

# Changes in Drought Trends and Effectiveness of the Social Safety-Nets on Post-Drought Recovery of Households in Moyale Sub-County, Kenya

Isack M. Aliow<sup>1\*</sup>, Soita Samuel China<sup>1</sup>, Oboka Wycliffe Aluoch<sup>2</sup> <sup>1</sup> Masinde Muliro University of Science and Technology.

<sup>2.</sup> Cooperative University College of Kenya. \*Corresponding author email id: Aliow.Mohamed@irworldwide.org

Abstract – For many decades now, drought in the Horn of Africa has had devastating effects on the lives and livelihoods of the pastoralist communities. This study was conducted with a view to analyze changes in drought trends and effectiveness of social safety-nets on post-drought recovery of household in Moyale sub-county, Marsabit County, Kenya. The study adopted cross-sectional survey and evaluation research design. The sample size for the study was 385 households. Study population consisted of Heads of households, community leaders, managers of NGOs, chiefs, and county drought coordinators in Moyale sub-county. Data was collected using household questionnaire, Key informant interviews, and focus group discussion. Data were analyzed using SPSS for frequencies and proportions followed by Chisquare test at p = 0.05. Socio-economic characteristic show household heads are mainly men (60.8%), community regarded marriage highly (74%) and no formal education (57.9%). On drought experience and impact, majority of people in the area have experienced drought (99%); drought of 2006 and 2011/12 was the most remembered due to its impact (41%) and drought characteristics was severe and extreme (65%). The study found out that, as the drought intervals become shorter, the drought intensity was increasing and its impact was becoming more severe. The study also found out that social safety-nets empowered women (50.9%), strengthened family relations (60%) and the benefitted household had enough food (73%) to overcome drought. However, the study reported that social safety-nets did not help in school enrolment or retention (50.9%) of pupils during the time of drought. The study recommends that robust drought mitigative measures should be put in place that will help in reducing the shock on people and their livelihoods. The study also recommended that support provided through monetary terms to beneficiaries targeted in safety-nets scheme should be enhanced and any adjustment made for future cash programme design should be guided by the existing local Household Minimum Expenditure Baskets. Finally, the study recommended that more intervention of enhancing school retention at the time drought should be implemented as this will form basis for stronger community resilience and sustained livelihoods.

*Keywords* – Drought trends, Effectiveness, Minimum Expenditure Basket, Moyale Sub-county post-drought recovery, Social Safety-Nets.

#### I. INTRODUCTION

Drought has caused losses estimated into millions of dollars [1]. Over the years, drought has continued to cause excessive loss of pastoral property through livestock death, thereby creating repeated bouts of humanitarian need and assistance [2]. According to Fitzgibbon (2012), this situation had put pastoralist livelihoods and their lives on state of vulnerability making them dependent on humanitarian relief hand-outs [3]. With increasing frequencies of drought being witnessed over years, the pastoralist speed of recovery before the next drought will continue to be hampered to a near snail pace as observed by Christian Aid report [4]. The Government of Kenya in partnership with civil societies started implementation of Safety-nets programme in Northern Kenya in the year 2006 dubbed "Hunger Safety Net Programme" (HSNP). Despite these new approaches to drought management and community resilience building through safety-nets, there are limited empirical researches done and documented on its influence on post-drought recovery.

Social Safety-nets is an instrument of strengthening community mechanism to overcome stress and shock to disasters [5]. It is also a protection mechanism provided to the population affected by disasters with an aim of addressing risk, vulnerability and social exclusion [6]. Social safety nets if designed and managed well can play critical role in the management of shock and risk emanating from drought and other hazards [7]. Cases of unpredictable appeal to humanitarian crisis have been seen as ineffective approaches especially in the face of increasing vulnerability and climate change. Social protection schemes were seen as predictable means by which predictable resources can be provided to the vulnerable population affected by the disasters [8]. This approach was seen as the best way of identifying and addressing risks associated with drought. This study was therefore designed and conducted against the above mentioned problem and within the backdrop of Hyogo frameworks of action on Disaster Risk Reduction that ended in March 2015, and the Sendai framework (2015-2030) which highlight issues of recovery schemes and social safety-nets as critical activities towards reducing risk and opportunity for building back better [9]. The framework highlighted strengthening the implementation of social safety-nets mechanism to assist the poor, the elderly and the disabled and other populations affected by disasters [10].

The findings from the study will provide insights to the National and County Governments and other Policy groups, academician on the policy formulation and review of general disaster management strategies in Kenya and drought management in particular as envisioned in the Mid Term Plan II (MTPII) of Kenya Economic Plan of Vision 2030 where the government will work with stakeholders in ending drought emergencies [11].

The findings will also contribute to the wider Global knowledge in the design and implementation of social

Copyright © 2017 IJAIR, All right reserved



safety-nets as a pillar of resilience building towards emerging phase of climate change.

### II. METHODS

#### Study Design

The study employed a cross-sectional research design. The decision to adopt this design was guided by (Mugenda, 2009) [12] who posited that cross-sectional research design are commonly used when examining and comparing two variables that exist in communities. The design allowed for analysis of how social safety-nets contributes or affects post-drought recovery among the pastoralist population. The field work was carried out in Golbo ward, Moyale subcounty, Kenya between March and October 2016.

#### Study site and Population

The study was conducted in Golbo ward of Moyale Subcounty of Marsabit County in Kenya. Marsabit County has a population of 291,166 people [13] representing 0.8% of the national population with 52% of the population being Male and 48% being Female [14]. Marsabit County is administratively divided into four sub-counties namely:-Moyale, Saku, North Horr, and Laisamis. The Climate in Moyale sub-county and that of Golbo ward is generally hot, with temperatures varying from 10.0°C to 30.2°C. The months of January-March and September-October recorded the highest temperatures, averaging 30°C while the months of June-July have the lowest temperature averaging 24°C. Rainfall was bimodal averaging 200mm to 1,000mm per rainfall annum. This low coupled with high evapotranspiration rates tends to reduce crop and pasture productivity thus increasing the population vulnerability to drought, which leads to reliance on relief food or other humanitarian support throughout the year. In Moyale subcounty, close to 80% of the population are nomadic pastoralist, 13% are small scale farmers and close to 7% are business people [14]. The target population for this study included the Household Heads comprising of either husband or wife in the household setting. Other target groups include village elders, Orphans and Orphans care givers. Others include Project Field Officers and Program Managers of organization working in Moyale sub-county implementing Hunger Safety Nets programmes or any other form of safety-nets.

#### Sample Size Calculation and Sampling

A sample of 385 respondents mainly Head of the HH were selected from the overall Household of 4447 using Cochran's [15] formulae as presented in the Figure 1.

n = the sample size for a small population
N = the population size.
Using Equation 1, for a 95% confidence level and +/-
5% precision;
$n_o = (1.96)^2 (0.5) (0.5) = 384$
$(0.05)^2$

Fig. 1. Sample size calculation

Golbo ward is the largest ward in Moyale Sub County and has 10 villages. The Five villages were selected from the entire 10 villages in Golbo through use of the Probability Proportionate to Size (PPS). The PPS sampling was adopted to have each location and each household in the selected villages have equal probability to be selected in the study. The sample size was equally distributed among the five villages. At village level, 77 HH were selected using systematic random sampling. The total number of HH in each village was the sampling frame and the sampling interval (*i*) was arrived at by dividing the sampling frame with the sample allocated to the village which was 77. A random starting HH was identified and every *i*th HH was selected and interviewed

#### Data Collection

Household questionnaire was used to collect data from the Head of Household. The questionnaire contains information on demographic characteristics of the household, drought and its impact, types and the services offered under the social safety nets and the impact of social safety nets on social and economic recovery of the household. The Key Informant Interviews (KII) were also used in collecting information from the respondents. The target KII respondents included the Program Managers and officers of the organization responsible in managing and running the safety-nets project in the study area. The group was selected as they had experiences and expertise in the delivery of safety-nets programmes. Focus Group Discussion from women group, youth group and community members were put in mixed forums where discussion on the trends and the impact of the drought, and social safety-nets were discussed.

#### Data Analysis

The data from the questionnaire were inspected for completeness and edited for consistency. The cleaned data were then uploaded to excel for coding. The data was later exported to SPSS ver 17.0 for interpretation and analysis. Descriptive statistics such as means, median, frequencies and proportions percentages were used in analysis and presentation. Distribution in the variation of the data presented was analyzed using the Chi Square test. The KII and FGD results were analyzed for emerging themes.

#### Ethical Consideration

Approval letters for data collection was secured from School of Graduate Studies of Masinde Muliro University. The Research permit was also secured from National Council of Science and Technology while other approvals were sought from local and area chiefs to conduct the research. The researcher also obtained an informed consent from interviewees/participants after carefully explaining the research content and purpose. Confidentiality was maintained at collection, storage, analysis, and presentation of data.

#### **III. RESULTS & DISCUSSION**

#### Socio-demographic Characteristics

A total of 385 respondents with age ranging from 18 years to 85 year old took part on the study (Table 1). The mean age of the respondents was 40 years. From the 385 respondents, 234 (60.8%) were men and 151 (39.2%) were female. Ninety two (23.9%) respondents were practicing pastoralists, 89(23.1%) were unskilled laborer and 70(18%)

Copyright © 2017 IJAIR, All right reserved



\_

were farmers (table 1). Other occupations included shop keeping, casual laborers, business men, teaching, driving. Focus group discussion confirmed that most people in the area of study are livestock keepers. Since majority of the residents in the study are traditional pastoralists, exposure to drought hazards makes them more vulnerable thereby making the adoption of Social Safety-Nets (SSN) significantly important in this context.

From the 385 respondents selected, 285 (74.0%) were married, 44(11.4%) were widowed, 24(6.2%) never married; 19(4.9%) separated; while 13(3.4%) were divorced.

Table 1. Socio-demographic characteristics of the

Socio-Demographic Characteristics		Frequency (%)
[1]	Mean age	40(18-67years)
[2]	Sex	
	Male	234(60.8)
	Female	151(39.2)
[3]	Occupation	
	Pastoralist	92(23.9)
	Unskilled labor	89(23.1)
	Farmer	70(18.2)
	Casual labour	31(8.1)
	Shopkeeper	20(5.2)
	Other	42(11.2)
[4]	Marital status	
	Married	285(74)
	Widowed	44(11.4)
	Never married	24(6.2)
	Separated	19(4.9)
	Divorced	13(3.4)
[5]	Education level	
	No formal education	223(57.9)
	Can read and write	71(18.4)
	Primary school level	42(10.9)
	Secondary School level	25(6.5)
	Post-secondary	24(6.2)

On level of education, 223(57.9%) of the respondents interviewed were illiterate, whereas only 71 (18.4%) could read and write. On the other hand, 42(10.9%) had primary school level education, 25(6.5%) had high school level and 24 (6.2%) were categorized as others including those with Post-secondary and University.

Study by the PRASOL (2013), in Somalia on cash transfer indicated that 77% of the respondents were

illiterate or semi-illiterate 18]. Similarly, Asheber (2010) [19] reported that in Tigray Ethiopia under the PSNP, 58.9% of the respondents could not read or write while 35.6% had primary school system. The low level of education could be attributed to the livelihood of the population in this area as pastoralism has made it hard for them to pursue education.

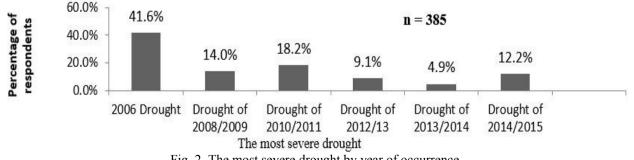
## Drought Characteristics and Impact

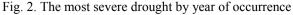
The average duration the respondents had stayed in the current home location was 31ysrs with a range of I year to 87 years. A total of 383 (99.5%) respondents indicated they had experienced drought in their lifetime while in their place of current residence and only 2(0.5%) of the respondents indicated to have not experienced drought. This finding is similar to a study by FAO (2014) which indicated that in Ethiopia, 73% of the respondents had experienced drought [16] and while in Malawi, Makoka (2008) argued that, 45.9% of the population had been affected by drought in their own areas of residence [17]. The discussions from the FGD also confirmed the same where all participants indicated that they experienced drought almost every year.

The drought of 2006 was considered by 160(41.6%) respondents as the most severe (fig. 2). This was followed by 2008/2009, 2010/2011, 2012/2013 and 2013/2014. The drought of 2013/14 was the least severe as shown in fig. 2.

The Chi square test conducted on data showed that there was a highly significant (P = .000) variation among the respondents on the most severe drought experienced in their area of residence ( $x^2 = 194.912$ ). The finding that drought of 2006 as the most severe drought in the area of study was similar to the finding by Makoka (2008) on research conducted in Malawi which indicated the drought of 2006 as the most severe and felt across by the farmers in Malawi [17]. Similarly, report by the International Federation of Red Crescent, (2012) indicated that drought of the 2004, 2006, 2009 and 2011 in Kenya severely undermined the ability of population to cope with reoccurring disasters [20].

The respondents reported that the pattern of droughts has changed over the previous 10 years whereby 232, (60.3%) indicated the drought effect has become severe over the years, 83(21.6%) respondents mentioned that warning time between drought periods had become shorter, 42 (11%) said frequencies are increasing, and 23(6%) said that resilient animals like camels are now affected.







From the 385 respondents, 269(69.9%) indicated drought was caused by nature while 110 (28.6%) indicated drought occurred due to action by both men and nature whereas only 5(1.3%) of the respondents mentioned man as the main cause of the drought. The finding that most respondents indicating delayed rainfall as a cause of drought was interpreted to mean that respondents are able to appreciate root causes of drought. Pasha *et al.*, (2015) noted that drought as a phenomenon is caused by nature and man. [21].

On the impact of drought on Household social and economic livelihoods, 240(62.3%) respondents reported the major effect of drought was drying of water sources. On the other hand, 98(25.5%) indicated drought results to displacements while 16(4.2%) and 15(3.9%) indicated increased cases of divorce and depletion of pasture respectively. Only 2 (2.3%) of the respondents indicated loss of market price, inflation and malnutrition as the impact of drought. As the water remain precious commodity for both household use and livestock need, lack of water can affect household social and economic productive livelihood. The result agrees with findings by Opiyo (2015) who argued in his research that in Turkana, Kenya, drying of water sources (18%), food shortages (15%), increase in food prices (15%) and loss of income were some of the social effect of drought [22]. The results by these authors confirm that social impact was highly felt by households due to drought and the drying of water sources were the main drought impact. Focus group discussion confirms these findings where social related challenges remained high as compared to economic issues. Socio Safety Nets and its Effectiveness

About 261(67.8%) respondents indicated to have benefitted from at least one form of social safety-nets (SSN) to help cope with drought since 2006 while 124 (32.2%) of the respondents reported they had not benefited from any form of SSN. While several safety-nets such as food for asset, voucher for work, food for work had been provided, majority of the respondents 147(55.9%) indicated cash transfers provided by NGOs as the main safety-nets, other respondents indicated Food for Asset 57(21.7%), Food distribution 30(11.4%) and others 10(4.1%) which include school feeding, seed vouchers and money remitted by family members from abroad (fig. 3).

A total of 198 (51.7 %) reported that women suffering had reduced due to benefit gained from SSN and 104 (26.9%)

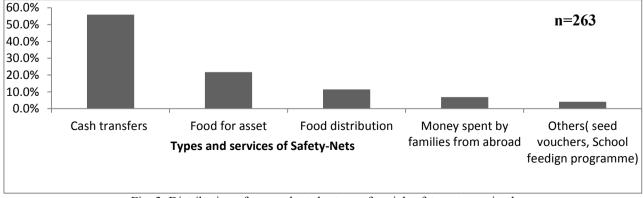
indicated no changes felt by women in their lives and 8 3% (21.4%) didn't know if the situation of women has changed or not. The Chi square test conducted on data showed that there was a highly significant (P=.000) variation among the respondents on influence of cash on women ( $x^2 = 59.372$ ). This finding was interpreted to mean that social safety-nets had positive impact on women. Report by Devereux (2000) of a study conducted in Swaziland indicated that 90% of the recipients of the cash transfers were women [23]. This was also reported as deliberate approach by the project designers to improve women benefit from safety-nets and way of mitigating drought impact.

With regard to Social safety-nets impact on family relation, out of 238 who responded to the impact of SSN on family relation, 164 (68.9 %) reported that the family relation remain good among those enrolled and benefitted from SSN. Finding of the study by Siddiki *et al.* (2014) on 'How social safety nets contributed to social inclusion in Bangladesh' indicated that 10% felt that violence against women had decreased [24]. Similar study by Thompson (2012) on the impact that social safety-nets indicated that the scheme as drastically reduced women suffering due to their enrolment to SSN with 51.7% having reported that they can use the resources gained through SSN to facilitate household work, reduce overburden of labour through use of the cash received. [25].

From the total of 385 respondents interviewed, 196(50.9%) indicated Cash safety-nets did not contribute to the school retention. Another 162(42.1%) indicated that cash safety-nets contributed to school retention while 27(7%) did not know whether it contributed or not.

Finding from a study conducted by Barkat-E-Khuda (2011) in Bangladesh indicated that safety-nets programmes contributed to a greater enrolment of boys and girls and children also from poor household benefitted from this programmes [26].

These finding did not agree with other authors and was interpreted to mean that the cash in the study area in Kenya was initially earmarked for household food basket but not school programme. Out of 243 respondents, 108(44.4%) indicated that school attendance dropped as there was no money for school fees while 80(32.9%) indicated there were no significant changes. On the other hand, 55(22.6%) of the respondents indicated there were no drop in school attendance as they have money to pay school fees.





with regard to impact of safety-nets on Household drought recovery, a total of 243 who responded indicated SSN has helped recover from the effect of drought with 85(35.0%) indicated that household had enough food to overcome drought while others, 78(32.1%) indicated they had enough money to buy food for their household during drought. On the other hand, 46(18.9%) indicated their children no longer miss school learning while 34(14%) of the respondents indicated that they will no longer be affected by drought and their recovery was quick. The Chi square test conducted on data showed that there was a highly significant (P<0.000) variation among the respondents views on positive changes in the family and community due to enrolment in safetynets ( $x^2 = 210.156$ ).

Finding from a study by PRASOL (2013), in Somalia indicated that 83% of the respondents reported that cash transfer had positive impact in that it increased household food security [18]. Report by Niang (2012), for work done in Niger indicated that SSN contributed to household resiliency building to crisis through improved food security (95%), building savings (72%) and 52% on productive asset [27].

The status of food availability and access by the drought affected population at their homes were also reviewed, from the 243 respondents, 209(86%) indicated they had no food in their household before their enrolment while 33(14%) mentioned that they had enough food at home. From 243 respondents interviewed, 178(73.25%) indicated they had enough food at home since their enrolment to the programmes while 65(26.7%) indicated they had no food even after enrolling in the programme. The Chi square test conducted on data showed that there was a highly significant (P<0.000) variation among the respondents Household status on household food reserve before and after enrolment ( $x^2 = 52.547$ ). A study by Merttens *et al.*, (2013) on Hunger safety-net in Kenva indicated that 75% of respondents reported food increase [28] while Devereux (2012) from his study on Productive Safety Net Programme (PSNP) in Ethiopia indicated that 60% food increase were reported due to social safety nets [29].

## **IV. CONCLUSION**

The study concluded that drought hazard is getting more severe with intervals of its occurrences getting shorter affecting the pastoralist livelihoods more often.

Secondly, the study reported that Social safety-nets did contributed to short term household recovery especially by increasing food reserve, making cash available for purchase of food but failed to contribute to school enrollment and retention. It also failed in creating asset building that would have contributed significantly to the post-drought recovery and resilient livelihood of the pastoralist population. Finally, the study concluded that cash intervention should be designed and delivered with consideration of local Minimum Expenditure Basket for it to be sufficient to support the household both during and post-drought recovery.

#### V. RECOMMENDATION

Based on the above Conclusion, the study recommends the following; the support given through monetary terms should be enhanced from current allocation of \$25 per HH per month to \$120. This will enable household Minimum Expenditure Basket to be fulfilled for sustained postdrought recovery. Secondly, a continuous mitigative drought coping mechanism should be implemented for the affected community to overcome the effect of drought in a resilient manner. This may include linking the safety-nets programme to livestock vaccination, preposition of food reserves and water for household and livestock use among other. Thirdly, the study finds out that Social safety-nets contributed to household recovery especially on increasing food reserve and making cash available for purchase of food but failed to contribute to school retention. Based on this finding, it was recommended that more intervention targeting and enhancing school retention should be implemented. Drought mainly interrupts and disrupts school session resulting to sustained school drop-out. The cash provided through safety-nets are insufficient and inadequate hence could not enable the household pay school fees and the resulting effects were children dropping from school. A community with no school and or whose school were closed due to effect of such hazards will always remain vulnerable to drought.

### VI. ACKNOWLEDGMENT

I would like to thank all those who supported me in one way or another towards completion of this study. A special appreciation to my supervisors, Professor Samuel Soita China and Dr. Wycliffe Oboka for their guidance, insight, advise and time towards completion of this study. Finally, I wish to thank my wife and children for their support throughout the study period.

#### REFERENCES

- Wilhite, D. A., Svoboda, M. D., & Hayes, M. J. (2007). Understanding the complex impact of drought: A key to enhancing drought preparedness and mitigation. Water Resource Management 21: 763. Available: https://doi.org/10.1007/s11269-006-9076-5.
- [2] Demombaynes, G., & Kiringai, J. (2011). The Drought and Food Crisis in the Horn of Africa: Impact and Proposed Policy Responses for Kenya. Economic Premise:, (page 71)
- [3] Fitzgibbon, C. (2012). Economics of Resilience study. Kenya Country Report, Nairobi. Unpublished reports.
- [4] Christian Aid, (2012). *Emergency Response Evaluation Report in Moyale*. Internal Evaluation Report. Unpublished Report.
- [5] Andrews, Colin; Bassett, Lucy Katherine; Castaneda, Tarsicio; Grosh, Margaret Ellen; Loureiro, Julia Pacheco; Quintana, Rodrigo; Steta Gandara (Too bad Gandara), Maria Concepcion. 2012. Safety nets how to: a toolkit for practitioners. Washington, DC: World Bank. Available:http://documents.worldbank.org/curated/en/98336146

Available: http://documents.worldbank.org/curated/en/98350146 8331021198/Safety-nets-how-to-a-toolkit-for-practitioners

- [6] Marito, Garcia., & Charity, M.T. Moore. (2012) "The Cash Dividend: The Rise of Cash Transfer Programs in Sub-Saharan Africa". The World Bank. Washington DC.
- [7] World Bank. (2012). Turn down the Heat: Why a 4 Degree Celcius Warmer World Must Be Avoided. Washington DC



- [8] Pelham, L., Clay, E., & Braunholz, T. (2011). Natural Disasters: What is the role for Social safety Nets? SP Discussion paper No 1102. London ODI.
- United Nations (2005). Sendai Framework for Disaster Risk Reduction 2015-2030, Geneva.
   Available:http://www.preventionweb.net/files/43291\_sendaifram
- eworkfordrren.pdf [10] United Nations (2005). *Hyogo Framework for Action 2005-2015. Building the resilience of Nations and Communities to disasters.* Geneva Available:https://www.unisdr.org/2005/wcdr/intergover/official-

doc/L-docs/Hyogo-framework-for-action-english.pdf

- [11] GOK (2013). Second Term Plan, 2013-2017 Transforming Kenya: Pathway to devolution, socio-economic development, equity and National Unity: The presidency. Ministry of Devolution and Planning: Government printer Nairobi
- [12] Mugenda, A & Mugenda, O. (2009). Research Methods: Quantitative and Qualitative Approaches. Acts Press. Nairobi, Kenya.
- [13] Kenya National Bureau of Statistics (2010). Kenya National Population Census. 2009 Housing and Population Census Highlights. Government printer. Nairobi
- [14] County Government of Marsabit (2013). First County Integrated Development Plan 2013-2017, Marsabit County, Kenya. Available:http://www.laikipia.org/wpcontent/uploads/2017/05/Marsabit-CIDP.pdf
- [15] Cochran, W.G. (1963). Sampling Techniques, 2nd Ed., New York: John Wiley and Sons, Inc.
- [16] FAO. (2014). Innovative Productive Transfers (Cash +) in Mali, strengthening the Resilience.
- Available: http://www.fao.org/3/a-i6544e.pdf
  [17] Makoka, Donald (2008). *The Impact of drought on Household vulnerability: The case of rural Malawi*. University of Bonn. Centre for Development and research (ZEF)
- [18] PRASOL (2013) Cash Consortium report for Somalia, Nairobi. Unpublished Report.
- [19] Asheber (2010). Mitigating drought; policy impact evaluation, case of Tigray region, Ethiopia Available: https://www.itc.nl/ library/papers\_2010/msc/gsim/asheber.pdf
- [20] International Federation of Red Crescent (2012), Drought in the Horn of Africa, Preventing the next disaster, Geneva Available: http:// www.ifrc.org/ PageFiles/ 90410/1203800-Drought%20in%20the%20Horn%20of%20Africa-Preventing%20the%20next%20disaster-EN-LR.pdf
- [21] Pasha, M., Ali, A., & Waheed, A. (2015). Sindh drought 2014-Pakistan: Was it a Natural or a Man-made Disaster. American Journal of Social Science, 1(1), 16-20. Retrieved from http://www.publicscienceframework.org/journal/ajssr
- [22] Opiyo, F., Wasonga, O., Nyangito, M. (2015) Disaster Risk Sci (2015) 6: 295. doi:10.1007/s13753-015-0063-4
- [23] Devereux, S. (2000). Social Safety Nets for Poverty Alleviation in Southern Africa (Rep. No. ESCORE Report R7017). The Institute of Development studies
- [24] Siddiki, O. F., Holmes, R., Jahan, F., & Chowdhury, F. S. (2014). How do Social Safety Nets contribute to Social Inclusion in Bangladesh?: Evidence from Chars Livelihoods Programme and the Vulnerable Group Development Programme (Rep.). Bangladesh. odi.org
- [25] Thompson, H. (2012). Cash and Child protection: How Cash Transfer programing can protect children from Abuse, Neglect, Exploitation and Violence. London, UK: Save the Children Fund 2010.
- [26] BARKHAT-E-KHUDA (2011). Social Safety Net Programme in Bangladesh. A review. Bangladesh Development Studies. Vol XXXIV, June 20111, No2
- [27] Niang, O., Mistycki, V., & fall, S. (2012). The impact of safety nets on the resilience of vulnerable households in Niger. Humanitarian Practice Network.
- [28] Merttens, F., & Morris, R. (2009-2012). Kenya Hunger Safety Net Programme: Operational Monitoring Final Report (Rep.) Available:https://www.oecd.org/derec/unitedkingdom/Evaluatio n-of-the-Hunger-Safety-Net-Programme-Kenya.pdf
- [29] Devereux, S. (n.d.). (2012) IDS working Paper 105. Famine in the 20th Century. Available: https://sarpn.org/documents/ d0000076/ Devereux.pdf

## **AUTHORS' PROFILES**



**Mr. Mohamed A. Isack** holds Bachelor's Degree in Community Development from Daystar University in Kenya. Mr. Isack currently works with Islamic Relief South Sudan Programme as the Head of Mission. He has over more than 10yrs working experience in the Humanitarian Sector in the East Africa Region.



**Dr. Wycliffe Oboka** holds a PhD in Disaster Management and Humanitarian Assistance from Masinde Muliro University of Science and Technology in Kenya. He currently lectures at the Cooperative University, Kenya, as the Head of Department in the School of Disaster Management and Sustainable development.



**Prof. Samuel Soita China** is professor at Masinde Muliro University, Kenya with PhD in Land use Planning, Soil and Water Conservation from the University of Southampton and a Master of Science in Agricultural Engineering from Pennsylvania State University. He is currently teaching at Masinde Muliro he School of Disaster Management and Sustainable

University in the School of Disaster Management and Sustainable Development.