problems are the water borne diseases (Cholera, diarrhea, typhoid and dysentery), water related health complications (kidney problem which is a proven facts, teeth discoloration, due to high mineral content in the water and hygiene), and isolated cases of hepatitis B.
The districts are struggling to keep this in check but with low or none existence of medical personnel or practitioners in health field it is an impossible task. It is imperative to note that emergency cases, and complicated medical cases are referred to Las-Anod regional MCH which is very far in terms of distance to be covered a fact that contributes to number of deaths experienced on a daily basis since most of the patients pass on en-route to the hospital while specialized doctors are not available regionally they have to travel to Hargeisa which is huge undertaking due to finances involved with no assurance of total medical attention.

DESCRIPTION OF HEALTH ANALYSIS
Far East parts of Sool, which are Awrboogays, Xudun, Xalin, Carooley, Godaalo, Shaxda, Saxa Geba Gebo, and Lasacurdin and covered by PAFDES0 team in terms of health data collection and information reflects a dire need of immediate attention. Lack of health care centers, MCHs and outreach medical campaigns has serious impaired the health system, mainly aggravating problems relating to access and equity of health care services in the 11 districts focused by PAFDES0 organization. It remains a challenge to imagine an effective, affordable and equitable strategy to bring essential health services closer to communities in these regional districts, which have, on the whole, low levels of expendable income. Pastoralists face the greatest challenge in accessing medical care services due to distances involved while also facing great challenges due to social background of not interacting and getting information limiting their knowledge on diseases, disease occurrence and contributing factors both to adults and children.

Health institutions and services
The total number of MCH centers in the districts covered is 7, number of health centers 0, number of qualified nurses is 15, number of qualified midwives is 14, and number of health officers is 3. Though the medical services are free medicine have to be bought by the patient or his relatives (next of kin). The districts have a population of 92,925 the ratio of MCH centers to population is 0. On observation the MCH are not fully equipped to cater for emergencies in all MCH centers there was no ambulance services in all 11 districts, emergency situations among the communities largely depend on good Samaritans to offer their vehicles to transport sick persons to hospital.
Health centers which are supposed to cater for mostly women have no personnel since there are 15 qualified nurses and 14 midwives who are concentrated in Xudun, Awrboogays, Taleex, and Godaalo leaving the rest 8 districts with no personnel to attend to sick people.

Maternal mortality rate in the region
Somaliland is the joint six highest maternal mortality rate in the world with 732 deaths in every 100,000 births. Mortality rates based on statistics and data acquired lack credibility due to the lack of documented sources but focusing on the number of qualified midwives and nurses, lack of maternal capacity building among the communities, lack of synergies to train village traditional midwives and lack of knowledge in the region can be some of the factors contributing to mortality rates in the region.

Maternal mortality rate, pre-natal, and neo-natal care in the region. The main causes of maternal mortality rate are typically due to a complication from the pregnancy or complications during delivery, lack of emergency services, which aggravate the situation further in this region. The most common of these complications is due to postpartum bleeding and early childbirth or premature birth coupled with lack of proper medical personnel and services. Other things that lead to maternal mortality are infections, blood clots, and obstructed labor. Post-natal, neo-natal and anti-natal care is absolutely non-existence a fact that contributes high mortality rate during childbirth. The number of trained or qualified nurses (18), midwives (14) in the districts in relation to the population served the percentage is equal to nothing in terms of percentage ratio of nurse/midwife to number of population. Anti-natal care visit percentage is 8.4 among the poor, 12.8 second, 23.4 middle, and 34.9 fourth, and 51.4 richest (UNICEF statistics database on anti-natal care.

Data Availability
There are no data storage structures, equipment or assets apart from files that are prone to getting misplaced or stored carelessly adding to more time in retrieving them when needed. Lack of proper medical history documentation adds to lack of data contributing to situations where strategy on campaigns on diseases would be difficult due to lack of tangible data. Mortality rates cannot be accurately analyzed and tabulated in relation to the causes since there are no tangible indicators on causes of death. Maternal mortality rates are also another complication issues which needs a form of data collection, recording and storage to enable coordinated access, retrieval and report writing to enable overall data availability to the central government and ministry of health to help with planning, strategy and action plan.
MCH facilities and structures

In the maternal wards on observation the patient were sleeping on the floor since there was one bed which was used when the patient was being examined or attended to during medical procedure or delivery. The MCHs were understaffed with no nurses in most of the districts. The main MCH in the region situated in Las-Anod was the only medical institution with good quantifiable medical personnel and offered varied number of services. Xalin, Carooley, Hol-Hol and Saaxo Geba Gebo Geba Gebo have no medical personnel nor MCH or Health centers creating a great concern on medical services. The communities in these districts have to travel to Las-Anod or Ainabo or to the nearest district with a health center for medical services.

Data collection, recording, storage and their use in medical planning in disease control.

Distances travelled by patient are long and tiresome while there are no outreach medical programs, ambulance services or campaigns apart from immunization and vaccination programs. Most community members have to persevere and search for medical service from their homes since no medical facilities even private ones are situated locally near them. Lack of computers and medical records to record data it is a matter of great concern since control of diseases and management is difficult without data and medical history of patients a fact that seriously hinders proper medical efficacy in medical services dissemination in the districts and in the region as whole.

Trends in Immunization and vaccination

Immunization and vaccination programs are the only success stories which the organization recorded with over 60% of the children reached on immunization and vaccination campaign carried out in the districts focused for analysis by the PAFDESO team this year. In the recent past immunization rates gave indication of the level of interaction between the population and public health systems as immunization campaign and capacity building was not able to reach a high percentage of communities since many are pastoralists in the region.
**Nutrition**

Malnutrition and malnutrition related cases are high in the region largely due to lack of proper diet, breast feeding information, advice and workshop training for lactating mothers which has never been carried out this and other factors contribute largely to malnutrition cases while lack of food and balanced diet among mothers is another contributing factor.

**Other health issues**

Water borne diseases (Cholera, diarrhea typhoid and dysentery), water related health complications (kidney problem which is a proven facts, teeth discoloration, due to high mineral content in the water and hygiene), and water related cases are high in the region largely due to quality of water, while this is the case the people continue to drink in spite of the dangers this practice is mainly due to lack of knowledge or information or no alternative source of quality consumable water in the districts. High mortality cases in the region are largely associated to lack of access to medical services, lack of information and knowledge due to high illiteracy rate in the districts among the communities. Life expectancy is very low at 60 years average a fact, which is observable.
EDUCATION ANALYSIS

Far East parts of Sool which are Awrboogays, Xudun, Xalin, Taleex, Carooley, Godaalo, Shaxda, Saxa Geba Gebo, and Lasacurdin and covered by PAFDESO team shows the eleven districts have 12 primary schools, 2 primary private schools, 64 classrooms, and 73 teachers while they have 2 secondary schools. Illiteracy among the adults is a contributing to low education performance and focus due to lack of proper attention to education both in school and at home”. School aged children in Somaliland only 4 of them are actually in school. Teaching and learning outcomes are further affected by the lack of safe school environments. An improvement was noted on the ratio of girls to boys in school of 1:3 while student teacher ratio was low being 23:1 indicating lack of teachers mainly due to low pay or lack of payment for a long period.

Many communities, lack most basic of school buildings while in others, children are expected to learn in unsafe, dilapidated structures often without adequate sanitation facilities, unpredictable rainfall patterns and water shortage have resulted in only 29% of the population having access to safe water and 9% to sanitation. Poor hygiene, which can be addressed through school WASH programmes, increases the risk of outbreaks of waterborne diseases such cholera. As the socio-economic condition of a nation mainly depends upon the education of its general people, illiteracy must be removed by any means based on this premise most of social problems and education-associated problems are attributed to lack of literacy levels among the adults.

Number of school going age and enrolled students currently in schools

Based on the total number of students for primary schools are 3736 while for secondary is 589 in total. The youth constitute the largest percentage of the population based on this premise 92,925 is the population 60% of the population is 55,755 are youth 30% are primary school age and are 16,726 with only 3736 in school at present the rest are either in IDP camps and cannot attend schools in their respective villages or district due to drought and climatic change impacts which largely affected the normal lives of many communities in the districts focused. Education and gainful employment for youth in Somaliland can build their resilience by channeling their energies into positive outcomes.

Literacy rates, especially among young women in the 15-24 year’s cohort, are particularly low. In Somaliland 44 percent and 37 percent of young women were found to be literate respectively. In Sool regions, the lowest literacy rates were found to be high indicating a lack of education service provision and/or poor uptake of services. Data also indicates that gender inequities has become more accentuated in lower second-
ary school with only 28 percent of girls transitioning to lower secondary schools (School Census MOEH 2015/16). An acute shortage of girls-only schools to overcome cultural constraints at this level is highlighted by the fact that only 37 percent of girls who transitioned from primary school sat the Form 4 examination in 2015/2016.

Possible barriers to education advancement among the populations in the region
In three districts 93% of school age children are not accounted for in attending school or any form of school while in the other two districts 98% were not accounted in attending school while six of the other districts have 90% not accounted for in attending any form of school this fact is attributed by either lack of fees, resettlement in IDP camps, migration to a different district or to urban town in Las-Anod as parents look for other sources of livelihoods. Cultural perceptions also contribute to low girl enrollment to schools most of them spotted at home helping with chores while some helping looking after herds of camels, goats and sheep, another common cultural factor is early arranged marriages which see the girls being married without their consent.

Importance of alternative sources of education establishment and private schools. Since there is no increase or establishment of any alternative education facilities due to the relative low number of schools, low number of classrooms in the existing schools and no increase of either private established school or schools in the 11 districts the number of formal primary schools remains the only source of education while it’s imperative for alternative basic education since it has an important role to play in the equitable provision of quality education in all three education systems available a serious consideration by the stakeholders particularly the communities, business persons, ministry of education and non-governmental organization is establishing and engaging with the locals to see alternative basic education establishments are built whether through communal synergies and build capacities on the part of communities focusing on importance of education for the young generation now and in the future since its vital due to contribution it will give to socio-economic developments as learned members of this communities will be used and take active roles in bringing the much needed change in spite of current severity of the situation in terms of drought and low livelihoods sources of income.

Notable fact: many schools going age children will not attend schools until an intervention or solution is found and implemented to bring the normalcy in many communities in the districts concerned. In six districts each has 1 school with less than 5 classrooms a fact reflecting lack of funds, lack of assistance or coordination to complete the rest of the classrooms among the communities served by the schools. Most of the administrators interviewed indicate lack of fee payment as the
single most contributing factor to lack of development in the schools’ infrastructure and equipment. School asset management is missing a notable fact while socio-economic factors play a role in deterioration of the asset but planning and careful management of funds available could contribute to caring of the assets in the long run while this premise might be true lack of capacity building on school administrators play a role in asset deterioration.

Schools, infrastructure, furniture, equipment and sanitation facilities
The schools in the twelve districts are not sufficient to cater for already ongoing learning students, in this case there are on average 5 classrooms per school, this is due to some districts have no classrooms or have 1 or 2 classrooms show inequitable distribution of classrooms.

In all the eleven districts and a prevalent observable occurrence is most of the schools lack roofing and the most single important facility the washrooms living the students to go out in the open land to relieve themselves.
Sanitation infrastructure in schools needing

On camera we have pathetic and health risk facilities to students in some of the schools visited on the issue of washrooms a situation leading to epidemic outbreak and an outcry for assistance. The school and the community it serves are not able to build new washroom facility. Water storage structures are lacking which includes pipes and taps a fact attributing to risk of water borne disease outbreak with no solution foreseeable (UNICEF sanitation data 2017 In Somaliland open defecation is 80.3 while unimproved facility index is 7.3 in rural areas). In 8 out of 12 schools are in dire need of furniture and equipment which are crucial for normal learning of the students and administration management.

Figure 7. Toilet facility in one of the schools

Early child education and performance of the child in later years The student ratio is 1:23 student in consideration of districts with no schools and districts with schools with less than five classrooms. The basic school curriculum which can integral in improving performance on the part of students are lacking which raises the question of fee charged to students and its use in terms of budgetary.

Teaching and teaching skills needs and gaps

90% of the teacher both in kindergarten, elementary and upper primary are not trained they work as UT untrained teachers complicating issues of teaching methodologies, lesson plan-
ning, creativity in class, and class management. Lack of trained teachers adds to low academic performance among the students due to lack of basic teacher teaching skills while lack of access to information, books and library complicates proper understanding of the subject or lesson on focus.

Behavioral issues among the students adds to the overall wholesome education which builds students for the future and without addressing issues contributing to certain inconsistent behavior among the young students seriously affects the adulthood in later stages in life, based on that premise it is imperative for the government and ministry of education to strategize on how to address the underlying problems early enough particularly teacher training which can be done on quarterly basis in the region without disrupting normal school days. The early childhood program, classes, equipment including first aid kits, wall charts and books are also lacking indicating the children of very young age (5yrs to 6years) are not catered for this indicates most students join school without attending pre-school classes a fact which contributes to difficulties in learning to most students in the region. Poor quality education and the lack of jobs were found to not only reduce their natural resilience and optimism but it also made youth vulnerable to risky and criminal behavior.

**Facts on teaching skills level**

On observation and answers offered most (99% of them did not attend a teacher training institution or training in the past prior for them being teachers in the schools they teach.) of the teachers are not qualified trained teachers creating another obstacle in proper efficacy of teaching increasing barriers to education in all of the eleven districts focused by PAFDESO team during data collection.

The ministry of education decentralized the education program and every region in Somaliland controls most of the education program in spite of decentralizing the education sector Sool region education is not balanced in terms of resource equitability a fact attributed to either neglect or pure marginalization issues.
School management and organization
School management is not in place due to lack of basic resources which can facilitate proper administration and management and in this case proper and established school management system could have enabled the head teachers to efficient and more productive instead of having to improvise or use whatever they can access to able to deliver the much needed management services contributing to lack of effective management which affects overall education services in the focused districts. Lack of effective well-managed schools indicates lack of monitoring and evaluation by the regional ministry of education in Sool region, which shows neglect, and lack of professionalism.

WATER ANALYSIS AND DATA COLLECTION
Water is an essential part of life for human beings and plays a vital role for survival while its usage is enormous. Lack of water is detrimental to myriad of issues from domestic use, consumption as a drink by both human and animals and crucial role it gives in crop production. In the Far East parts of Sool which are Awrboogays, Xudun, Xalin, Taleex, Carooley, Godaalo, Shaxda, Saxa Geba Gebo, and Lasacurdin covered by PAFDESO team on data collection shows critical need of water, water sources, water conservation and storage structures and rainwater harvesting structures.

The drought has affected about 80% of the population of Sool region, more than 75% of the population in Sool are nomads depending on livestock for their livelihood, and they are the most hit by the current drought. Moreover, it was reported in late 2016 that around 100,000 internally displace people (IDP’s) existed.

Much of the causes of vulnerability are due to drought risks and the constraints to improving livelihood and economic development in the country are related to lack of development of water resources and its poor management. Most of the rainwater is not put to productive uses due to lack of storage.
and poor water management practices. Groundwater is a finite resource and very costly to extract due to the need for deep wells of 200 to 400 meters in many parts of the country. Furthermore, the pressures on this scarce resource are mounting due to increasing population, urbanization, irrigated farming and industrial activities. Water needs range from water supply for 2 million urban and 1.5 million rural people and livestock (estimated 7 m camels, 5 m cattle, and 25 m goats and sheep), agriculture, and pastoralism. However, despite the various problems, there is adequate potential to meet water needs in Sool and many parts of the country if water is to be well managed. For example, better rainwater harvesting infrastructure is needed in the highland areas where most of the annual 500 mm of rain is received in intense storms with associated flash flooding.

### Water Sources per district

![Water Sources per district](image)

### Hydrologic Setting

Water is a scarce resource in Sool region and to a larger extent Somaliland. There are no lakes and permanent rivers, and rainwater is limited to two brief rainy seasons. The mean annual precipitation is about 300 mm, reaching about 500 mm in the west and along the highland range, and most of the country is classified as arid or semi-arid. Evapo-transpiration is very high, particularly in the coastal area, where it reaches 2900 mm. Droughts are common, occurring moderately every 3-4 years and severely every 7-9 years, and causing great hardships due to loss of livelihoods, especially for nomadic pastoralists who rely on livestock. Due to increased climate variability, rainfall patterns have changed and droughts are becoming more frequent and severe, leading to many internally displaced people (IDP) in the region. Building resilience also requires strengthening productive sectors and livelihoods, and provision of basic services, such as access to drinking water.

### Water analysis

The analysis physical characteristics natural resources, water resources, infrastructure, socio-economic development and environmental aspects. This report elaborates the nature and outcomes of the analysis undertaken and key issues in the plan preparation that is focused to be prepared aiming to de-
develop project proposal in regards to underlying water issues in the focused districts in the region. The report will serve as a basis for the second consultation with key stakeholders.

Inadequate water resources management is the most important constraint towards addressing the vulnerability to disasters due to adverse climatic conditions. Although there are inadequate levels of rainfall in many parts of the country that cannot meet current needs, Sool and other regions are lacking the infrastructure and know-how to properly manage its available water resources.

Due to water sources and availability, large population of people and communities have concentrated their settlement and livelihood a notable observation is Xudun and Awrbogaays of which the two have the largest populations in terms of numbers. Xudun has 1 big borehole and has the capacity to supply large numbers of people but in the recent past the pump and solar panels need repair and replacement (maintenance is of great importance).

Without adequate infrastructure Sool region will not be able to meet its water needs. In particular, given its seasonal rainfall patterns, recurring annual droughts, and lack of permanent surface water, there is great need for rainwater harvesting (RWH) infrastructures for collecting and storing rainfall for livestock, irrigation and other uses. As well, sustainable exploitation of groundwater resources is essential to meet water supply and other needs.

Water for Livestock

With over 50% of the population nomadic pastoralists, water for livestock is a major concern and one that needs to be urgently addressed. However, since poor location of water points can lead to conflicts, constraints, depletion of the existing
water and degradation of the environment due to over-grazing, careful siting of water points is essential. Strategic water points which can be used during periods of drought must also be planned for and developed but at this juncture due to social-economic constraint, vulnerability of the communities and stress being experienced it is crucial to note immediate need of water has to be addressed while short, mid and long term strategies and action plans need to be developed in the near future in order to relieve the communities the current situation they are currently in.

The level of access to safe water in Somaliland is not well known, with any reliable statistics available. Recent estimates by the FAO-SWALIM have given access figures ranging from less than 20% to 50% in various districts. The Somaliland Development Plan 2012-2016 reports that on average 41% of the population was using improved drinking water sources while not discrediting the report is proper to not the disparities in the regions in this case Sool where 11 districts, 4 districts have no source of water this include boreholes and shallow wells, while the others have sources of water pumping machinery are broken and Not yet repaired while solar panels are in needed in the case of Awrbogaays, which has 2 boreholes, and have potential of supplying water to the whole township. 90% of the Water sources in the focused districts have water with high content of minerals, which in terms of quality the water is termed as unconsumable by both animal and human. Water prices are high a fact aggravated by distances travelled to get water by the local vendors it is the opinion of the report that proper and accurate data on important issues affecting the communities who make up part of the nation to be addressed with at most discretion and precision in order to draw attention focusing on addressing the underlying problems.

The average consumption in the capital Hargeisa is estimated at only 10 l/c/d. To supply drinking water to the rural areas, including small towns, the use of deep boreholes is envisioned. However, this requires significant investments since in many parts of the country borehole depths can range up to 300 to 400 m (average depth is approximately 150 m in the country), and can cost $100,000 or more to construct. The use of solar or wind for water pumping is being tried in parts of the coun-
try, and their use is expected to expand for the more shallow boreholes.

**Land and Environment**
Land degradation is becoming a serious concern due to the loss of topsoil as a result of the flash flooding during the rainy season, and the loss of protective vegetation in many areas. Technologies to address these issues have been successfully demonstrated in previous projects (such as soil bunds, stone terraces, runoff check dams, sand storage dams, tree nurseries), but have never been scaled up.

**Knowledge of water resources**
With the support of data from FAO, who have provided assistance on water and land information management, some form of understanding and knowledge has been acquired on water resources which can be used as the basis to prepare a WRM plan for the sector. There is also the basis of a hydro-meteorological network in place, but strengthening is necessary. There is a lack of understanding of sustainable yields from the deep aquifers, and consequently an extensive and comprehensive hydro-geological survey of the whole country is needed, building on the ongoing project to improve the understanding of groundwater resources. As well, a comprehensive inventory of all point water sources in the country was completed, but this needs to be updated. Capacity building, including training of existing staff and education of more specialists, and additional equipment for improving the hydrometeorological network, geophysical investigations, and water quality monitoring, are needed as well. While this is the case it is imperative to note that knowledge and data available has not been used to the advantage of the situation affecting communities in Sool or in other regions it is a high time the knowledgeable persons to be involved in strategizing and planning on water issues to tackle underlying issues particularly in regions most affected by drought and climatic impacts.

**SECURITY ANALYSIS AND DATA REPORT**

**A brief rundown of security in the Sool region**
Xudun has one police station with 5 rooms and 20 officers with one senior officer. Awrboogays has one police station with 4 rooms and 15 Community appointed officers with one Government appointed senior officer.

According to Somaliland government Taleex is the capital city of the region called Xaysimo so Carooley, Xallin, Shaxda, sarmayno, Lasacurdin Godaalo are all under Taleh. So there is a regional police officer who controls all those areas Carooly has 7 police officers. Godaalo 6 police officers. Sarmaanyo 8 police officers. Lasacurdin 5 police officers. Xaln 7 police offi-
cers. Taleh has 20 police officers with one police station with 6 rooms. And all the other villages that are under Taleh use this police station. Shaxda Hol Hol and saaxa Geba Gebo has no police officers and police stations.

Security Analysis
Security in the 11 districts PAFDESO visited and collected data is a responsibility of everyone including members of the communities. Based on that premise its careful to note that from household level everyone is responsible to observe peace and keep security as top priority. In the recent past the region has been subject to violent flare up much fueled by inter-clan differences and rivalries which were a common prevent occurrences which contributed to the region be labeled as high risk priority area and as such much of the need humanitarian and other related synergies were not able to be implemented. Differences of the clans in the region and the government were also a source of risk since government was not embraced but the success of peace and reconciliation conferences held by the government and representatives of the communities from the region has contributed greatly to the peace and security stability.

It is further to be noted that the current administration is focusing to embrace and implement a series of development in the region aiming on basic developments that will enable the people and communities to access health, education and wa-

ter it is crucial to note that the people will be relieved owing to that fact that they have been in a serious situation which has created large impact on social economic factors. Though the number of security personnel is not enough and up to standard as required the government has owned to its responsibility to the people and confidence of their security can be felt and on that premise its evident on the ground on the number of volunteer local police officers attached to each police station though with limited equipment to carry out their duties.

PAFDESO team did not leave the matter of security on observation but to ascertain that there is and will be no security hitches during its project implementation or any other non-governmental organization the team went ahead to meet village and community elders on the matter of security and had an signed agreement to attest to the commitment of the people of the villages and town visited. They also committed to help safe guard people belonging and working from other organization in case of security risk or any other risk a fact that largely attest to the level of security is upheld and will be handled by the communities in the region.

Notable evidence is the ongoing projects by major international non-governmental organization going on.