



www.chuka.ac.ke library@chuka.ac.ke

PSYCHOSOCIAL CHALLENGES TO SUSTAINABLE DEVELOPMENT IN EMBU, THARAKA-NITHI AND MERU COUNTIES: PSYCHOSOCIAL ISSUES REPORTED BETWEEN JUNE, 2015 AND JUNE 2016 397 to 408

Manono, G. and Mwiti, K.

Faculty of Arts and Humanities, Chuka University, P. O. Box 109-60400, Chuka

Citation: Manono, G. And Mwiti, K (2017). Psychosocial Challenges to Sustainable Development in Embu, Tharaka-Nithi and Meru Counties: Psychosocial Issues Reported Between June, 2015 and June 2016. In: Isutsa, D.K. and Githae, E.W. Proceedings of the Third Chuka University International Research Conference held in Chuka University, Chuka, Kenya from 26th to 28th October, 2016 397-408 pp.

ABSTRACT

The sustainable development goals (SDGs), which are defined in the 2030 Agenda for Sustainable Development, offer an opportunity to achieve the commitments on the prevention of most harmful psychosocial issues facing humanity in the twenty first century. This paper seeks to identify and analyze the psychosocial challenges that can hinder the attainment of sustainable development in Embu, Tharaka-Nithi and Meru Counties. Objectives that guide the study seeks to establish the causes of psychosocial issues reported in the three Counties, their trends, the nature/type of issues reported, their prevalence/frequency of occurrence per County and per month, relevant policies in place, their impacts to development and recommended mitigation measures. The study uses archival research method whereby data is collected from already existing records from two national dailies of Daily Nation and Standard newspapers for the period from June 2015 to June 2016. Psychosocial issues reported from the three Counties will be systematically recorded using written document analysis worksheet where issues are listed as per newspaper, date and County. Each of the reported psychosocial issues is analyzed as per thematic area. The trends in terms of types of psychosocial issues reported and frequency of occurrence is identified and analyzed per month and County. Discussion of findings relates the theoretical explanations in literature to the psychosocial challenges reported in the three Counties. It is anticipated that the findings will be of interest to the County Governments of the said Counties and inform policy and County development planning. Conclusions are drawn and recommendations made based on the findings.

Keywords: *psychosocial, psychosocial factors, psychosocial stressor, community development, sustainable development, County Government*

INTRODUCTION

Background Information

Sustainable development is crucial to prosperity of future generations. According to Elliot (2006), sustainable development has been a principal policy goal for countries and major institutions of the world including the United Nations, World Bank and the World Trade Organization for several years. This is confirmation of how understanding of the global challenge of sustainable development has moved on to encompass the complex interdependencies of environmental, social and economic development. Kenya, along with other nations in the world, has pledged to implement the seventeen

sustainable development goals in the next fifteen years. In the country's 2030 vision the achievement of the sustainable development goals is incorporated. This underlies the seriousness with which the country takes the achievement of the SDGs. Since the promulgation of the new constitution 2010, Kenya has a devolved system of governance. The devolved units of government are expected to help implement the country's Vision 2030 and the SDGs. The three counties of Embu, Tharaka Nithi and Meru are some of the devolved units in Kenya. The three counties have a number of common features including socio-cultural practices, geographical (they border Mt. Kenya), economic activities, political and language.

Definitions of Terms

Sustainable development. This refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (World Commission on Environment and Development, 1987). **Psychosocial.** This relates to both the mind and interaction with other people (Cambridge University Press 2009). Thus psychosocial refers to how an individual's thoughts, feelings and behavior are affected by interaction with others. As applied to this study all those aspects that affect people's thoughts, feelings and behavior were considered as significant and were recorded as part of the data.

Psychosocial factors; according to the APA (2015), these are social, cultural, and environmental phenomena and influences that affect mental health and behavior. These influences include social situations, relationships, and pressures, such as competition for education, health care, and other social resources; rapid technological change; work deadlines; and changes in social roles and status (e.g., of women and minority groups). People's mental health and behavior is affected by the social, cultural and environmental settings in which they live. For the purpose of this study psychosocial factors were broadly categorized as social, cultural and environmental. Each broad category was

Objectives of the Study

General objective: To identify and analyze the psychosocial challenges influencing the attainment of sustainable development in Embu, Tharaka Nithi and Meru Counties of Kenya.

Specific Objectives

- (i) To establish trends in psychosocial issues reported in Embu, Tharaka Nithi and Meru Counties.
- (ii) To establish the type of psychosocial issues reported in Embu, Tharaka Nithi and Meru Counties.
- (iii) To establish rank and prevalence/frequency of occurrence in Embu, Tharaka-Nithi and Meru Counties
- (iv) To establish the link between theoretical explanation and reported issues

Justification

The study aims at identifying key challenges to the attainment of sustainable development in the three Counties. It is anticipated that these findings will inform the design of strategies to mitigate against these challenges and create awareness among the public regarding their role in the attainment of sustainable development goals. The results are expected to contribute to the university in the development of the local communities within which the institution is located through research, advocacy and partnership with relevant stakeholders.

LITERATURE REVIEW

Elliot (2006) observes that future development worldwide will be centered on resources. This is because all forms of economic and social activity make demands on the resource base: as raw materials such as soil and water within agricultural production, as sources of inputs and energy into industrial production or in the construction and maintenance of human settlements and urban lifestyles. To attain sustainable development efforts must be exerted to surmount challenges that include; Inequalities in access to resources, Poverty, Health problems resulting from environmental factors, which range from the biological environment (such as water pollution) to the chemical environment (such as air pollution) to the built environment (including road traffic accidents).

In 2015, at a summit on Sustainable Development Goals, heads of states pledged to accelerate efforts to implement 17 goals and 169 activities in the next 15 years. This is out of realization that the very survival of billions of the world's citizens, many of whom reside in developing countries is at stake. The challenges to achieving the goals include; depletion of natural resources, adverse impacts of environmental degradation, and climate change, putting the survival of many societies, and of the biological support systems of the planet in danger extinction (*Transforming Our World: The 2030 Agenda for Sustainable Development, 11 August 2015*).

Achieving Sustainable Development Goals in Kenya

Kenya is a signatory to the Heads of states declaration on Sustainable Development goals 2015. She has committed herself to the implementation of the 17 goals and 169 activities outlined in the declaration for the next 15 years. The country's Vision 2030 encompasses the implementation of the SDG goals and activities. Of particular relevance to this study are the implementation of goals 3, 5 and 6. Goal 3 focuses on ensuring healthy lives and promoting well-being for all at all ages and the activities to be carried include; (3.4) that targets by 2030, to reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being. (3.5) that aims to strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol. (3.6) that targets by 2020, to halve the number of global deaths and injuries from road traffic accidents. (3.8) aims to achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Goal 5 focuses on ending all forms of discrimination against all women and girls everywhere. The activities to be implemented include; (5.2) to eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation. (5.3) this targets to eliminate all harmful practices, such as child, early and forced marriage and FGM.

Goal 6 focuses on ensuring the availability and sustainable management of water and sanitation for all. The activities to implement this goal include; (6.1) that targets by 2030, to achieve universal and equitable access to safe and affordable drinking water for all. (6.2) Aims by 2030, to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations. (6.3) targets by 2030, to improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. (6.5) aims by 2030, to implement integrated water resources management at all levels, including through transboundary cooperation as appropriate (6.6) targets by 2020, to protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes (*Transforming Our World: The 2030 Agenda for Sustainable Development, 11 August 2015*).

Health, Demographic and Economic Indicators for Embu, Tharaka Nithi and Meru Counties

KDHS 2014 report indicated that the percentage of children under 5 who are stunted, or too short for age in Kenya as being 26%. Embu County had the percentage of children under 5 who were stunted at 26% to 35%, Tharaka Nithi county 26% to 35%, and Meru County, 15% to 25%. According to the Kenya County fact sheets (2013), Embu county had a poverty gap index of 14.2 and was ranked 20th in Kenya. Population per nurse stood at 7,374 compared to the national ratio of 8,580 per nurse. Population per doctor was 103,242 compared to the national figure of 253, 046 per doctor. Tharaka Nithi county had a poverty gap of 12.0 and was ranked 15th in Kenya. Population per nurse stood at 7,773 compared to the national ratio of 8,580 per nurse. Population per doctor was 365,330 compared to the national figure of 253, 046 per doctor. Meru county had a poverty gap of 6.2 and was ranked 3rd in Kenya. Population per nurse stood at 9,227 compared to the national ratio of 8,580 per nurse. Population per doctor was 79,782 compared to the national figure of 253, 046 per doctor. The indicators above show the three counties as being nearly at the same level. It also reveals that nationally they are not doing so well on the indicators above.

Psychosocial Factors and Community Well Being

Studies by community psychologists indicate a correlation between community settings and the psychosocial issues prevalent in that community. Research has shown how an individual's immediate neighborhood influences psychological outcome and the regulation of behaviors within that setting (Maton, 1986). Neighborhood influences have been studied in relation to adolescent academic achievement (Brooks-Gunn, Duncan, Klebanov, and Sealand, 1993; Gonzales, Cauce, Friedman, and Mason, 1996), adolescent drug use and other problem behaviors (Allison et al., 1999), and fear of crime (Perkins and Taylor, 1996; Riger, LeBailly, and Gordon, 1981). Researchers have also linked people's sense of community to community development, (Maton 2002).

Sense of community refers to the relationship between the individual and the social structure as well as participation in community affairs (Sarason, 1974, McMillan and Chavis, 1986; Newbrough and Chavis, 1986a, 1986b). Studies show that individual's participation in the community development is influenced by their perception of the environment, one's social relations, and one's perceived control and empowerment within the community (Maton 2002). The community development process is rooted within the context of the physical and social environment of the community. Individuals' participation in the community development process is key to sustainable development.

Perception of the environment involves judgments about the environment (e.g., perceived qualities of the environment, satisfaction with the environment, problems in the environment). Judgments are made about the degree to which the environment or a specific aspect of the environment is positive or negative to the individual. If it is viewed negatively, it can lead to stress and/or arousal (Baum, Singer, and Baum, 1981; Wandersman, Andrews, Riddle, and Fancett, 1983). There are substantive relationships between the qualities of the physical environment, the social environment (e.g., social interaction and sense of belonging), and residential satisfaction (e.g., Rohe, 1985; Taylor, 1982; Weidemann and Anderson, 1985). Negative signs in the environment (e.g., incivilities such as litter, abandoned cars, or gangs on the street) can lead to fear of crime, lower property values, and social withdrawal (Ahlbrandt and Cunningham, 1979; Lewis and Salem, 1981; Perkins, Florin, Rich, Wandersman, and Chavis, 1990; Skogan and Maxfield, 1981; Taylor, 1988). A sense of community or social cohesion has been found to moderate negative environmental factors such as crowding (Aiello and Baum, 1979; Freedman, 1975).

Stress-buffering is a concept that asserts that key psychological moderator variables for example, perceived social support, coping ability, protect high life stress individuals from the negative effects of stress, while having significantly smaller or no impact on low life stress individuals (Maton 2002). Community settings can serve the purpose of offering a stress buffer for individual community members. For instance an individual who has just lost a job that they really needed can be said to be experiencing high life stress and therefore in more need of a stress buffer compared to an individual that has just gotten a job they really need. Settings that facilitate higher levels of social support, adaptive coping skills, and meaningful roles may be expected to better protect members from deleterious effects of stress than settings lacking these capabilities. Social support may be experienced directly, through relationships with friends or acquaintances in the setting, or indirectly, through a general sense that the setting has a high sense of cohesiveness and that support is generally available.

Environmental Factors in Community Well-Being

Negative effects of environmental degradation have been document in several parts of the world. In China studies have revealed various challenges to sustainable development leading to the "Death Villages". The term "Death village" is used to describe China's many villages that have unusually high rates of illness or mortality caused by severe environmental pollution. It is shown that the number of these villages has been increasing steadily in recent decades, thus compromising the benefits of the country's extraordinary economic boom that have been achieved since the 1970s (Zheng and Cao, 2011).

At the moment, China is believed to have hundreds death villages based on media reports since 2001, and these villages are scattered throughout the country. Media reports suggest that these villages share a single common feature: proximity to polluting enterprises, such as chemical plants, paper mills, and refineries. Because these enterprises have made no effort to detoxify their outputs, their adverse impacts on humans, livestock, plants, and the environment are increasing continuously; worse still, their toxins often accumulate in the food chain or persist in nature.

Almost two-thirds of China's major rivers are seriously polluted, and about 86% of urban rivers are seriously degraded as a direct result of accidents that release toxic materials, as well as due to inadequate waste treatment capacity (Zheng and Cao, 2011). The cost of environmental damage to the Chinese economy is estimated at U.S.\$240 billion. This money has been spent on environmental conservation and remediation since 2003 (The Statistical Communique on the National Environment, 2009).

Human-Wildlife Conflicts and Community Wellbeing

According to White and Ward (2010), human-wildlife conflicts are increasing throughout the world, mainly due to a combination of factors such as human population growth, increased pressure on land and natural resources and climate change. They suggest that differences in objectives among various stakeholders in regard to the benefits of wildlife may exacerbate human-wildlife conflicts. This is especially where the wildlife in question is a resource that can be exploited for economic or cultural benefit, or where the conservation of wildlife is at odds with human population growth or development pressure. They propose an interdisciplinary approach to human-wildlife conflict situations by integrating knowledge and understanding across the natural and social sciences.

Research on human wildlife conflicts have indicated various challenges that are experienced by persons residing near wildlife inhabited areas. For instance, in Tanzania over 71% of local people surveyed in a study reported having had problems with wildlife. Of those local people who reported having problems with wildlife, majority experienced crop damage, while others reported the killing of livestock. Large and small animals caused varied damage with small animals causing more damage than big ones. Local people were generally less effective in controlling small-bodied species than large-bodied species (White and Ward, 2010). In the literature on sustainable development substantial focus has been placed on areas such as environmental degradation, economic, political and social issues. There is need for more information the psychosocial issues and their influence in attaining sustainable development. This study purposes to identify the psychosocial issues prevalent in the three counties of Embu, Tharaka Nithi and Meru and explore their relationship to sustainable development.

METHODOLOGY

This was a descriptive study that used archival research method to collect information. Data was gathered through newspaper document analysis from two major Kenyan National dailies, the Standard and the Daily Nation newspapers for the period between June 2015 to June 2016. Daily reports relating to the counties of Embu, Tharaka Nithi and Meru were examined and those that met the criteria of psychosocial issues were recorded as per the newspaper, date, month and county.

Criterion for Inclusion of Issues

Psychosocial issues were categorized into three main areas of social, cultural and environmental. Each of the main areas was further categorized as follows: Social issues included; Crime, land disputes, Gender based violence, Welfare for the Elderly, Youth and Child, people with disability, accidents, health and sanitation. Cultural issues included; beliefs and lifestyle. Environmental issues included; Environmental degradation, conservation, disaster management and human-wildlife conflict.

Data Analysis

Each of the areas of the psychosocial areas of concern will be analyzed through written document analysis worksheet tool. Psychosocial issues reported from the three counties in the two national dailies of Daily Nation and Standard newspapers were listed down as per newspaper, day, month and county. The issues were categorized as per the type and frequency of reportage. Trends in terms of type of issues

were analyzed as per frequency of reportage ranging from lowest to highest. Trends were also further analyzed as per month and county in relation to frequency from lowest to highest.

RESULTS AND DISCUSSION

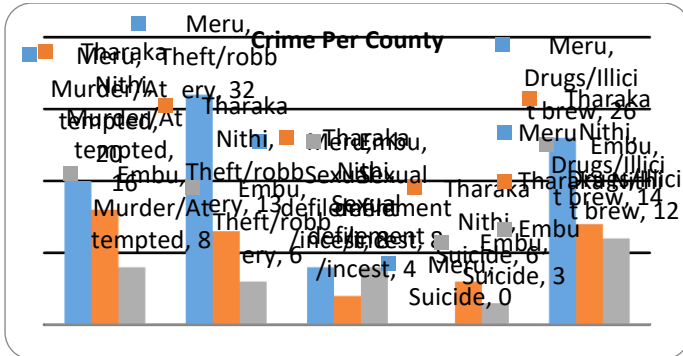


Figure 1: Crime per county

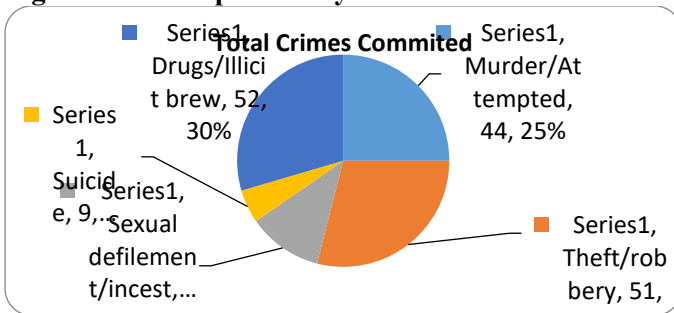


Figure 2: Total crimes reported

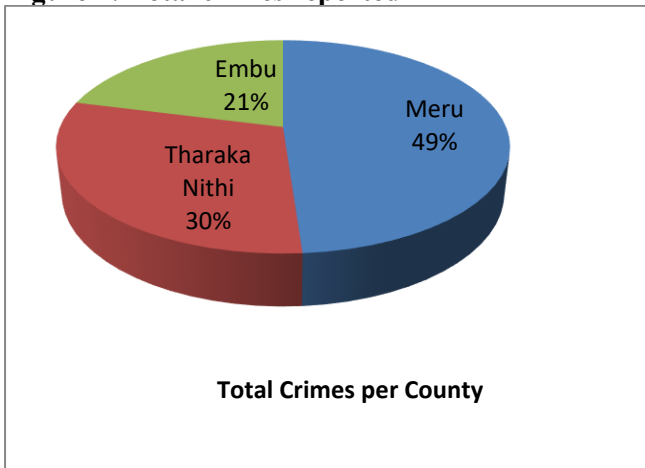


Figure 3: Total crimes per county

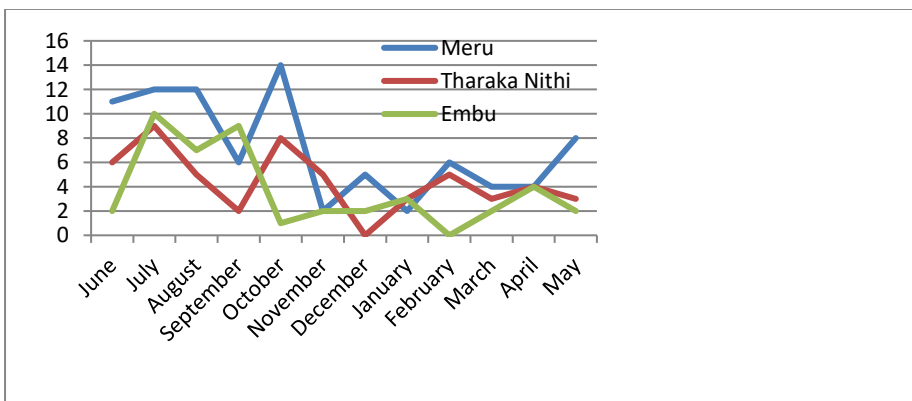


Figure 4: Total crime trends

From figure 1, 2, 3 and 4 above, the rate of crimes reported is highest in Meru compared to the other two Counties. The county reported a total of 86 crimes, followed by Tharaka Nithi County with 53 and Embu County reported a total of 37 crimes. Among the most rampant crimes were drug and substance abuse, theft and robbery as well as murder. Alcohol (illicit brew) was the most reported substance abuse across the three counties. The rates of crime tended to be high between the months of June to November across the three Counties. War against crime is relevant to realization of SDG No. 11 which promotes cities and human settlements that are inclusive, safe, resilient and sustainable. Any threat to achievement of safety is a threat to achievement of sustainable development.

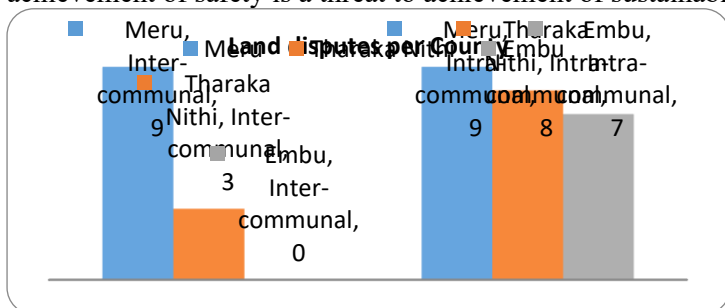


Figure 5: Land disputes per county

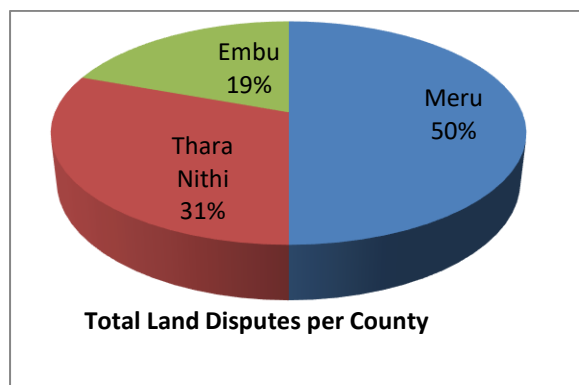


Figure 6: Total land disputes per county

From Figure 5 and 6 above, most land disputes reported during the period happened in Meru. There were equal numbers of both inter-communal and intra-communal land disputes in Meru County. Most of inter-communal land disputes reported involved border conflicts. Common among the disputes were the Meru-Isiolo border conflicts as well as Meru-Tharaka Nithi border conflicts. Most intra-communal disputes reported involved family land disputes among its members and/or neighbors as well as those involving community institutions. This is not in line with SDG No. 16 which advocates for building of peaceful and inclusive societies for sustainable development. Peace is paramount to sustainable development.

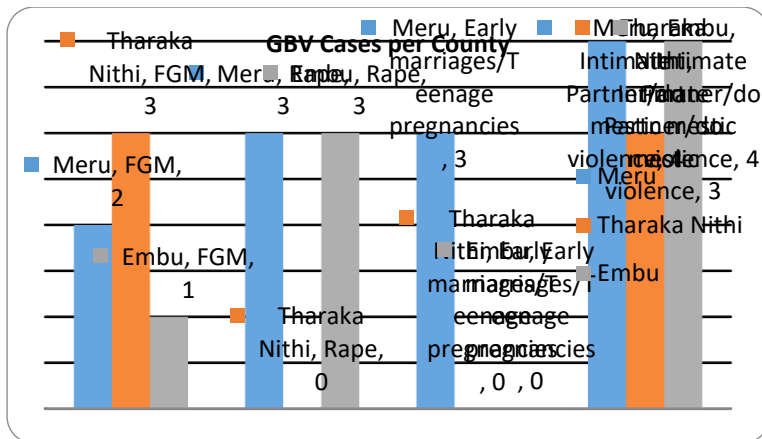


Figure 7: Gender bases violence (GBV) per county

From Figure 7 above, there were more cases of Gender Based Violence (GBV) reported in Meru County than in the other two counties. The County reported almost half of the total cases reported. FGM was highest in Tharaka Nithi County. Female circumcision or female genital mutilation as it is commonly known is forced upon young teenage girls. It is not voluntary, but a cultural 'norm'. Once a girl has undergone FGM, she is regarded as an adult and can enter into early marriage. That causes the high school dropout rates for girls. Rape cases reported in Embu and Meru Counties were high compared to those reported in Tharaka Nithi County. Most victims of rape were young girls assaulted by their senior family members, teachers and other members of the community.

Early marriages were reported in Meru especially at Mbeere and Tigania regions where “circumcised girls” were expected to be married off as deemed eligible. Cases of intimate partner assault tended to remain high across the three Counties. Most gender based violence was reported between June and December, the same period that most of the other crimes were committed as per Fig 4 above. Most of violent cases directed towards intimate partner, wife or husband included battering, stabbing and chopping off private parts. GBV is a big undoing to achievement of SDG No. 5 which promotes achievement of gender equality and empowerment of all women and girls.

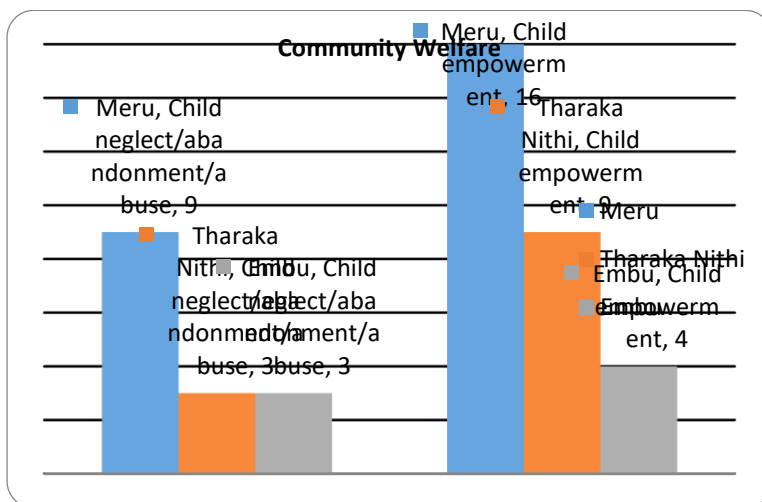


Figure 8: Elderly, youth and child welfare

Figure 8 above illustrates that there were more cases of child, youth and elderly empowerment initiatives reported than those of neglect of the same categories of people. Some of the empowerment activities reported targeting children include supporting them with school bursaries, issuance of shoes, health awareness and nutritional support from both the Government and NGOs. The youths were targeted with campaigns against drug and substance abuse as well as economic empowerment activities such as training on entrepreneurship and issuance of soft loans for businesses. The reports on the elderly were

on support through the cash transfer program and shelter initiatives. There however few cases of child neglect and abandonment across the counties. In several cases, children were not supported to access education. In Meru County for instance, cases of boys dropping out of school to engage in miraa harvesting and other forms of child labor featured most.

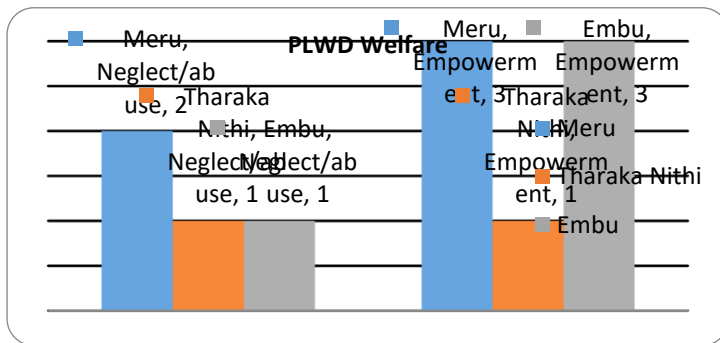


Figure 9: People living with disabilities

Figure 9 above shows more cases of empowerment for people living with disabilities were reported than cases of neglect and abuse. There were reports of issuance of wheel chairs for lame, free medical camps for various people challenges in different ways, among others. However, cases of structures that are unfriendly to the disabled and varied forms of discriminations were reported across the three counties.

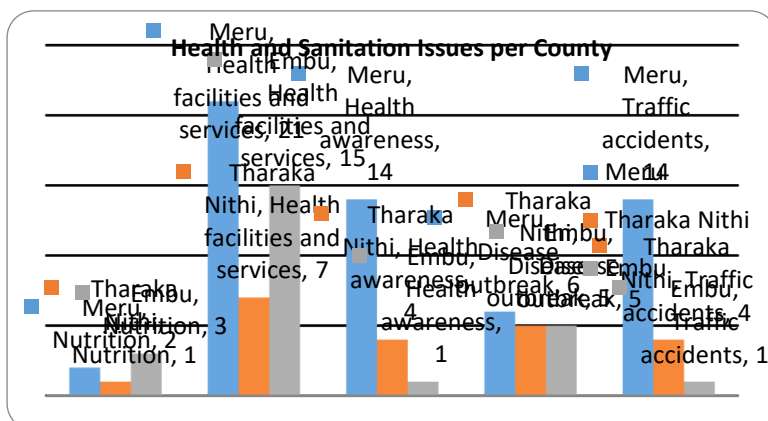


Figure 10: Health and sanitation issues per county

From the diagram above, nutritional issues were least reported during the period. Those few reports that seemed to address nutritional issues were targeted on issuance of food rations to sections of County residents and especially poor households and the elderly. There were no sustainable mechanisms reported as put in place to address key possible malnutrition issues. There were various reports on health facilities and infrastructure. Most of them focused on equipping the health care facilities as well as construction of new ones. Reports on the main access roads to these facilities were also covered. During the same period, reports on health awareness were more from Meru County than the other two Counties. Campaigns against pollution were noted, awareness on cancer screening was largely created for both men and women including free testing for the same through mobile clinics, campaign on household sanitation through construction of pit latrines and other waste management, among others. Incidences of disease outbreak especially cholera were reported. Unhygienic food hawking was also banned in several parts of the three Counties. Traffic accidents remained high in Meru County. These accidents involved motor vehicles and motorcyclists. Health is critical to achievement of sustainable development as outlined in goal number three of sustainable development goals. The goal seeks to ensure healthy lives and promote well-being for all at all ages.

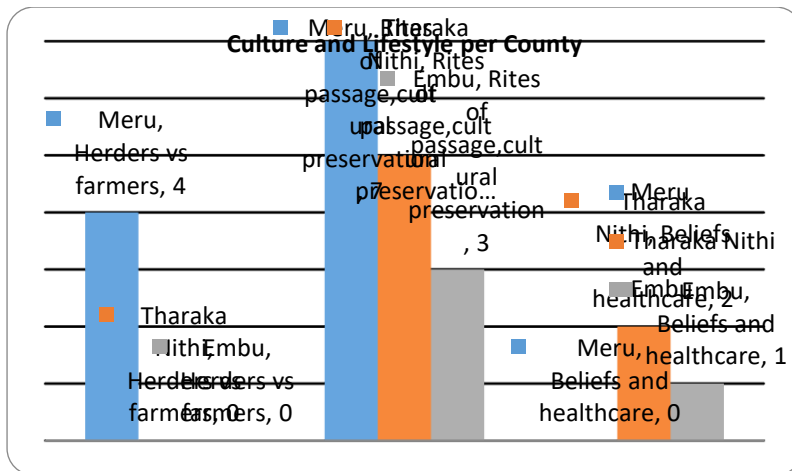


Figure 11: Culture and lifestyle per county

From the figure above, it is evident that reports on herders versus farmers were most reported in Meru County than the other two Counties. There reports were on conflicting lifestyle patterns between the two groups. This was common especially at the Isiolo-Meru border where herders from Isiolo came grazing on their neighbors' crops especially during the dry seasons of July to September. There were also reports on girls graduating through an alternative rite of passage in an attempt to fight FGM. Incidents were reported in Meru where boys had been initiated by unqualified expert. Beliefs on health remained the greatest obstacle to access to healthcare. In Embu, some residents of a religious sect declined vaccination for their children citing reliance on divine healing.

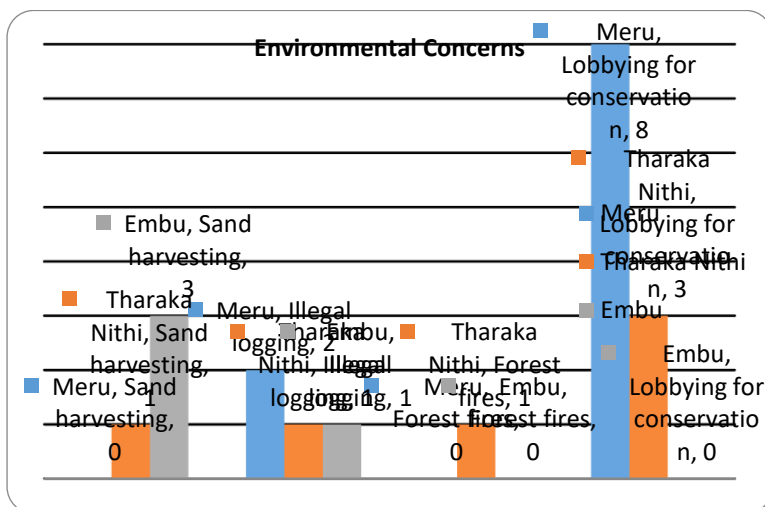


Figure 12: Environmental concerns per county

Environmental conservation is important to achievement of sustainable development goal number 15 which advocates for protection, restoration and promotion of sustainable use of terrestrial ecosystems, sustainable management of forests, combat desertification, halt and reverse land degradation and halt biodiversity loss. In line with this, several environmental concerns were reported. Sand harvesting along the river banks were said to interfere with aquatic life and led to drying up of several rivers in Embu and Tharaka Nithi Counties. Illegal logging tended to be happening across the three Counties prompting desertification. Cases of forest fires were mainly reported in Tharaka Nithi with residents being urged not to set fires near forests. Lobbying for environmental conservation was largely done in Meru County especially by NGOs that advocated for tree planting among other initiatives.

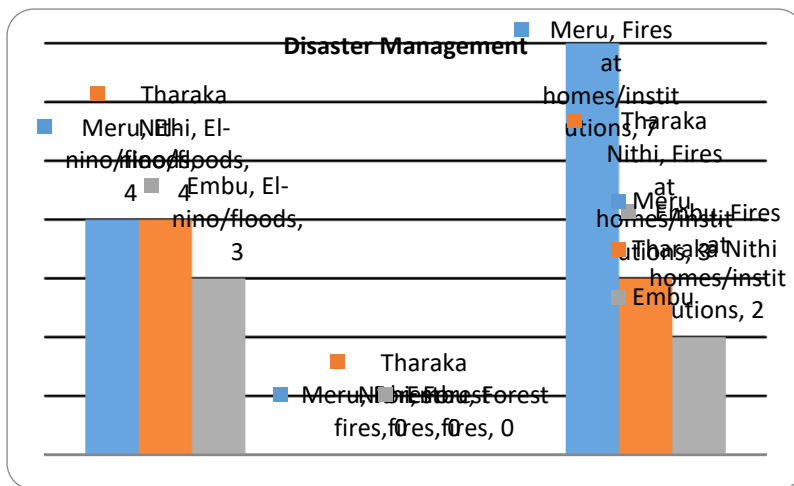


Figure 13: Disaster management issues per County

Across the three Counties, there were reports early disaster preparedness mechanisms in place. This was especially so for the possible El-nino rains and flood prone areas. These reports were captured between September and December. This is around the rainy season in the said Counties. These points to the Counties inability to prepare for disasters in advance and only prepare during or when they are just about to happen. There were minimal cases of forest fires reported, with most cases of fires reported at homes and institutions such as schools. Some of those fires were accidental while others were cases or arson due to students strike or general carelessness.

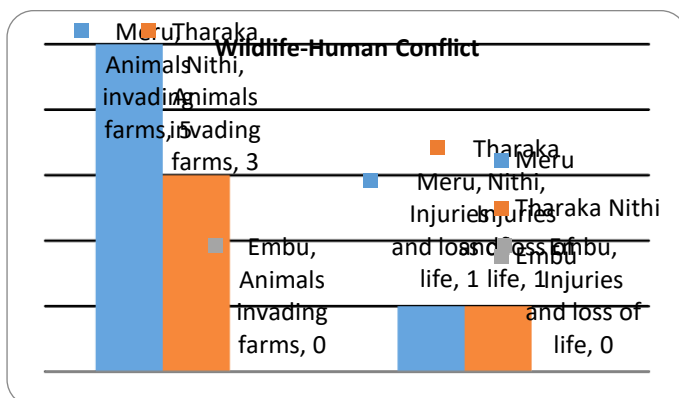


Figure 14: Wildlife-human conflict

Human-wildlife conflicts were reported as being rampant in Meru and Tharaka Nithi Counties. Cases of animals invading local farms were on the rise. In Meru, residents bordering Mt. Kenya forest spent several sleepless nights chasing huge and small animals away from their farms. Among the most notorious were elephants. They invaded peoples' home and destroyed crops and other properties. In several incidences, these animals cause injuries to individuals in the process of confrontations. Residents urged their respective County governments to elect an electric fence round the forest without much success. Residents were faced with a dilemma between protecting the wildlife and their properties.

REFERENCES

- Ministry of Environmental Protection. (2009). The Statistical Communique on the National Environment; State Environmental Protection Agency: Beijing.
- Elliott, J., A. (2006). An Introduction to Sustainable Development. 3rd ed. Routledge. Milton Park, Abingdon.
- Kenya: County Fact Sheets (June 2013). Second Edition. Collection Revenue Allocation.

- Kenya National Bureau of Statistics (KNBS) and ICF International. 2014. Kenya Demographic and Health Survey 2014. Calverton, Maryland: KNBS and ICF International.
- Maton, K.I (2002). Community Settings as Buffers of Life Stress? Highly Supportive Churches, Mutual Help Groups and Senior Centers. A Quarter Century of Community Psychology: Readings from the American Journal of Community Psychology, edited by Tracey A. Revenson et al. Kluwer Academic Plenum Publishers, New York.
- Gonzales, N. A. Cauce, A. M., Friedman, R. 1., and Mason, C. A. (1996). Family, peer, and neighborhood influences on academic achievement among African-American adolescents: One-year prospective effects. American Journal of Community Psychology, 24,365-387.
- Brooks-Gunn, L., Duncan, G. L., Klebanov, P. K., and Sealand, N. (1993). Do neighborhoods influence child and adolescent development? American Journal of Sociology, 99, 353-395. Allison, K. w., Crawford, I., Leone, P. E., Trickett, E., Perez-Febles, A., Burton, L. M., and LeBlanc, R. (1999). Adolescent substance use: Preliminary examinations of school and neighborhood context. American Journal of Community Psychology, 27,111-141.
- Perkins, D. D., Florin, P., Rich, R. C, Wandersman, A., and Chavis, D. M. (1990) . Participation and the social and physical environment of residential blocks: Crime and community context. American Journal of Community Psychology, 18, 83-115.
- Sarason, S. B.(1974).The psychological sense of community: Prospects for a community psychology. San Francisco: Jossey-Bass.
- Ahlbrandt, R. S., Jr. and Brophy, P. C. (1975). Neighborhood revitalization: Theory and practice. Lexington, MA: Lexington Books.
- Baum, A., Singer, I. E., and Baum, C. S. (1981). Stress and the environment. Journal of Social Issues, 37:4-35.
- Chavis, D. M., Hogge, I. H., McMillan, D. w., and Wandersman, A. (1986). Sense of community through Brunswik's lens: A first look. Journal of Community Psychology, 14,24-40.
- Newbrough, I. R and Chavis, D. M. (Eds.). (1986a). Psychological Sense of Community, I: Theory and concepts. Journal of Community Psychology, 14(1).
- Newbrough, I. R and Chavis, D. M. (Eds.). (1986b). Psychological Sense of community, II: Research and applications. Journal of Community Psychology, 14(4).
- Perkins, D. D., Florin, P., Rich, R. C, Wandersman, A., and Chavis, D. M. (1990). Participation and the social and physical environment of residential blocks: Crime and community context. American Journal of Community Psychology, 18,83-116.
- Rohe, W. M. (1985). Urban planning and mental health. In A. Wandersman and R. Hess (Eds.), Beyond the individual: Environmental approaches and prevention. New York: Haworth.
- Sarason, S. B. (1974). The psychological sense of community: Prospects for a community psychology. San Francisco: Jossey-Bass.
