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INTERNATIONALE-BOOK

Index

STONE MONUMENTS, TOOLS, POTTERIES AND ARTIFACTS OF THE MAHBERE DEGOU, HAOULTI AND MELAZO ARCHAEOLOGICAL COMPLEX OF THE AKSUM-YEHA REGION OF TIGRAI STATE: NEW AND PRELIMINARY INVESTIGATIONS AND PLANS TO SALVAGE THESE SITES FOR THE PROMOTION OF HERITAGE TOURISM IN AKSUM, ETHIOPIA.

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Abstract

Degou town which is 14 Kms from Aksum town in Northern Ethiopia has revealed several ruins and archaeological assemblages of the early pre-Aksumite, Late Post-Aksumite, Early Aksumite and Early Post-Aksumite site clusters. Degou in Tigrinya literally means: Land of Generous people. In 1973 Anfray (Journal of Ethiopian Studies, Vol.xi) and in 1974 Joseph W.Michels made a principal survey of these sites by which they depicted the archaeo-topographical changing settlement patterns in the Aksum-Yeha region of Ethiopia. On the way to Degou from Aksum, (about 5 kms), the author found a few prehistoric sites towards the eastern side on a disparate chain of cliffs which needs a detailed examination and test pit excavations. Much more remains to be explored, surveyed and assessed on the above said sites by which his team has earnestly tried to explore the vicinity and the periphery of those sites which has not been surveyed by western scholars.

Topography

Elevations extrapolated from the available contours on East African Grid system of Asmara Sheet (National Science Foundation, Third EAF edition, Washington, 1946) shows that Degou, Hauolti and Melazzo predominantly are Old Testament sites, situated at a height of 2500 feet and

2440 feet respectively above the sea level. The area surveyed by the team varied potentially with respect to topography, soil type and other ecological relevant features. The standard agricultural complex seen in this southern periphery of Aksum is the abundance of wheat, barley, teff, finger millets and beans cultivation and bioarchaeological toponomy also reveals the same wild and domesticated forms of crop were the staple food of the ancient Aksumite people. Degou and Melazo –Haoulti topography reveals black *Welka cracking* clays which are alkaline with deeply cut alluvial features. Local farmers say it is excellent for the full growth of a number of Cereal crops like maize, sorghum and that no fallowing is required as long as a systematic crop rotation is practiced. One can glean more information from V.Kazmin's book (1973) on the soil and rock formations of the Southern Periphery Zone of the former Aksumite Kingdom.

The Southern Periphery of the Aksumite Kingdom

Some of the principal archaeological sites in this zone are ***Gobochelo Melazo mound, Melazo, Haoulti, Mazaber or Mai Agazen basin chiefdom, Mai Siya, Adi Gunda, Adi Satiah, Adi Gezi, Enda Cherqos, Gobo Debre, Adi Wuferti, Adi Berekti, Gobochela, Adi Atero and Enda Mariam Behaleiti***. The population recorded during the early Aksumite period (150 BC-450 AD) of the southern periphery of around 52 Sq.Km stands around 773 for an area of 22 Sq.Kms surveyed within seven sites is a notable feature (Joseph Michel,1975). Analogous with the appearance of elite residential complexes, one can witness the absence of religious structures i.e., both shrines and temples. Although the Mai Agazen basin chiefdom fell under the Aksumite kingdom, nothing is visible about a mortuary or burial tomb celebrating a particular personality (the Chief) than with the adoration of any specific God. But there are remnants of building structures and monumental architecture (Fattovich, 1998, 2000, The Aksum archaeological area: Preliminary assessment, Napoli University, Italy). The statistics given by Joseph Michels amply goes to substantiate about the presence of a gregarious population and with a few scattered ceramic clusters and artifacts found, reveals the habitation of common man settlements in this Southern periphery of the Great Aksumite Kingdom.Moreover absence of commercial militia in the case of a defensive fortified settlement exists for this period (150 AD – 450 AD), goes to indicate an absence of interregional conflict probably owing to the absence of economic contacts. About the nine elite precincts Joseph Michels (2005) which is reminiscent of Degou-Haoulti-Melazo and Gobochelo-Melazo, mentions the following:

"Five of them resemble Ona Nagast in having multiple structures within a single precinct .The relative scale of the elite complexes is difficult to ascertain since no secure estimates of size are available for the three of the key precincts: Ona Nagast, Seglamen and Gobochelo-Melazo. Accordingly one cannot yet ascertain that the Ona Nagast complex was qualitatively different in architectural style from the other two or indeed from a number of the other elite precincts .Thus despite provisional acceptance of the notion that the Ona Nagast leadership formed the basis for Aksumite kingship, the kingdom in its earliest phase, most likely involved the participation of leadership cadres embedded within polities geographically dispersed within the survey region and fully comparable organizationally".

A palace about 2000 sq.mts of the early post Aksumite settlement (750 AD- 850 AD) is noticed at Haoulti and there are lots of monumental architecture found near the Enda Cherqos church just below the mound of Haoulti.The southern periphery chiefdom appears to represent continuity with all the previous periods despite the evident reduction in the number of settlements associated with it. However unlike the Late Aksumite Period where no elite residence could be found or documented, a replica of a palace scale residence is always associated in these areas surveyed by the team.

The Modern church of Enda Sadkan, Degou. The ancient ruins of the church near Enda Sadkan (39 AD)

Mahbere Tsadkan is the site near to Degwe which is about 15 kms south west from Aksum town on the way to Naeder where several artifacts like potteries, grinding stones, stone tools, amphora etc has been found here .Local legends attribute this place as a religious congregation of the followers of Jesus Christ resulting in the formation of an association when Queen Atezhin Indeche was ruling Ethiopia (Aksum and its attractions, Tigrai Tourism Development project,2009,p.49-50). It is said that Mahbere Degou association was formed by 3000 saints in

6666 BC (the dates are literally exaggerated) as per the oral traditions and one can see the black sandy and coarse soil scattered over the Hauolti and Melazzo plains.Degou is a circular plateau surrounded by steep valleys on all it four sides and rock shelters and caves .The depression is a valley on all sides of Degou is around 100 to 200 feet .Here one can see the Abba Libbanos or Meta rock hewn church (about 9 kms from Aksum) from the peak of Enda Sadkan church. This church has numerous pottery and ancient treasury collections but need to be conserved and documented well with a chronological and genealogical history.

The Monumental structure and walls of the ancient ruined church - Mkmat Abozguy Church. The present Church stands on ancient foundational steps.

Monolithic geological structure standing on a small rock-2nd-3rd Cent BC –Living place of God at the Mkmat Abozguy church.

The monolithic edifice of the ancient church, Degwe. The lateral view and the basement of the monolithic rock or the living place of God.


The pathway leading to the Holy water site of the Mkmat Abozguy Church, Degou.
Samples of stone tools, Quartz and potteries from Degou.

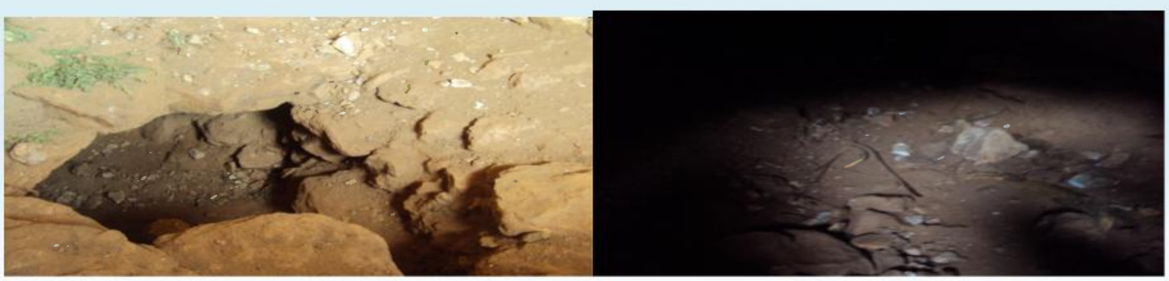
Near the ruined church of **Enda Sadkan** there are remnants of archaeological ruins with artifacts scattered all over and the ancient foundation walls are rapidly getting eroded due to the menace of slope cultivation and water erosion besides the local residents are involved in looting the natural heritage properties. Abundant remains of bricks go to point out an advanced material civilization preferably of the middle and late Aksumite civilization. Most of the rock formations are formed of red sandstone and corrosion weathering is clearly visible. The ancient church of Enda Sadkan was established during the reign of King Kaleab wherein the 3000 saints came to establish the association in 365 AD.


Pottery collections found on the western side of Degwe plateau. The rocky hill slopes of the western part of Degwe where numerous attributes of ceramics were found.


Historic Heritage dwelling on the western slopes of the Degou. The foundational structures and bricks of elite residential structures found on the western side of Degou.

The Landscape erosion of the ancient church and the settlement walls of elite residential cum architectural structures of Degou

The house where the Enda Sadkan Cave is protected on the way to Aula village.



Enda Sadkan Cave of Adi Tahasos or Angesa Hamlet, 2 kms from Degou plateau. The inner part of the cave.

The Enda Sadkan Cave is located on the way to Aula Village which is about 2 kms north east of Degou bus station. This cave measures about 1.6 meters in length and 1.6 meters in breadth and its depth measuring around 1.20 meters. This cave must have been used as a secluded prayer habitation by the saints and here there are a chain of such caves for example the **Mai Ambesa (Lions water Cave) and Endaba Abel caves** which is about two hour walk by foot to reach this place from Degou town through Daroh Afhash.

The Enda Abel Cave church at Mai Ambessa Village: Just about 3kms to the south of Degou on the right side of the main road we have a plain suddenly falling down about 300 meters deep into a slope leading to a lush green rocky oasis obviously a biodiversity zone of Mahber Degou. In the midst of this small pocket of forest area lies a huge basement rock where the modern church has been built and we also have the tomb of the famous saint Enda Abel dating back to the 2^{nd}-3^{rd} Cent.AD. This rock cut cave church is exquisitely carved and nearby this basement church we have evidences/ruins of ancient monumental architecture, traces of residential places and religious structures .Although well preserved this area needs test pit excavation.

The rich biodiversity of Enda Abel cave church (2^{nd}-3^{rd} cent AD), Mai Ambessa Hamlet, Degou.



Ancient pot found on the Enda Abel cave church entrance. The ancient monumental and architectural ruins of the Enda Abel cave church which needs test pit excavations.


The modern church of Enda Abel built within the ancient Cave church. The tomb of the Saint Enda Abel, Mai Ambessa Hamlet Degou

The fortified enclosure showing the ancient ruins of steps leading to the ancient Enda Abel cave church, Mai Ambessa Hamlet, Degou

The Mariam Welya church in the gorge of the valley overlooking the Mai Ambessa Village


The Hauolti-Melazzo archaeological complex: Influence of the Sabeans.

Hauolti is an extension of the palace complex or an elite residential complex (about 2000 Sq.mts) with exceptional fertility and here in Hauolti and Melazzo small ruined elite residences are found dating back to the early Aksumite, middle pre-Aksumite, Early Pre-Aksumite and Late Aksumite periods. Amid the vast fertile plains Haoulti-Melazzo is located on a dome shaped hill or a huge circular mound marked by monolithic pillars. Here in 1958-59 Dr.Henri de Contenson (1961, “Les fouilles a ouchatei Golo pres d Axoum en 1958”, **Annales d’ Ethiopie** 4,3-16.) on behalf of the Institute of Ethiopian Archaeology found a fine covered throne of carved limestone , its sides showing low reliefs and a frieze of ibexes in the South Arabian style besides a small figurine being seated with the hair and facial features resembling the South Arabian style. (David W.Phillipson., 1998, **Ancient Ethiopia. Aksum: Its antecedents andSuccessors**, British Museum Press, London; also see Munro-Hays S.C., 1991,**Aksum – An African Civilization of late antiquity**, Edinburgh, Edinburgh University press;Nespereira,J.,Blanco,J.A .,*et.al.*, 2006, Problems in the use of the Salamanca sandstone in historic monuments –**Geophysical Research abstracts**,8,00940;Fattovich,R., 1990., "Remarks on the pre-Aksumite period of Northern Ethiopia", **Journal of Ethiopian Studies**,23,1-33.). Later in 1975, the Hauolti archaeological complex was excavated by the Italians under the Dergue regime and most of the huge stone blocks made of sandstone are left open and even the Ministry of agriculture has dug a small pond for water to be stored in that pit complex but eventually they abandoned the work with the loss of several archaeological sequence and artifacts. Just on the slopes of this mound i.e. to the eastern side, a ground radar survey is essential so as to detect the structures beneath it. These sandstones were brought/quarried from Adigrat , on the outskirts of Edagarbi town and the Tekeze Sandstone found in some of the gorges, located 15 kms away from Yeha (Asrat A., 2009, "The Temple of Yeha : Geo-Environmental Implications on its site selection and preservation" in the **Proceedings of the 16th International conference of Ethiopian Studies** , Ed .,by Harald Aspen .,*et.al,* Trondhiem).Just diagonally to the southern direction of Haoulti, just a few 100 meters away from the Haoulti site lies the Mai Agazi basin and overlooking it is the Enda Cherqos site where a lithic workshop has been found. The Gobochelo-Melazzo Mound complex shows of Early and middle pre-Aksumite occupations. **Chincha Baakel** (brown sandy soils) are found at Hauolti and Chincha Baakel Soils (limestone, dolomite, sandstone shale and granite) are seen at Melazzo where as, at the summit of the Degou plain, one can see the **Welkay** a brown clay soil. Degou is represented by diagnostic ceramic attribute clusters.

The Aksumite buildings of clay models denote a rectangular thatched structure although no such traces are noticed commonly in the archaeological records of the Aksumite periods but the models retrieved from Hawelti offers us a round and rectangular specimen possibly dating back to the Pre-Aksumite period (200 BC-100 AD) (Phillipson,1998).

Archaeozoological evidence from the 3rd century AD, in the form of pottery figurines of yoked oxen, from the tomb of Brick Arches at Aksum is also corroborated at Hawelti with a specimen of Baroca which goes to say that yoked oxen were used for ploughing even much before the 3rd century AD, although there are speculations about these clay figurines being an Indian import commodity.The same figurines are analogous the bronze ones of Mahabere Degwe and Zeban Kuntur that both humped and humpless varieties of cattle was in vogue during the Aksumite times (Phillipson, 1998).Many of the Hawelti- Melazzo artifact collections are stored and exhibited in the National Museum of Addis Ababa.

The Gobochela – Melazo mound showing the ancient ruins of a lithic workshop.

Mai Agazen Basin and Enda Cherqos where Pre-Aksumite settlements and populations (about 52%) were dominant. The ruins of Enda cherqos church is seen on the slopes of this mound.

The vast plains of Mai Agazen Basin showing the abundance of rock formations obviously a lithic workshop for the Aksumite kingdom.

Unfinished stelaes scattered all over the lower part of Haoulti-Melazo mound.

The contemporaneity of South Arabian intrusion and the formation of the town of Maheber Degou-Houlti-Melazzo complex indicate that the early Pre-Aksumite population of the region continued to migrate into the area all during the period and that there was scanty resident population before 400-500 BC., which is evident in the scattered material remains. But the migrations were from elsewhere within the Aksumite Culture area (i.e., northern Ethiopian Plateau) and not from South Arabia or elsewhere outside the cultural region (Joseph W.Michels., 2005, **The Changing settlement patterns in the Aksum-Yeha Region of Ethiopia**, 1974, Cambridge university press). The above said three ancient complexes are located on bluffs overlooking drainage basins which can be seen on the western slopes of Degou and the eastern escarpment of Degou running down towards Melazzo- Hauolti plains. Ancient terrace farming and irrigated lands are more distinct on the lands near to the valleys with heavy erosion and utility of the soil with acidic characteristics evident in the present day soil of Degou and its fringe complex. These land forms of Degou amply testify that micro catchments of irrigation in a small scale, stream fed and canal irrigation have been imminent indigenously to the early Aksumite period and the same is true today.

The huge sandstone (quartzose arenite) blocks at Haoulti, a replica of the Yeha palace structures and the Almoqah temple. The pillars are the same like Grat Be'al Gebri site at Yeha .The texture and the architectural styles are similar.

The evidence of a small scale like palace (2000sq.mts) showing sandstones foundations probably of an elite residence at the peak of the Haoulti Mound.

The ancient ruined boundary foundational structures disturbed while digging a water reservoir and the potteries found on the site at Haoulti-Melazo mound.

Conclusion

Monumental architecture in the form of impoundment and canal and drainage features show ancient irrigated farmlands and both the eastern and western side of Degou town is testified by a small category of residential structures with architectural features that needs to be conserved and preserved for the future. Research in the past and currently by the team reveals percentages of all diagnostic sherd counts going up to 52% or more, has been recovered from sites within spatial grouping .More interesting are the evidence of ancient religious structures and lithic workshops being noticed on the southern edge of Melazzo. At Gobochelo Melazzo early Aksumite structures and small elite residences not less than 2000 square meters (150 AD-450 AD) are visible. According to local chronicles these towns (archaeological complexes) were used as ritualistic and for religious sacrifices during the period of Queen Sheba, King Bazen and Renhay as part of the Old Testament beliefs.

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TOMBS, STELAES, ANCIENT SETTLEMENTS, ARTIFACTS AND ROCK HEWN CHURCHES IN GUAHGOT VILLAGE OF GANTA AFESHUM WOREDA OF EASTERN TIGRAI REGION OF ETHIOPIA-A VITAL AXUMITE CENTER OF ACTIVITY

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Abstract

Globally well-known ancient rock-hewn churches are present in Ethiopia in general and particularly in the central and eastern parts of Tigray regional state. They are important sites of heritage and tourism. Guahgot in the Adigrat region is the most solid monolithic rock hewn or rock cut church not known to the outside world. Most of them are facing destabilization problem in different degree due to natural and anthropogenic factors. Among the affected, two churches hewn into sandstone located near the southern side of Guahgot, the Abreha-Atsibaha and Wukro (Kirkos/Cherkos church) in Tigray region were chosen for detailed study in terms of geological and engineering geological condition of the rocks in to which they are hewn. Both of them are affected by weathering and seepage. Both are carved into Mesozoic Adigrat sandstone that occupies higher elevations in topography, red in color and with iron and silica-rich alternating bands. Petrographic data suggest that the rock is dominated by quartz followed by feldspars; opaque and heavy minerals; pore spaces and carbonate/iron/silica cement. The rock is characterized by low to medium unconfined compressive strength. The alternating bands with varying mineralogical composition differ in mechanical properties and are responding differently to weathering and erosion. This is resulting in the development of minor spalling, pitting etc in the pillars, walls and roofs of the churches. Keeping the geological condition in view remedial measures are to be planned to minimize deterioration with time.

***Keywords**: Geological, Geomechanical, Rock hewn-Church, Abraha-Atsibaha, Tigray, Ethiopia.*

Introduction

Ethiopia is endowed with many rock-hewn churches, with the largest group in central and eastern Tigrai. These churches can be divided into four zones: the Atsbi, Hawzen Ger'Alta, Sinkata Adigrat, and Tembien, with more than 100 rock hewn churches of different ages, sizes, and histories. However, they have one thing in common: All are carved into sandstone. The Enticho, Adigrat, and Ambaradam sandstones (Permo Carboniferous, Triassic—Middle Jurassic, and Early Cretaceous, respectively) are extensively exposed in these areas and are characterized by thick and massive beds of coarse to fine grained and well sorted successions. These sandstones are easily carved, yet compact enough to withstand pressure. Although limestone, basalt, and crystalline rocks are exposed in the same area, few rock hewn churches have been carved into them. The *rock type* is, therefore, the most important factor in the location of these rock hewn churches.

Guahgot is about 30 minutes drive from Adigrat town which has to be passed through rugged and rocky mountainous terrains. Ganta Afeshum is one of the 9 woredas in the Eastern part of Tigray Region of Ethiopia. , Ganta Afeshum is bordered on the south by Hawzen, on the west by the Central) Zone, on the north by Gulomahda, and on the east by Saesi Tsaedaemba. The administrative center of this woreda is Adigrat; other towns in Ganta Afeshum include Bizet. Prominent villages like Azaba, bahra Siheta, Guahgot, Betehariat, Dibla sieet, mergahya, hagaroga and Wurhet area are found here. High points in this woreda include Mount Alequa (3290 meters) and Mount Undale, peaks in the Harat Mountains. Historical churches like Bete Eyesus (Siheta: betyes), Mariam Ki'at (Kiat) and Endabahani are found in this wereda. This wereda is also the source of the Sluh River from the Siheta highlands.

Ganta Afeshum is one of the woredas in the Tigray Region of Ethiopia. Part of the Misraqawi Zone, Ganta Afeshum is bordered on the south by Hawzen, on the west by the Mehakelegnaw (Central) Zone, on the north by Gulomahda, and on the east by Saesi Tsaedaemba. Towns in Ganta Afeshum include Bizet. Since the town of Adigrat split off Ganta Afeshum as a separate woreda, it is surrounded by this woreda.There are several local monolithic churches in this woreda, which include Mariyam Si'it and Samuel Mayaba (abandoned as of 1970). High points in Genta Afeshum include Mount Alequa (3290 meters) and Mount Undale, part of the Harat Mountains.

Geological Perspectives

Extensive limestone beds are exposed in three regions in Ethiopia: the Mekelle Outlier in the North (Tigray), the Blue Nile Basin in central Ethiopia, and the Ogaden Basin (including the Bale and Western Harrarghe areas where the longest cave in Ethiopia, SOF Omar, and the Mechara karst systems are located, respectively,). In Southeastern Ethiopia, a massive limestone terrain led to the development of a karst system on Jurassic limestone beds, regionally known as the Antalo Limestone Unit (Bosellini et al., 1997; Asrat, 2002), and locally subdivided into the Hammanlei Formation, Uarandab series and Gabredare series (Assefa, 1988; Bosellini et al., 1997). All the caves in the karst system have been developed on the Gabredare series. Deepening of the ocean during the middle Mesozoic and regression of the sea from the northwest to the southeast back to the Indian Ocean during the late Mesozoic were the subsequent processes. These successive processes resulted in the deposition of various sediments (Beyth, 1971;Bosellini et al., 1997;Asrat, 2002): (i) Adigrat Sandstone wherein Ganta Afeshum sits on a nucleic rocky bed: fluviatile, gray to red, fine to coarse grained, well-sorted, friable, cross-bedded, and very mature sandstones (quartz arenites) and siltstones which were deposited over peneplained crystalline basement; (ii) Antalo Succession: sub-continental and marine deposits including variegated shales, marls, and clay intercalated with finely crystalline limestone and thin beds of dolomite, gypsum (Agula Shale), and white (and rarely black), finely crystalline to lithographic, well-bedded, fossiliferous, typically well-indurated limestones interbedded with yellow marl and sandy limestone. The Antalo Limestone conformably overlies the Adigrat Sandstone.

Based on the 2007 national census conducted by the Central Statistical Agency of Ethiopia (CSA), this woreda has a total population of 88,644, an increase of 3.79% over the 1994 census, of whom 42,096 are men and 46,548 women; 3,636 or 4.10% are urban inhabitants. With an area of 1,636.36 square kilometers, Ganta Afeshum has a population density of 54.17, which is less than the Zone average of 56.93 persons per square kilometer. A total of 19,301 households were counted in this woreda, resulting in an average of 4.59 persons to a household, and 18,855 housing units. The majority of the inhabitants said they practiced Ethiopian Orthodox Christianity, with 99.14% reporting that as their religion. The 1994 national census reported a total population for this woreda of 122,827 of whom 58,398 were men and 64,429 were women; 39,561 or 32.21% of its population were urban dwellers. The largest ethnic group reported in

Ganta Afeshum was the Tigrayan (98.07%), and Tigrinya was spoken as a first language by 98.56%. The majority of the inhabitants practiced Ethiopian Orthodox Christianity, with 97.28% reporting that as their religion, while 1.66% was Muslim.

Ganta Afeshum is one of the 36 woredas in the Tigray Region of Ethiopia. Part of the Misraqawi Zone, Ganta Afeshum is bordered on the south by Hawzen, on the west by the Mehakelegnaw (Central) Zone, on the north by Gulomahda, and on the east by Saesi Tsaedaemba. The administrative center of this woreda is Adigrat; other towns in Ganta Afeshum include Bizet. There are several local monolithic churches in this woreda, which include Mariyam Si'it and Samuel Mayaba (abandoned as of 1970). High points in Genta Afeshum include Mount Alequa (3290 meters) and Mount Undale, part of the Harat Mountains. Based on the 2007 national census conducted by the Central Statistical Agency of Ethiopia (CSA), this woreda has a total population of 88,644, an increase of 3.79% over the 1994 census, of whom 42,096 are men and 46,548 women; 3,636 or 4.10% are urban inhabitants. With an area of 1,636.36 square kilometers, Ganta Afeshum has a population density of 54.17, which is less than the Zone average of 56.93 persons per square kilometer. A total of 19,301 households were counted in this woreda, resulting in an average of 4.59 persons to a household, and 18,855 housing units.

However, recent geological and geomorphological studies (Gobezie, 2004; Asrat and Ayalew, 2011) have shown that the considerable numbers of churches are undergoing deterioration, some of them seriously, due to weathering, seepage, discontinuities, landslides etc. The degree of weathering and erosion in most of the cases is related to the discontinuities (cracks, fissures, joints) that facilitate seepage and weathering apart from landslides. The geological structures being static in a given geological environment they are subjected to natural dynamic processes and rapid changes in the landscape evolution and urban developmental activities. Recent experiences indicate that many worldwide known rock-hewn churches, monuments and heritage landscapes were destroyed by geological and human induced factors (Lollino and Audisio, 2006; Asrat and Ayalew, 2011; Lee et al., 2011; Paolini et al., 2012; Bala'awi and Mustafa, 20017; Margottini et al., 2017).

The backdrop with abundant Pre-Axumite and Axumite cultures preserved underground.The main outlet for Guahgot leading to the shaft tomb graves and Mingas at the edge of the mountains seen at the backdrop.. The series of rough rocky terrains makes the archaeological sites a safe haven.The Numerous Pre Axumite and Axumite shaft tombs, Steles and the later period cemeteries under the rocks.The Guahgot village: Plateau surrounded by sandstone cliffs suitable for agriculture and irrigation. The Siheta village, just 15 minutes to reach Guahgot. Guahgot village is located just behind this cliff on a deep gorge and a valley leading to the plains of Guahgot. While precise dating for the complex and its components has yet to be determined, scholars generally agree that it was constructed in four or five phases between the seventh and thirteenth centuries.Carved into a rocky massif located approximately 2,630 meters above sea level, the complex consists of two groups of churches and a single church divided by a stream .A system of pathways links the churches and attendant ecclesiastical structures, including tombs, catacombs, and storerooms. Passing through this trench and tunnel system adds a physical dimension to the spiritual journey of moving between churches on the steep slippery rocks: narrow pathways guide visitors into a single file, obviously very difficult to climb as it needs a strong manual lift, allowing them to symbolically descend into the earth and up into heaven as a group.

Structure of the churches

Igneous in nature, the vertical rocky massif of the church complex is primarily composed of two kinds of volcanic basalt. The churches have been carved top-down with a broad entrance and small windows, from the sections of porous basaltic scoriae using chisels, axes, and other blades. Workers first traced the perimeter of the structure on the rock face, and then isolated the main structure of the church. Finally, the inner mass was sculpted as the exterior was refined and ornamented. Unlike in built construction, where the last element constructed is at the top, this method of construction leaves the most recently hewn element at the bottom. To avoid flooding from underground rivers and water tables, the church builders excavated drainage canals and trenches.

All four facades are carved to resemble the empire's favored building technique of layering long horizontal beams with mortar and stones, which created a rhythmic alternation of recessed and projecting surfaces. The upper and lower windows and doors appear to be framed by the wooden beam heads typical of Aksumite construction, while the central windows mimic the form of the monumental Aksumite stelae.The rug-covered floors of the churches are roughly hewn, and rise or fall in height to delineate different sacred zones. Bracketed pillars support flat ceilings, barrel vaults, and domes, while partially carved structural elements indicate abandoned construction sites. Semi-circular arches dominate interior spaces, reflecting both Ethiopian architectural precedents and motifs common in

Many of the churches include friezes of blind or open Aksumite-style windows in the upper choir area. While the majority of churches have only geometric ornamentation, Biete maryam has bas-relief carvings of human figures on its interior walls, and Biete cherkos has an exterior frieze of horsemen, variously interpreted as saints. Unique among the Guahgot churches, Biete cherkos retains vividly colored geometric and biblical scenes painted on shallowly carved walls, ceilings, and columns. Nearly all of the churches employ moldings and string courses to break their massive forms into smaller segments.

Topographic placement and measurement of the tombs:

There are more than ten tombs placed in a cluster on the slopes of the river Sluh. All of them are in a horizontal line most probably these were elite family graves placed in a symmetrical position as part of culture. Tomb 1 shows us the protruding skull of a child and the length of this tomb is 7 feet and its breadth being 2 feet (60 cms).Tomb 2 shows us a length of 6.4 feet and 1.72 feet in breadth. Tomb 3 is clearer showing us the engineering part of its construction, eroded by floods but its enclosures and the stony cap lid has remained intact but submerged inside the soil. Its length is 6 feet and breadth is 4 feet. Besides on the floor of the river banks there is an adjacent mound specially earmarked for architecturally designed stone graves. All of them are shaft tombs with steps leading inside the grave but more of the surface material constructions have disappeared or submerged or washed off by floods. This cemetery on the eastern part of Guahgot needs extensive search operations by expert archaeologist and possibly test pit excavation with future proposals of Conservation as a typical heritage site of Guahgot where sustainable tourism can flourish. As the Guahgot terrain is well fixed by rocks and soils there is less disadvantage of major soil erosion besides the given vegetation supports these architectural monuments of buried archaeology. Obviously the Sluh River is damaging most of the sites at Guahgot and this river is connected to the Mahe dam which flows through the Indabbahetsus mountains.

The tombs covered by silt, alluvium and soil. The corner stones and the foundation rocks embedding these graves are visible.The stone cap lid of this grave eroded partly showing the skull and bones coming out during rains. DNA tests shall reveal the bioarchaeology of those communities who lived here in the pre Christian and Christian times. Most of the rock shaft graves are getting exposed to heavy corrosion and soil erosion. The tombs covered by silt, alluvium and soil. The corner stones and the foundation rocks embedding these graves are visible. The Cactus plants a boon to safeguard the upper part of these graves. The Humps and bumps of these grave placements is another characteristic feature of a cluster oriented community based graves earmarked and the mound is an indication of placing the dead ones on the top as a mark of respect and the inaccessibility of these mounds by the scavenging animals but today the mound has deeply submerged due to erosion and floods.

Animal grazing and cow dung has damaged and closed the outlet of this grave. Note the shoe shaped structure of these shaft tombs unique for Guahgot. The depth evident here on the cap lid of this rocky shaft tomb indicates the amount of abrasion and corrosion of the rocks.The main complex of numerous shaft tombs heavily damaged by the river Sluh.Cactus vegetation grown all over these ancient rocky cemeteries. The cementery area is now heavily under threat by human and animal movements. A vast area of ancient cemetery lying in ruins which need urgent excavation and conservation.

The mathematics and geometry are well synchronized in these shaft tombs. Most of them were facing towards the southern direction which was a burial cultural practice of Pre Axumite times. Note the architectural engraving getting vanished slowly, to the right hand anterior corner of the tomb.The royal cemeteries well engineered by the Axumites Empire. The mystery of civil engineering and the stone carving work by the Axumite Empire remains a novel in raising shaft tombs.This circled mound of 20 feet by 40 feet is the largest

place in Guahgot accommodating several shaft tombs and the rocks and the stone slabs covering these burials are the only protection for it.The ancient city of Guahgot where these burials were just a few yards away from the main city in ancient times. The well dressed bedrock of this vast burial mound is unique on the entrance of Guahgot Village. These burials need test pit analysis at the earliest or else within another 10 years it will disappear forever. Note the strong circular rocky enclosures meant to prevent any alien things escape into the tomb. Burials expose the skulls and skeletons of ancient times. Needs to be preserved as an Open air museum and a chemical analysis of these bones is essential. Numerous human bones propping out of these graves .A prominent skull showing the frontal part corroded, of a child. Test pit analysis shall bring the complete skeleton into prominence and for lab testing too.The Geological grandeur of Guahgot village.The sandstone richness of Guahgot and its surrounding mountains being the perfect home for rising rock hewn churches.

Sandstone

Triassic.--In the region of Adigrat the metamorphic rocks are invariably overlain by white and brown sandstones, unfossiliferous, and attaining a maximum thickness of 300 m. They are overlain by the fossiliferous limestones of the Antalo group. Around Chelga and Adigrat coal-bearing beds occur, which Blanford suggests may be of the same age as the coal-bearing strata of India. The Adigrat Sandstone possibly represents some portion of the Karoo System of South Africa which is also typical for Ganta Afeshum woreda too. It is reddish and light yellowish in color, medium to coarse grained, and grains show irregular form, angular edges and rough to smooth surface. Degree of weathering is slight to moderate and slightly laterized. The intact rock strength ranges from 13.5 to 58 Mpa. WNW running vertical and horizontal joints of widely spaced (1.5 m) is common. Joint surface is planar and rough and its wall strength is weak to strong. Joint aperture is variable, narrow to moderately wide. The 2900 running joint are filled with calcite of about 3 cm thick.

These cliffs are a barrier for floods and other natural disasters for agriculture. Stony barrages erected all over the fields and slopes to prevent soil erosion.The occurrence of Preaxumite and Axumite sites at Mingas in Debri Kebele of Guahgot village.Artifacts and cultural materials strewn all over the north western part in the upper elevation of Guahgot. The rich archaeological site of Guahgot badly eroded and devastated.

Elite settlements and Palace complex building remnants at Mingas in Debri Kebele of Guahgot: The field where the stony pillar columns stand is wide enough about 120 feet in width and about 100 feet in length probably supposing this place as a palace complex and if we conduct test pit excavations on this nuclei field which is currently under agricultural activity we can unearth the building constructions of the Axumite times. The wide concrete granite slabs indicate that they were brought from another place to erect a settlement, palace or a royal necropolis. The stone slabs each measuring 10 inches by 40 inches goes to tell us about a strong foundation of a building and there are fragmented slabs brought from elsewhere seems to have a lid of a shaft tomb or a flooring and placed on the top of this monument. Overall as per the current standings of this monument he measurement from length shows us 3.42 feet or 110 cms , its breadth being 2.33 feet that is 85 cms and the thickness of the slab being 55 cms. There are clear architectural engravings and motifs on the south eastern part of the slabs and we suppose some artistic epigraphs were in vogue on this monument but now badly corroded and defaced.

The sturdy stone pillar or column in the field of Mingas, Beth Gibri.This stony concrete is binded by flat slabs in order to support the elite construction or a sacrificial center. Local clay has been used to affix these granite stones pillars at Mingas, Beth Gibri in Guahgot.This stone foundation is well carved but eroded badly and one can see the bulging artistic motifs on it and even the stone has changed its morphology due to weathering process. The undulating patterns of marks on this stone monument indicate it was a well worked out stone by the craftsman. Due to human movements and the climate this monument is now cracking from the middle.The undulated stone work of the ancient times at Mingas, Beth Gibri showing some scenery engravings which has got eroded.There is a probability of an inscription on this hexagonal stone column, but defaced. One of the displaced stony slabs preserved on the top of this pillar structure at Mingas, Beth Gibri, at Mingas, Beth Gibri.Continuous ploughing of the land, rains and soil erosion has displaced and deformed this rich Axumite archaeological site. This site needs urgent excavation and preservation.The monument seen standing in the middle of the field, north west of Mingas in Debri Kebele of Guahgot.

The prevalence of solid sandstones was the perfect place for rock hewn churches to be erected in the Northern Part of Tigrai region of Ethiopia.The chain of Adigrat Sandstone Mountains stretching all along the southern, eastern, and western (moderately) and central zones of Tigrai Region in Ethiopia was the seat for early Christianity and the erection of rock hewn churches .

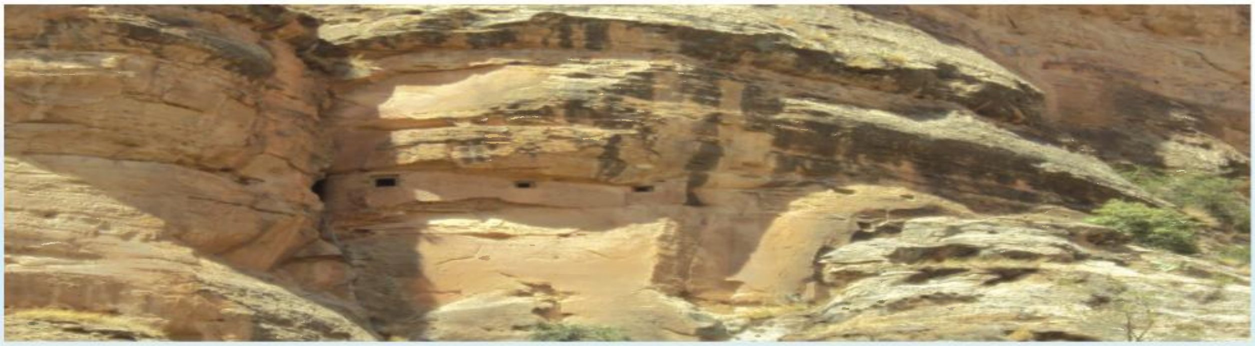
Elite settlements at Mingas in Debri Kebele eroded under the foot of the Rocky Mountains of Guahgot.

The basement structure of the elite complex. The concrete stone plating with the local lime mortar. The basement structure of the elite complex. The walls and chambers of this settlement disarranged due to soli erosion. The flooring with special set of granite stone slabs.

Stone walled structures of an elite settlement at Mingas in Debri Kebele which is the largest in its radius and circumference. The foundations and Corner stones are badly damaged. A test pit analysis shall reveal the whole building plan. This settlement had many chambers and a granary since it was close to the fields. This settlement extend up to 500 meters downwards probably indicating a market place or a public building.One can see the extension of several beds as concrete stone foundation below which extends up to 200 meters. Fragmented Potteries found all over scattered in this area. This settlement also

houses a brick manufacturing complex. Cultural materials and the extension of this building complex is more acute in this north western part of the village at Mingas in Debri Kebele of Guahgot. Water and soil erosion has damaged the rich archaeological site of the upper slopes of Mingas in Debri Kebele running stream downwards.

The vast plateau showing ancient marks of agriculture and habitation. The ploughed fields has yielded lots of artifactsRock hewn churches of Guahgot at Mingas in Debri Kebele of Guahgot: Guahgot is a rich inland surrounded by rocky terrains of cultural materials and human activities since the pre Axumite period. There are around seven prominent rock hewn churches surrounding the enclave of Guahgot: 1. The Yesus Kristos at Guahgot.2.Maryam Yesus at Guahgot.3.Mariam Bahra at Bahra very near to Guahgot. 4. Mariam Kudo located in between the boundary of Guahgot and Hawzen Woreda.5.Solost Dekik at Guahgot. 6. Bizeneiti in Hawzen woreda which is around 30 minutes walk by foot from Guahgot.7.Bete Cherkos at Mingas in Debri Kebele of Guahgot.The elevated part of the Mingas cliff leading to the rock hewn church.The author standing just at the foot of Mount Bete Cherkos.The modern Bete Giorghis church is placed in the midcurve on top of the mountain just ahead. One can reach by wooden steps and ropes attached to this church. This modern church are placed at the midpoint radius of the Mingas Mountain. The rock hewn church of Bete Cherkos is about 25 minutes walking from the main village of Guahgot. This pre Christian church is well preserved on red sandstone and one can notice red soil all over the fringes of this rocky cliff which is around 500 feet in height. The architectural features are the same elsewhere found in the rock hewn churches of the Tigrai region. As it is impossible to climb we presume that there may be rudimentary engravings or pillar constructions inside the church depicting the details of the Pre Christian religion. Fragmented ceramic wares are found below the foot of this cliff. As it was a cultural and religious site there should have been some human activities below the foot of the chain of mountains encircling Guahgot Village.



A close up view of the rock hewn church of Bete Cherkos with its left side entrance and three windows overlaying the rocky cliff which is 450 meters high.

The Bête Cherkos church is located in one of the most scenic sites of this locality which is known for its extraordinary rock cut execution from a very steep perspective and the ancient technology used to cut this cave church which has a dynamic interior decoration as well as some magnificent murals and paintings. The interior part of this rock hewn church has ceilings and pillar columns which divides the church into bays and aisles. This church is a masterpiece standing indefatigable and local legends say that this rock hewn church was built in the early Christian era that is in between 3rd and 4th century AD.

This steep and slippery rock is inaccessible. The researcher stands just at 25 feet from the ground level, at the foot of the rock hewn church of Bete Cherkos .The sturdy sandstone has been suitable for cutting rock hewn churches in this part of Eastern Tigrai in

Ethiopia.This is a circular monolithic boulder covering a perimeter of around 1500 feet from the ground level.

Analysis of decay factors

A multidisciplinary team of experts will review all the existing pertinent studies undertaken on Guahgot churches to take advantage from the accumulated knowledge and to plan the new activities related to the analysis of the structural, physical and chemical decay in the chain of Beit Cherkos rocky mountains. This team will undertake the analysis of the conservation problems and the degradation factors, and will report them on the architectural drawings. The failure and "obstacles" in the drainage system will also be reported on the topographical maps.

The weathering processes and causes of damage to the churches

Several combined reasons that cause physical and chemical decay in the hewn rock, and their interrelations have been identified: characteristics of the basalt and tuff, evaporation of salts, expansion of Montmorollonite, decomposition of feldspar, heavy weight of hewn roofs versus a lighter bearing capacity of the walls, dilatation of the large monolithic structures, mechanical erosion produced by rain drops, tuff stone alteration due to meteo-climatic factors, discontinuities in the rock geological formation with direction and dip capable to generate a sliding, etc.Studies undertaken by experts on the Guahgot complex in 2004 and 2005 have allowed progress in understanding the precise causes of decay, but still need to be deepened and improved. Tests still need to be done systematically to fully analyse the decay related to the geological, geophysical and chemical properties of the hewn rock. In addition, the humidity rates inside the churches should be analysed and monitored.

Structural problems

The most critical structural problems have been identified in Biet maryam adjacent to Beit cherkos where an imminent risk of collapse is possible (cf. Margottini, 2004). Immediate studies and remedial measures need to be undertaken in this church.In Biet cherkos the sliding problem seems to have stabilised, but necessitates further monitoring and, if needed, consolidation measures; structural investigation is necessary to determine if the past structural failures have stabilised or are still active. To define the appropriate solutions, detailed studies of the structural behaviour need to be undertaken and a monitoring system installed in these churches. Systematic structural assessment should also be done on all the other unfinished churches of Guahgot in the Ganta Afeshum woreda and, if needed, in their surroundings.

Wall paintings and sculptures

When comparing archive pictures with the current situation on site, it is evident that serious degradation of the paintings inside the churches has occurred in the last thirty years due to water infiltration. The paintings properties and decay factors should be thoroughly studied in order to define restoration solutions. The study should include historical research, detailed survey and recording of the wall paintings as well as sample analyses to identify the composition of the wall paintings and their decay pattern. Sample consolidation and restoration tests should be performed before generalising any solution. Sculpted elements have the same dilapidation pattern of the tuff out of which the churches are hewn. Although sculpted windows are exposed to rain, these are slightly damaged in general. However, sculptures and bas-reliefs (like the ones at the entrance of Biet Mariam) were severely damaged in the last thirty years, and their original features are hardly recognisable. Theses elements should be surveyed and restored following an historical research, a detailed survey and recording, and an analysis of their decay pattern in order to define a restoration action plan. Unfortunately, within the framework of the project, the restoration of wall paintings and sculptures cannot be addressed because of time constraints. Nevertheless, conservation studies and works will concern the protection of paintings and sculptures from already identified decay factors such as water infiltration, direct rainfall, humidity and cracks.

The three dimensional view of this rock hewn church of Bete Cherkos at Mingas in Debri Kebele of Guahgot. Its perimeter and radius should be around 60 feet from the right to the left entrance, although measurements have not been done but it’s a simple visual calculation made by the researcher. This Adigrat sandstone has been withering and

cracking from the base levels.This monolithic rock hewn church is around 200 feet high from the ground level.

One of these churches, Biet Aba cherkos, is a monolithic church anchored to the rock from which it was carved. Two major damaging phenomena affect the church: weathering of volcanic tuff in the lower part of the edifice and sliding of the façade and lateral walls, as consequence of a prone discontinuity. A first destruction of the façade was already occurred in the past, as consequence of an old planar sliding, still in coincidence of the same joint. Presently, the walls prone to slide are the structures constructed to replace the original rock that collapsed during the slide as well as some of the original rock hewn lateral walls. Kinematical analysis and numerical modeling implemented, clearly evidence the hazardous conditions of the rock hewn church of Biet Aba cherkos and the need of a prompt and proper intervention.

Analysis of rock samples from the rock hewn churches of Guahgot

With the aim to study alteration processes of the rock hewn churches from Guahgot (Tigrai Region, Northern Ethiopia), we applied Laser Induced Breakdown Spectroscopy (LIBS) technique to measure the elemental composition both of the bulk rock materials of Beit Cherkos and Beit Maryam inclusive of its lateral sides and their external layers, exposed to the environmental factors. The analytical plasma was generated by nanosecond pulses of an Nd: YAG laser emitting at 1064 nm. Different major and minor sample constituents were detected, including Ca, Mg, Na, Fe, Ti, Al and K. The detected O emission originates both from air surrounding and the sample, while the intensity of N lines, coming exclusively from air, was used for the LIBS signal normalization. By depth profiling of the weathered basalt rock, we observed a lower presence of K in the external layers, corresponding to the first 5 laser shots. The emission from this element is anti-correlated with the line intensities from O, and this was attributed to the variations in relative abundances of clay minerals and K-feldspar. The analogue measurements were performed on the tuff rock, and compared to the spectra from powder samples containing only the external soft material, scratched from the rocks. These analyses show an abundance of H in the weathered, wetted layers and suggest that cations are lost from the constituent primary minerals and replaced by H^+; this process disrupts the lattice structure and causes a marked loss of strength. The studies presented here demonstrate that LIBS is a useful technique for studying the alteration processes in the Beit Cherkos rocks and its hinder part, caused by environmental factors.

The right side entrance of Bete Cherkos is clearly visible. The prominence and magnitude of both the entrances are clearly visible. Cactus, shrubs and bushy plants are a common feature of this landscape. The monolithic rock hewn church made of Adigrat sandstone is well preserved but inaccessible. Note the wide right and left side entrances architecturally cut. The dome shaped monolithic is ideal to hold and cut a rock hewn church for serenity and seclusion in ancient times. The three sanctum sanctorum clearly engraved to identify the rock cut church.

Concluding remarks:

- Biet Cherkos is not concerned by the new shelters construction works
- It is a small scale church, suitable for an experimental project
- It is easily accessible for the workers and the materials through manual climbing items.
- It needs quick fixing to prevent structural failure of the rock of several points around it
- It has mural paintings that need to be protected from further damage immediately

The pilot project can also be used to analyse the effects of the climate on the church's structural behavior.

Ceramic wares collected from Mingas in Guahgot. Pot sherds from the lower valley of Guahgot.The reverse side of the ceramics found at Mingas, showing the artistic work of the potters.Floral designs on some wares indicate the skilled professional work of the artisans at Guahgot.The broken pieces of some structurally different cooking vessels found on the floor bed of the Mingas Mountains.

The following input to the conservation action plan is recommended by the mission:

- The importance of an adequate team leader that ensures the scientific and technical coordination and the decision making in terms of the conservation strategy and works, in the framework of an integrated approach for the site.
- The importance of the historical and archaeological study –included in the conservation action plan- should not be underestimated. It should be accompanied with a dendrochronolgy of the trees planted around the site and test excavations in the debris areas, and an expert's analysis of the rock excavation and carving techniques, stylistic analysis.

  This study should allow dating the site and understanding its evolution; it study will be the key for defining the main conservation choices of the site as a whole, and the environmental "restoration" of the archaeological area and its landscape, as well as the interpretation of the site in relation to the visiting circuits.In addition, samples of existing traces of mortars on Beit Cherkos and Biet Maryam and elsewhere in Guahgot should be analyzed.

- The input of an engineer specialized in quarries and mines could be very useful to undertake the structural analysis of the churches. The structural study could be done in three phase:
    1. Diagnosis of the most endangered areas.
    2. Mathematical models.
    3. Monitoring: Analysis of the expected structural behaviour under the foreseen shelters, and after their dismantlement.
- The cleaning and restoration of the mural paintings should take into consideration the existing patina of the hewn rock of the churches around the paintings.

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INCREASED DIGITALIZATION LEADS TO MORE FRAUDS: A COMPARATIVE STUDY

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Abstract

A good and strong banking industry is very important for every national economy and has a significant bearing in promoting economic development through efficient financial services. Forgrowth and development of Indian economy too, banking sector plays a vital role. Banking industry has witnessing major changes after digitalization. The banking industry in India has been directed to change its functions to help a massive number of needy people in remote and rural areas as well as urban areas. Bank frauds have a tendency toincrease with the advent of technology in banking sector. It all starts with a few individuals hacking the financial system. Now the menace has become so huge that gangs of skilled criminals try to steal relatively modest amount of money with unauthorized access to sophisticated technology tools. RBI is also trying to manage the bank frauds but the connection between employees and customers is increasing since past few years which also lead to increase in number bank frauds. Besides that, there are several other factors like poor or inadequate internal control system which aggravates the problem.Consumers can overcome with these frauds through proper care of their confidential information and be in regular contact with their bank to keep updated with their account's details.Banks should also train their employees regarding the bank policies and

procedures to mitigate risk occurring from human error. Further, they should also give proper care regarding internal control system of the banks so that frauds can be minimized.

Key words: *Banking, digitalization, bank frauds.*

Introduction

A good and strong banking industry is very important in every country and has a significant affect in promoting economic development through efficient financial services. Forgrowth and development of Indianeconomy banking sector plays a vital role. Banking industry has undergone major changes after liberalization. Many banks started getting privatized which created new opportunities for expansion of the business.

Technology is a major driving force in banks which is leading to redefined work processes.

Traditional banking vs Electronic banking

In traditional banking, the customer has to visit the bank branch in person to perform the basic banking operations like account enquiry, funds transfer, cash withdrawals, etc. The brick and mortar structure of a bank are essentially the banking functions.

When most corporate tend to become internetworkingorganizations, banking has to be E-banking in the new century. E-banking enables the customer to perform the basis banking transaction by sitting at his/her office or home through PC or laptop. The customer can access the bank's websites for viewing their account details and perform the transactions on account as per their requirements. With E-banking, the brick and mortar structure of the traditional banking gets converted into a click and portal model, thereby giving a concept of virtual banking a real shape. Even though it smoothens the work process of the banking system but wireless-based technology solutionsbrings along with it a lot of unique security challenges. Some of these challenges which are dealt in by the banks are discussed below.

Financial institutions must comply with regulatory requirement and industry best practice in order to:

1. Ensure the security and confidentiality of customer information;
2. Protect against any anticipated threats or hazards to the security or integrity of such information; and

3. Protect against unauthorized access to or use of such information that could result in substantial harm or inconvenience to any customer

The element of security that add up to ensure protection for the mobile solution from the origin, i.e. customer's handset to the transacting bank include-

1. Transaction message encryption
2. Transaction message integrity
3. Device related issues and security risks
4. User and device authentication
5. Password security on the device
6. Initial and Existing Users Authentication-Non-Repudiation using digital Signatures.
7. Secure Inter Bank Settlement

Security is the fundamental requirement for all banks as customers expect their investments, personal information and credit details to be secure. Fraud continues to be an issue for retail banks across the world. The majority is currently related to cards and payments; however, identity theft and account breaches are on the rise. As a result, banks are fighting an ongoing battle on all fronts.

Bank fraud means to obtain money, assets or other property owned by financial institution or to fraudulently obtain money from depositors posing as a bank or other financial institution. Bank fraud is a criminal offence.

Fraudsters and street criminals have been always targeting banks. Banks are finding it difficult to keep ahead of fraudsters, because of the use of advanced technologies in processing financial data and the increase in organized criminal activities. Some vigilance should be maintained by banks in order to detect and prevent fraud in their institutions. Banking Institutions may have the best of controls, but if someone is determined to commit a fraud, it is a challenge to stop him/her. Through good and efficient internal control, the incidence of bank frauds can be reduced.

Literature Review

(Pradhan & Bai, 2018) have both analyzed that nowadays bank frauds are playing game in the dream of the public and their impact on Indian economy. After the Vijay Malya case of money laundering i.e Punjab National Bank scam of Rs.13000 crores helps us to understand the impact of bank frauds on our Indian economy.

(Charan Singh & Dixit, 2016) have analyzed that after the growth of Indian economy after liberalization the NPAs are rising across various scheduled commercial banks specially Public sector banks.

As per the survey conducted by Deloitte (2015), over the last two years the number of banks frauds has increased and around 93% of respondents supported this statement of increase in bank frauds whereas more than half said that they have witnessed it in their own organizations.

(Gupta & Islamia, 2008) have highlighted that the increase in electronic banking also increased the liability of customer satisfaction. They also identified the weakness of conventional banking as the systematic and reliable information on Internet banking in India is still not sufficient, especially for consumers and the bankers.

(Bhasin, 2013) have shown that growing number of frauds have undermined the eroded the financial reports, contributing to substantial economic losses, and eroded investors' confidence regarding the usefulness and reliability of financial statements. The increasing rate of white-collar crimes also demands stiff penalties, exemplary punishments, and effective enforcement of law with the right spirit.

Need for the Study

The recent and dynamic trend in banking is the digitization of core banking functions and Electronic banking. As every coin has two faces, even the electronic banking has two faces, i.e., positive and the negative. In recent years, a rising trend of banking frauds in India has been witnessed. Fraudulent practice in banking means to obtain money, assets or other property owned by financial institution in unethical means that may be in the form of obtaining money from depositors fraudulently by one unauthorized person or institution posing as a bank or other financial institution.

Objective of the study

The objectives of this study are to

- study the effect of bank frauds on Indian economy

- determine the means to curb/ mitigate bank frauds

Research Methodology

The research is based on the secondary data available at various sites and a comparative analysis is made by the use of graphs.

Data Analysis and Interpretation:

Phishing

Phishing is a type of bank fraud where user data, including credentials and credit card numbers are stolen. The recipient or the victim is tricked into clicking malicious link, which can lead to installation of malware which then leads to revealing of sensitive information.

Phishing includes unauthorized purchases, stealing of funds or identity theft. An organization suffers severe financial losses in addition to declining market share, reputation and consumer trust.

There are various phishing techniques:

1) Email phishing scams
2) Spear phishing

ICICI Bank Phishing

A few customers from ICICI Bank received an e-mail from someone asking for their internet logging name and password of their account and directed them to web page that resembled bank’s official site. The person posed himself as an official of the bank and got duped that some users even clicked on the URL given on the mail. The bank’s customers forwarded the e-mails to an assistant manager of ICICI Bank’s information security cell, to cross-check the validity of the e-mails with the bank, who then discovered the scam.

Phishing can be curbed through following steps to be taken by both enterprisers and users.

For users: Careful observation and attentiveness especially while dealing spoofed messages.

For enterprises:

- Two-factor authentication(2FA) is the most effective method for hitting back phishing attacks
- Management should enforce stern password management policies in addition to2FA. Example: Employees should be required to change their password frequently and not be allowed to reuse it for multiple application.
- Educational campaigns

The following guidelines will help customers to overcome such type of frauds: (for customers)

- A legal financial institution will never ask for the details of account via an e-mail. So financial informationshould never be shared through e-mail.
- If the transaction is initiated and personal or financial information is to be provided through organization's website, see that the site is secure, like a lock icon on the browser's status bar or a URL for a website that begins with "https" (the 's' stands for secure)
- Always call your local bank and ask for verification before answering to any kind of electronic correspondence that claims to come from the bank.

Vishing

A vishing call involves fraudster posing as an employee of your bank or some government body like SEBI, IRDA, etc. asking for personal information. The fraudster may tell you many different reasons why they require this information. Despite of the story you are told, the fraudster will be aiming to convince you to reveal confidential, personal and banking information such as ATM pin, password, card details, etc. Most vishing scammers now rely on "Caller ID spoofing". ID spoofing allows them to make phone calls that appear to be from legitimate source which makes victims to feel more compelled to pick up the call as a result.

Equifaxdata breach

Equifax is one of the nationwide credit reporting companies that tracks and rates the financial history of US customers. The companies are supplied with information about loans, loan payment and credit cards, as well as details on everything from child support payments, credit limits, missed rent payments, addresses and employer's history, which all factor into credit scores.

Cyber criminals had accessed sensitive information including names, social security numbers, and date of birth, addresses and the driver's license number. In addition, Equifax said that credit card numbers for about 2,09,000 US customers were revealed, as "Personal Identifying Information" and approximately 1,82,000 US customers involved in credit report disputes.

The following guidelines will help consumers to avoid such type of frauds:

- Never share confidential information like ATM pin, card number with anyone even if the person claims to be a bank employee.
- Even though caller ID displays the phone number of the legitimate company, it doesn't guarantee that the call is genuine.
- Abstain from sharing your personal information with anyone.
- Make a habit to change bank passwords and pins regularly.
- Immediately get in touch with the nearest bank branch in case you have shared confidential information, and get your card, internet banking blocked and change your password.

Identity theft

In identity theft another person's personal identifying information is stolen in order to access to his financial resources or obtain access to other benefits such as money, insurance benefits, credit.

Fraud relating to 7 loans

This incident happened in Ahmadabad in October, 2017. A person named Rajesh Panchal got to know that he had been a guarantor for an auto loan without his notice. On checking the bank account, he found that it was Identity theft wherein someone used his PAN and two years of IT returns by changing photograph, signature, address and phone number. He filed a complaint with police for forgery and other charges. The person had applied for 7 auto and personal loans from all major banks with the documents. Panchal blocked his PAN to prevent further misuse. It is suspected that there are many more such victims who had faced similartype of frauds.

The following guidelines will help consumers to avoid such type of frauds:

- Never write the pin numbers on credit or debit cards, or on a slip of paper.
- Pay attention if bills arrive as scheduled.
- Keep all account treatments and receipts.
- Keep all personal information in safe place at home.
- Use firewalls on home computers.

Card skimming

Card skimming is a theft of credit and debit card information and PIN numbers when the user is at an Automated Teller Machine. The thieves steal money from accounts, make purchases and sell card information to third parties for the same.

Lack of public awareness about the issue allows the card skimmer to be successful. So one should be alert about the surroundings when making any transactions. One should refrain from making transaction if an ATM seems suspect and report to necessary authorities.

Kolkata bank fraud

The fraudsters installed the skimmers at ATM machines between April and July 2018 and withdrew money. Customers from Canara bank, Punjab National Bank and Kotak Mahindra bank received messages that money was withdrawn from their accounts from different cities. Customers had withdrawals from ATMs thousands of kilometers away from Kolkata. Among those who lost money also include 10 employees of the bank and one AGM of Public sector bank. The investigating agencies felt that skimming devices were installed on some ATM machines that copied the data and fraudsters use the data to clone cards and used them to withdraw money from ATMs at other cities.

The following guidelines will help consumers to avoid such type of frauds:

- Check the keypad if the numbers are hard to press, it might have a false keypad installed and move onto the next machine.
- Always try to use machines that are in-view with security monitoring.
- Keep checking your account regularly using online and mobile banking rather than to wait for monthly statement.

- If you suspect about the authenticity of the machine use a different machine or payment method.

As per the data mentioned below this is the scenario of Indian bank frauds compared to other countries.

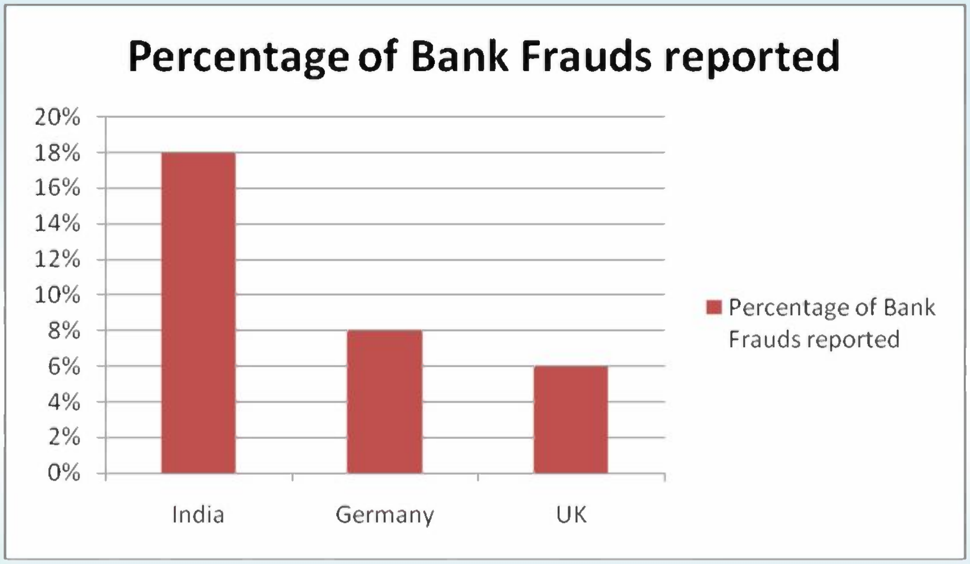

Table 1:

According to the survey by Fidelity Information Services (dated-30th May,2018), in Table1,it is analyzed by Mayank Jain that after surveying across various countries the biggest victims of bank frauds are Indians i.e 18% with the frequency of usage in digital banking whereas in Germany only 8% of people reported a fraud and 6% in UK.

In December, 2017 Ravi Shankar Prasad (Union Minister holding Law and Justice and Electronics and Information Technology portfolio in the Government of India) said that in 2017 over 25,800 cases of digital frauds were reported in India.

According to the RBI report by Saloni Shukla (dated-27th June,2018) the 85% of bank frauds are accounted by public sector banks.

It was also observed that Top 10 bank frauds held in 2018 alone lead to financial loss of 10,000 crore.

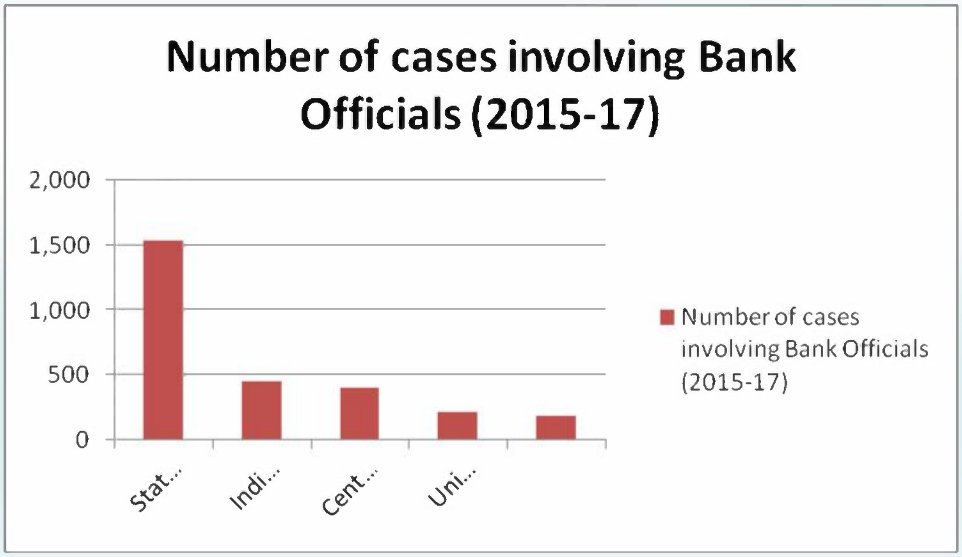

Table 2

Source: RBI data via Times of India

As per an article of Times Of India (dated-18th february2018), as shown in Table2, 5,200 officials were held for fraud between 1st January,2015 to 31st March,2017 in Public sector banks

- Fraud cases involving private and public sector banks (2013-2014): **17,504**
- Amount of money involved in these cases: **Rs 66,066 crore**
- Number of cases which involved bank officials: **2,084**

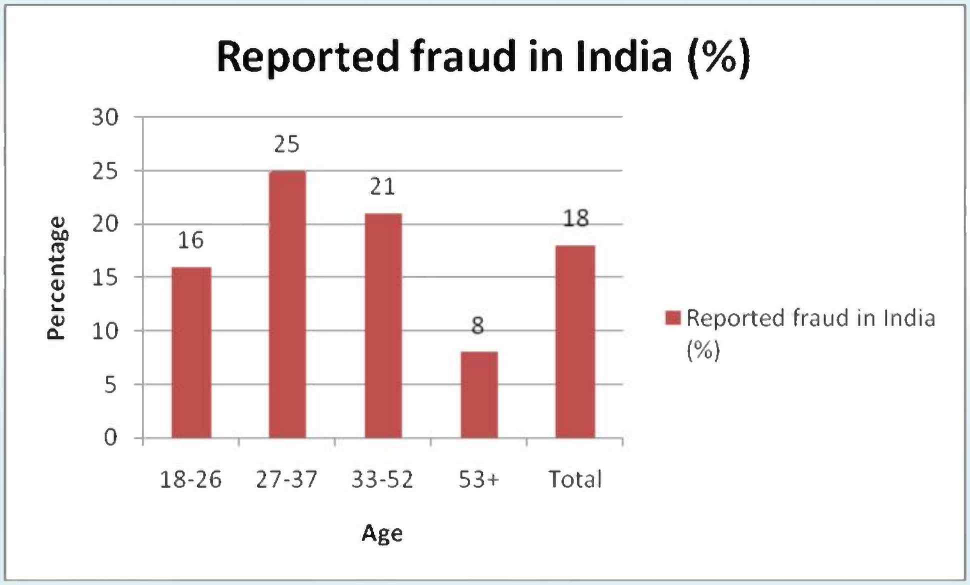

Table 3

Source:https://www.business-standard.com/article/economy-policy/at-18-indian-customers-biggest-victims-of-banking-fraud-fis-study-118052900467_1.html

As per the statistics shown in Table3, it can be said that highest loss was by the people between 27 years to 37 years which is 25%. And the people who are more than 53 years suffered least compared to other age groups i.e 8%. By the above statistics we can say that people from 27 to 52 years of age belong to the working class and they make most use of internet banking and have suffered the highest loss, on the other hand people from 18 to 26 years of age are mostly into pursuing education and people more than 53 years are retired or on the verge of taking retirement, so they use less internet banking facilities and the number people who suffered loss is comparatively low.

Table 4

Moneycontrol-Jan 23, 2017 01:54 PM IST | Source: Moneycontrol.com

As per the statisticsshown in Table 4, India ranks second after China in which the organizations are discouraged from operating because of frauds with 19% and security measures taken by banks are poor which amounts to 16%.

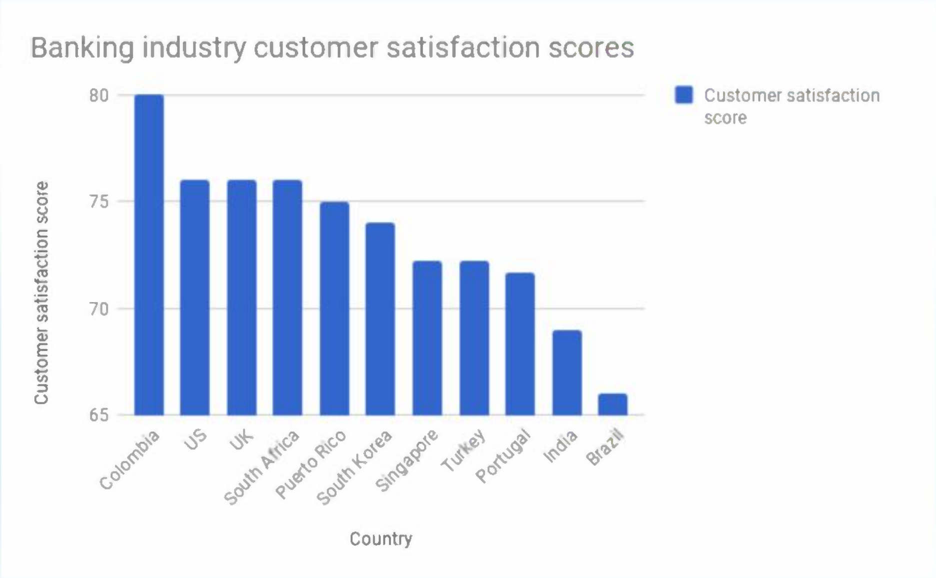

Table 5

Source: Study conducted by the Indian Customer Satisfaction Index in 2016.

As per Table 5, the customer satisfaction of Indians is very low. India ranks high in terms of frauds (Table 1) which is one of the reasons for customer satisfaction scores to be very low in Indian banking industry.

Conclusion

Greater percentage of respondents in India reported fraud across the four categories surveyed - corruption and bribery (27 percent), management conflict of interest (27 percent), market collusion (27 percent) and internal fraud (25 percent).

It is noted that most common perpetrators of fraud and security incidents in India over the past 12 months were current and former employees. Executives in India named junior employees inside the company (61 percent) as the primary perpetrators of fraud incidents. The next most common group to be named was agents and intermediaries working for the company (49 percent). In both cases, these numbers are 22 percent above the global average.

As per Indian National interest-Indian banks use outdated software and technology that have become easy targets for frauds. e.g.The recent PNB scandal points to clunky, inefficient technology that banks force their users to put up with.

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INDIA'S INVESTMENT CYCLE: A STUDY

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Abstract

For a domestic demand driven Indian economy, consumption and investment play key roles in growth dynamics. 1% increase in the real interest rate (interest charged after allowing for inflation) leads to a decline of about 0.5% in the investment rate, a current study by the Reserve Bank of India (RBI) indicated, which recently released its working papers wherein the authors divulged their views and estimates regarding the investment cycle in the emerging Indian economies. A study of India's investment cycles in the last 60 years by the Reserve Bank of India (RBI) has revealed that the latest investment upswing will run till 2022-23 to the peak of 33%. Present study focuses the various RBI reports & its impact on the economic growth through various graphical representations.

Key words: *Investment Cycle, investment rate, RBI, Economic growth*

Introduction

The Indian economy is domestic demand driven with consumption and investment playing key roles in growth dynamics. Investment activity, in particular, is significant as it not only plays an important role in shaping the current growth rate of the economy, but also in boosting the country's medium-term growth prospects. A study of India's investment cycles in the last 60 years by the Reserve Bank of India (RBI) has revealed that the latest investment upswing will run till 2022-23 to the peak of 33%.

What is an investment cycle?

Basically, an investment cycle is the holistic process of acquiring (investing in) assets, earning profits (returns) on that investment, and then disposing (selling) it off, after which the money is re-invested. This cycle continues and gets the economy going in a sustainable manner.

Factors influencing investment activity in India

The study also finds that investment activity in India is affected by several macro-financial factors. These are real GDP growth, real interest rate, bank credit growth, global GDP growth and GFD. Domestic economic activity turned out to be the main determinant of investment activity in India. The real interest rate had a negative impact on investment activity. A one percentage point increase in the real lending rate reduces the real investment rate in the range of 0.29-0.40 percentage points. Non-food bank credit growth positively impacts investment activity. The GFD crowds out investment demand.

Trends in the Indian economy

Upturn in investment cycle could last up to 2022-23

The study finds that, the cyclical component has shown upward movement from 2016-17, suggesting that recent improvement in investment activity is due to cyclical factors. The upturn in the current investment cycle, which began in 2016-17, is estimated to last up to 2022-23 when the investment rate is estimated to increase up to 33.0 per cent from the current level of 31.4 per cent. However, the challenge is to reverse the declining trend component of investment activity. This will require policy efforts on multiple fronts such as further improving ease of doing business; expediting resolution of distressed assets; addressing the NPAs problem of the banking sector; and speeding up implementation of the stalled projects.

These measures will help (i) ride the current phase of the investment cycle to its peak; and (ii) boost medium-term prospects of investment activity.

The sharp acceleration in real GDP growth in 2018-19, acceleration in bank credit growth and buoyant stock market augur well for sustaining investment activity going forward. However, uncertainties on the global front and financial market volatility need to be guarded against.

India fastest growing major economy in 2018-19

(a)India's GDP will grow at 7.3 per cent in 2018-19. This will further climb up to 7.5 per cent in the next two financial years. The World Bank reasons that this is a result of increased consumption and investment. Besides, it says that the economy is regaining after a temporary slowdown due to demonetisation and the implementation of GST**.**

(b)India's economy declined in 2017 due to demonetisation and the implementation of the Goods and Services Taxes (GST). In 2017, China grew at 6.9 per cent while India's GDP growth was 6.7 per cent. "India's growth outlook is still robust. India is still the fastest growing major economy**.**

(c) In the financial year 2018-19, India's growth accelerated to an estimated 7.3 per cent from 6.7 per cent the previous year. This was because the economic activity continued to recover with strong domestic demand. "While investment continued to strengthen amid the GST harmonisation and a rebound of credit growth, consumption remained the major contributor to growth.

(d) Meanwhile, growth among advanced economies is forecast to drop to 2 per cent this year. Slowing external demand, rising borrowing costs, and persistent policy uncertainties are expected to weigh on the outlook for emerging market and developing economies. Growth for this group is anticipated to hold steady at a weaker-than-expected 4.2 percent in 2019.

Findings & Discussion

The study finds that investment activity in India is affected by several macro-financial factors. These are real GDP growth, real interest rate, bank credit growth, global GDP growth and GFD. Domestic economic activity turned out to be the main determinant of investment activity in India. The real interest rate had a negative impact on investment activity. A one percentage point increase in the real lending rate reduces the real investment rate in the range of 0.29-0.40

percentage points. Non-food bank credit growth positively impacts investment activity. The GFD crowds out investment demand.

In India, the growth has accelerated, driven by an upswing in consumption, and investment growth has firmed as the effects of temporary factors wane. However, rising interest rates and currency volatility are weighing on activity

Conclusion

Thus, the upcoming election cycle [2019 Lok Sabha election in India] next year elevates political uncertainty in the region. The challenging political environment could adversely affect the ongoing reform agenda and economic activity in some countries

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अपेक्स सहकारी बैंक का मध्यप्रदेष के ग्रामीण विकास में योगदान –एक अध्ययन

कीर्ती सिंह

शोधाथी

सरोजिनी नायडू शासकीय कन्या स्नातकोत्तर (स्वषासी) महाविद्यालय, षिवाजी नगर भोपाल बरकतउल्ला विष्वविद्यालय (म.प्र.) वाणिज्य संकाय के अंतर्गत

शोध सारांष

सहकारिता का आधार समानता, सामूहिक प्रयास, सामूहिक चेतना व एकता की भावना है। यह एक ऐसा संगठन है जो समस्याओं का समाधान सामूहिक व प्रभावषाली विधि से करता है। मध्यप्रदेष राज्य सहकारी बैंक मर्यादित (अपेक्स बैंक) द्वारा सहकारिता के सभी कार्य किये जाते है। मध्यप्रदेष राज्य सहकारी बैंक लिमिटेड त्रीस्तरीय साख संरचना है, प्राथमिक कृषि सहकारी संस्थायें, जिला सहकारी केन्द्रीय बैंक, तथा राज्य सहकारी बैंक।

अपेक्स बैंक सीधे तौर पर ग्रामीण विकास के कार्यो से सम्बद्ध नहीं है, किन्तु अल्पकालीन त्रीस्तरीय साख संरचना होने के कारण प्राथमिक समिति ग्रामीण विकास के कार्यो से सीधे जुड़ी हुई है।

मध्यप्रदेष राज्य सहकारी बैंक ने सभी क्षेत्रों में चाहे वे तकनीकी, आर्थिक तथा सामाजिक प्रगति हो अपना महत्वपूर्ण योगदान दिया है, इस संस्था से वास्तविक एवं क्रियात्मक लाभ प्राप्त हुए हैं, जिसके अंतर्गत शीर्ष बैंक में वर्ष 2013 से कोर बैंकिंग सेवाये लागू की हैं साथ ही प्रधानमंत्री जी द्वारा सामाजिक सुरक्षा योजनान्तर्गत घोषित की गई योजनायें जैसे– प्रधानमंत्री जीवन ज्योति बीमा योजना, प्रधानमंत्री सुरक्षा बीमा योजना एवं अटल पेंषन योजना का क्रियान्वयन सहकारी बैंकों द्वारा किया गया। बैंकों में तकनीकी सेवाओं को और अधिक उन्नत बनाये जाने के लिए प्रयास किये जा रहे हैं, ताकि शीर्ष बैक के साथ जिला सहकारी केंद्रीय बैंकों में ऑन बोर्ड पेमेंट सुविधा के अंतर्गत त्वरित भुगतान सेवा, मोबाइल बैंकिंग का लाभ भी ग्राहकों को प्राप्त हो सके। जिला बैंकों से जानकारियों के त्वरित संप्रेषण हेतु शीर्ष बैंक मुख्यालय स्तर पर आनलाईन पोर्टल प्रोग्राम तैयार कराया गया है। अपेक्स बैंक के माध्यम से कृषि ऋण एवं अग्रिम, मौसमी कृषि उत्पादन हेतु अल्पकालीन ऋण, तिलहन उत्पादन कार्यक्रम, दलहन उत्पादन हेतु साख सीमा, जनजाति विकास कार्यक्रम हेतु साख सीमा , अन्य फसलों हेतु अल्पकालीन साख सीमा, मध्यकालीन परिवर्तन /पुनः परिवर्तन ऋण, किसान क्रेडिट कार्ड योजना ,अकृषि वित्त प्रदान करना आदि प्रकार ऋण और सुविधाएं बैंक के माध्यम से अपने ग्राहकों को उपलब्ध कराई जाती है। जिसके कारण देष का विकास होता है। मध्यप्रदेष राज्य सहकारी बैंक सरकार और नाबार्ड के साथ मिलकर भी विभिन्न योजनाओं को पूरा करती है तथा कृषि और अकृषि दोनों प्रकार के ऋण प्रदान कर वित्त की आवष्यकता की पूर्ति करती है।

अपेक्स बैंक के विष्वव्यापी विकास को देखते हुए मैं कह सकती हूं कि कोई ऐसी आर्थिक आवष्यकता नहीं है जिसकी पूर्ति बैंक द्वारा नहीं की जा सकती।

प्रस्तावना

सहकारिता का परिचय–

सहकारिता शब्द सह+कार दो शब्दों से मिलकर बना है। सह शब्द का आषय मिलकर तथा कार शब्द का मतलब काम से है। अतः सहकारिता का अभिप्राय साथ मिलकर काम करने से है। सहकारिता का सि़द्धांत उतना ही पुराना है, जितना की मानव समाज। मानव का सामाजिक एवं घरेलू जीवन सहयोग के बिना संभव नहीं है। यह सहयोग एवं सहकार ही मानव की सामूहिक प्रवृत्ति एवं भावना है, जो उसे साथ रहने , मिलकर कार्य करने तथा कठिनाइयों में एक –दूसरे की सहायता करने हेतु प्ररित करती है। सहकारी समिति ऐसे व्यक्तियों का एक स्वैच्छिक संगठन है जिनके आर्थिक साधन सीमित है, जिन्हें सहकारी सेवाओं की आवष्यकता है और एक साथ काम करने को तैयार है।[1]

मध्यप्रदेष राज्य सहकारी बैंक मर्यादित का परिचय–

मध्यप्रदेष राज्य सहकारी बैंक लिमिटेड का पंजीकरण दिनांक 2.4.1912 को (को–ऑपरेटिव्ह एक्ट 1912 धारा (2)के अंतर्गत जबलपुर में "चतवअपेपवदंस बववचमतंजपअम इंदा सजकण् ब्मदजतंस चतवअपदबमे " के नाम से किया एंव इसके पश्चात् बैंक का मुख्यालय नागपुर में स्थानांतरित हुआ। बैंक ने अपना व्यवसाय 5 लाख की पूंजी से प्रारंभ किया गया था, जिसका प्रमुख उद्देष्य कृषि ऋण हेतु वित्त पोषण था। आंरभ में बैंक के बोर्ड ऑफ डायरेक्टर में व्यक्तिगत शेयर होल्डरों को नामांकित किया जाता था, ताकि बैंक को लोकतांत्रिक दर्जा दिया जा सके। [2]

भविष्य में बैंक द्वारा संकलित अधिकतम शेयर को सहकारी संस्थाओं एवं जिला सहकारी केन्द्रीय बैंकों में स्थानांतरित किया गया ताकि बैंक के बोर्ड में संस्थागत प्रतिनिधि आ सके।

वर्ष 1956 में मध्यप्रदेष को –ऑपरेटिव्ह बैंक लिमिटेड नागपुर का विभाजन होने से महाकौषल को–ऑपरेटिव्ह बैंक जबलपुर का निर्माण हुआ, जिससे 14 जिला सहकारी केन्द्रीय बैंक संबद्ध हुए। वर्ष 1956 में ही देष में प्रदेषों का पुनर्गठन होने से 1 नवम्बर 1956 को मध्यप्रदेष राज्य का गठन हुआ, इसी के साथ महाकौषल को–ऑपरेटिव्ह बैंक का नाम बदलकर "मध्यप्रदेष राज्य सहकारी बैंक मर्यादित" किया गया, और साथ में 56 जिला सहकारी केन्द्रीय बैंक प्रदेष में खोले गये, ताकि 1 जिले में 1 बैंक कार्यरत हो। जिला बैंकों की संख्या वर्ष 1956 में 52, 1961 में 48 वर्ष 1966 में 44 और 1968 में 43 एंव अंतिम रूप से 45 जिला बैंक कार्यरत हुई है।

नवम्बर 2000 में पुनः मध्यप्रदेष राज्य का विभाजन कर छत्तीसगढ़ राज्य बनाया गया, जिसमें कार्यरत प्रदेष के 7 जिला सहकारी केन्द्रीय बैंकों को छत्तीसगढ़ राज्य में स्थानांतरित किया गया। अतः वर्तमान में मध्यप्रदेष राज्य में 38 जिला सहकारी केन्द्रीय बैंक कार्यरत है।[3]

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[1] डा. बी. एस. माथुर,2001, सहकारिता, साहित्य भवन पब्लिषर्स एण्ड डिस्ट्रीब्युटर्स

[2] www.cooperatives.mp.gov.in

[3] www.ncdc.nic.in

मध्यप्रदेष राज्य सहकारी बैंक (षीर्ष बैंक) एक विषिष्ट संस्थान है तथा दीर्घकालीन , मध्यकालीन, एवं अल्पकालीन कृषि ऋण का वितरण प्रदेष में नाबार्ड की सहायता से जिला बैंको एवं प्राथमिक कृषि साख सहकारी समितियों के माध्यम से कृषकों एवं अन्य ग्रामीण तबको को उनकी आवष्यकता अनुसार वित्त पोषण हेतु उपलब्ध कराया जाता है। शीर्ष बैंक की स्वयं 24 शाखायें पूरे प्रदेष में कार्यरत हैं, जिसमें विभिन्न प्रकार की आकर्षक ऋण एवं बचत योजनायें संचालित की जाती है। शीर्ष बैंक की प्रमुख भूमिका है कि वह ग्रामीण क्षेत्र के लोगों को मध्यप्रदेष में कृषि/ अकृषि ऋण नाबार्ड की विभिन्न योजनान्तर्गत उपलब्ध कराये साथ ही व्यक्तिगत ऋण कके अंतर्गत ग्राहकों को व्यवसाय ऋण, आवास ऋण, त्यौहार ऋण, षिक्षा उच्च ऋण, प्रोजेक्ट ऋण , वाहन ऋण आदि प्रदान करे।[4]

मध्यप्रदेष राज्य सहकारी बैंक लिमिटेड त्रीस्तरीय साख संरचना है, प्राथमिक कृषि सहकारी संस्थायें, जिला सहकारी केन्द्रीय बैंक, तथा राज्य सहकारी बैंक।

अपेक्स बैंक सीधे तौर पर ग्रामीण विकास के कार्यो से सम्बद्ध नहीं है, किन्तु अल्पकालीन त्रीस्तरीय साख संरचना होने के कारण प्राथमिक समिति ग्रामीण विकास के कार्यो से सीधे जुड़ी हुई है।

उद्देष्य– मध्यप्रदेष राज्य सहकारी बैंक के आर्थिक विकास में धारणीयता का अध्ययन।

पूर्व में किये गये शोधकार्यो की समीक्षा–

- अनन्त कुमार सकसेना 2004, मध्यप्रदेष के ग्रामीण विकास में जिला सहकारी बैंक एवं क्षेत्रीय ग्रामीण बैंक का योगदान होषंगाबाद संभाग के विषेष संदर्भ में।
- राहुल जोहरी 1998, मध्यप्रदेष के सहकारिता आन्दोलन में मध्यपदेष राज्य सहकारी बैंक मर्यादित का योगदान।
- राधेष्याम रघुवंषी 2004 वाणिज्य होषंगाबाद संभाग में संस्थागत कृषि वित्त में सहकारी बैंकों की भूमिका एवं प्रभाव।
- शोभा जैन 1986–87, मध्यप्रदेष में सहकारी साख का आर्थिक अध्ययन।
- अंषु यादव 2003, मध्यप्रदेष राज्य सहकारी बैंक मर्यादित की कार्य प्रणाली एवं उपलब्धियों का मूल्यांकन।

शोध प्रविधि– साक्षात्कार, प्रष्नावली, अवलोकन।

भविष्य में संभावनाएं– भविष्य में मध्यप्रदेष राज्य सहकारी बैंक से संबधित अनेक शोध कार्य किये जा सकते है जैसे–

- म.प्र. राज्य सहकारी बैंक के वित्तीय विष्लेषण का अध्ययन
- जिला सहकारी या राज्य सहकारी बैंक की कार्यप्रणाली एवं विकास का अध्ययन।
- कृषि विकास में अपेक्स बैंक की भूमिका का अध्ययन।

विष्लेषण–

❖ **मध्यप्रदेष राज्य सहकारी बैंक मर्यादित के माध्यम से चलाई जानी वाली योजनाएं**

[4] वार्षिक प्रतिवेदन 2015–16 म.प्र. राज्य सहकारी बैंक मर्यादित

- **कृषि ऋण एवं अग्रिम**[5]

वर्ष 2015–16 में कृषिगत उद्देष्यों के लिए विभिन्न प्रकार की साख सीमायें, जैसे मौसमी कृषि परिचालन हेतु अल्पकालीन साख सीमा, मध्यकालीन परिवर्तन ऋण, उर्वरक नगद साख सीमा, जिला सहकारी केन्द्रीय बैकों को स्वीकृत की गई है।

वर्ष 2015–2016 में जिला सहकारी बैंकों के माध्यम से रू. 18000.00 करोड़ के कृषि उत्पादन ऋण वितरण का लक्ष्य रखा गया था, जिसके विरूद्व रू. 13588.44 करोड़ का ऋण वितरण किया गया है

- **किसान क्रेडिट कार्ड योजना**

कृषकों को साख सुविधा प्रदान करने के लिए किसान क्रेडिट कार्ड योजना सम्पूर्ण प्रदेष में जिला सहकारी केन्द्रीय बैंकों एवं प्राथमिकता कृषि साख सहकारी समितियों के माध्यम से क्रियान्वित की जा रही है। सहकारी बैंकों के माध्यम से प्रदेष में कृषकों को वर्ष 2003–2004 में मध्यप्रदेष के 38 जिला सहकारी केन्द्रीय बैंकों के द्वारा 19 लाख किसान क्रेडिट कार्ड प्राथमिक कृषि साख सहकारी संस्थाओं के माध्यम से जारी किये गये थे तथा साख सीमा रू. 4449 करोड़ स्वीकृत थी। वर्ष 2013 में अभी तक जिला सहकारी केन्द्रीय बैंकों के माध्यम से 47.06 लाख किसान क्रेडिट कार्ड जारी किये जा चुके हैं। और मार्च 2016 तक कुल 52.63 लाख किसान क्रेडिट कार्ड वितरित किये जा चुके है।

- **0 प्रतिषत ब्याज दर पर अल्पावधि फसल ऋण**

खेती के लिए किसानों को शून्य प्रतिषत ब्याज पर सहकारिता ऋण देने वाला मध्यप्रदेष, देष का पहला राज्य है। वर्ष 2003–04 में कृषकों को 16 प्रतिषत ब्याज दर पर रू. 1273.98 करोड़ का फसल ऋण वितरित किया गया वहीं वर्ष 2013–14 में शून्य प्रतिषत ब्याज रू. 12000.00 करोड़ के लक्ष्य अभी तक रू. 11490.71 करोड़ फसल ऋण का वितरण किया जा चुका है।

राज्य शासन के निर्णयानुसार वर्ष 2012–13 से राषि रू. 3.00 लाख तक के फसल ऋण समय पर अदा करने वाले कृषकों को 0 प्रतिषत ब्याज दर पर पैक्स के माध्यम से उपलब्ध कराया जा रहा है। इस हेतु राज्य शासन द्वारा 6 प्रतिषत एवं केन्द्र शासन द्वारा 5 प्रतिषत ब्याज अनुदान उपलब्ध कराया जा रहा है। वर्ष 2015–16 में राज्य शासन से राषि रू. 871.97 करोड़ का ब्याज अनुदान प्राप्त कर प्रदेष के प्राथमिक कृषि साख सहकारी समितियों को उपलब्ध कराया गया है।

निवेश ऋणों के अंतर्गत गुणात्मक वित्तपोषण को बढ़ावा देने के उद्देष्य से अपेक्स बैंक द्वारा राष्ट्रीय बैंक (नाबार्ड) की योजनाबद्व वित्तपोषण सुविधा के अंतर्गत जिला सहकारी केन्द्रीय बैंकों एवं प्राथमिक सहकारी समितियों के माध्यम से प्रक्षेत्र मषीनीकरण, पशुपालन (डेयरी), एग्रीक्लिनिक एवं एग्रीबिजनेस केन्द्रों, औषद्यीय एवं सुगंधीय पौधों की खेती, वर्षा जलसंग्रहण, मुर्ग्रीपालन, मत्स्यपालन, लघुसिचाई, बायोगैस, उद्यानिकी, प्रक्षेत्र वानिकी आदि उद्देष्यों हेतु ऋण सुविधा उपलब्ध कराई जा रही है। वर्ष 2015–16 में इस कार्यक्रम के अंतर्गत विभिन्न जिला सहकारी बैंकों द्वारा 2497 लाभार्थियों के लिये राषि रू. 1539.65 लाख की वित्तीय सहायता स्वीकृत की गई है। उसके अंतर्गत आधार साख के रूप में कृषि यंत्रीकरण हेतु रू. 130. 87 लाख, दुग्ध विकास हेतु रू. 776.26 लाख, मत्स्यपालन हेतु रू. 132.94 लाख लघुसिंचाई हेतु रू. 219.54 लाख एवं अन्य उद्देष्यों हेतु रू. 280.04 लाख की ऋण स्वीकृति हितग्रहियों को प्रदान की गई है।

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[5] वार्षिक प्रतिवेदन, 2015–16, मध्यप्रदेष राज्य सहकारी बैंक, मर्यादित

वर्ष 2016–17 में प्रदेष के 38 जिला सहकारी बैंकों हेतु योजनाबद्ध वित्तपोषण कार्यक्रम के अंतर्गत विविध कृषि प्रयाजनों के लिये राषि रू. 15000.00 लाख के वित्तपोषण का एक महत्वाकांक्षी कार्यक्रम तैयार किया गया है। इसके अतिरिक्त कुछ अन्य योजनाओं और कार्यक्रमों को प्रारंभ किया गया जो इस प्रकार है–

- साख विस्तार कार्यक्रम
- बहुउद्देषीय सेवा केन्द्र योजना
- ऋण परामर्ष केन्द्र।
- वित्तीय साक्षरता केन्द्र।
- कोर बैंकिंग साल्युषन्स।
- उर्वरक नगद साख सीमा।
- सहकारी बैंकों द्वारा बैंकिंग रेग्यूलेषन एक्ट का पालन।
- सहकारी बैंकों को बैंकिंग लायसेंस की प्राप्ति।
- आभूषणों के तारण पर ऋण।
- कृषि आधारित सहकारी औद्योगिक इकाईयों की स्थापना हेतु वित्त प्रदान करना।
- बुनकर एवं औद्योगिक सहकारी समितियों को वित्त प्रदान करना।
- विभिन्न कृषि उपजों की खरीदी एवं विपणन हेतु साख सीमायें।
- मौसमी कृषि उत्पादन हेतु अल्पकालीन ऋण।
- सार्वजनिक वितरण प्रणाली हेतु वित्तीय सहायता।

- अन्य फसलों हेतु अल्पकालीन साख सीमा
- पुनः परिवर्तन ऋण
- मुख्यमंत्री कृषक सहकारी ऋण सहायता योजना
- अकृषि वित्त प्रदान किया
- रासायनिक खाद के वितरण हेतु वित्त प्रदान किया
- शीर्ष बैंक शाखाओं के माध्यम से व्यक्तिगत ऋण ग्रहिताओं को सीधे ऋण प्रदान करना
- योजनाबद्ध वित्तपोषण कार्यक्रम

समस्याएं–

- इन बैंकों द्वारा बनाई जाने वाली ऋण नीति, ऋण प्रक्रिया एवं विधि में अनेकों दोष विद्यमान है जिसके कारण लघु एवं सीमांत कृषकों को उपेक्षा का षिकार होना पड रहा है।

- संभाग में कृषि वित्त की मांग के संबध में इन बैंकों द्वारा जो पूर्वानुमान लगाया जाता है, वह सही नहीं होता है । और बैंकों द्वारा वितरित ऋणों में अनियमितता पायी जाती है।
- सहकारी बैंकों एवं उनकी शाखाओं की सम्पत्ति में तरलता का अभाव पाया जाता है।
- इन बैंकों में राजनीतिक दबाव हावी रहता है , जिससे बैंकों के संचालन में कठिनाई आती है।
- प्रबंध संबधी दोष भी विद्यमान है जैसे – लाल फीताशाही, समय पाबंदी का अभाव, उत्तरदायित्व लेने की कमी आदि।
- बैंको द्वारा दिये गये ऋणों की वसूली भी समय पर नहीं होती है।

❖ **सुझाव–**

- बैंकों को अपनी ऋण नीति एवं विधि संबधी सुधार करना चाहिए।
- बैंकों को अपनी विनियोग नीति को सुस्पष्ट करना चाहिए।
- साख एवं उत्पादन वृद्धि के मध्य संतुलन स्थापित किया जाना चाहिए।
- ऋण वसूली नीतियों में सुधार करना चाहिए।
- कार्य व्यवहार में सामाजिक उत्तरदायित्व का समावेष होना चाहिए।
- ऋण वसूली नीतियों में विषेष सुधार करना चाहिए।
- बैंकों के आंतरिक दोषों में सुधार करना चाहिए।

निष्कर्ष– किसी भी राष्ट्र की उन्नति एवं समृद्धि का सर्वश्रेष्ठ आधार सहकारिता है। यह कहावत भी प्रचलित है– **संघे शक्ति कलियुगे** इस युग में संगठन शक्ति ही सबसे महान है। जिला सहकारी केन्द्रीय **बैंक** व क्षेत्रीय ग्रामीण बैंक ग्रामीण साख की धुरी के रूप में कार्य करते है, इन बैंकों ने ग्रामवासियों को साहूकारों के चंगुल से निकालने में कई हद तक मदद की है। इन बैंकों के माध्यम से रोजगार आय और जीवन स्तर में वृद्धि हुई है, क्योंकि ये बैंक लोगो की आवष्यकता अनुसार वित्त पूर्ति करते है, जिसके कारण लोग अपना व्यवसाय , षिक्षा आदि कार्य सही समय पर पूरा कर पाते है और अपने लक्ष्य की प्राप्त करते हैं। म.प्र. राज्य सहकारी बैंक के माध्यम से प्रषिक्षण कार्यक्रम चलाकर प्रषिक्षित किया जाता है। आवष्यकतानुसार लोगों को ऋण संबंधी जानकारी देने के लिए जिला सहकारी केन्द्रीय बैंकों की प्रत्येक शाखा में ऋण परामर्ष केन्द्र की स्थापना की गई।

इस प्रकार हम कह सकते है कि म.प्र. राज्य सहकारी बैंक देष के आर्थिक विकास में अपना महत्वपूर्ण योगदान देता है, जरूरत है लोगों को इससे जुड़ी योजनाओं की जानकारी देने की। जिससे अधिक से अधिक लोगों को इसका लाभ प्राप्त हो सके।

❖ **संदर्भ ग्रथं सूची**

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- मध्यप्रदेष राज्य सहकारी संघ, भोपाल, प्रदेष में सहकारिता, उत्कृष्टता के साथ सतत् विकास।
- मध्यप्रदेष राज्य सहकारी बीज उत्पादक एवं विपणन संघ मर्यादित का 11वां वार्षिक प्रतिवेदन वर्ष 2015–16
- कुरूक्षेत्र ग्रामीण विकास को समर्पित।
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- www.ncdc.nic.in

HIV/AIDS, MALARIA AND OTHER COMMUNICABLE DISEASES: IMPLICATIONS TO EDUCATIONAL PLANNING

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Abstract

This was a desktop study which shows that HIV/AIDS, Malaria and other communicable diseases continue to ravage the education sector in Kenya and other developing countries. More particularly, the impact of malaria on children remains a serious obstacle to the achievement of many of the Millennium Development Goals (MDGs), including Goal 2 on attainment of universal primary education and Goal 4 that emphasize the reduction of infant mortality. The study argues that of preventable medical causes of absenteeism, malaria accounts for 13-50% of all school days missed thus affecting educational outcome.The literature reviewed shows that 10.2% and 9.7% of girls and boys, respectively held misconceptions about how HIV/AIDS can be avoided. Specifically, 24.1% of the girls and 15.5% of the boys thought that a healthy looking person cannot have the HIV/AIDS virus. It also shows that only 56% of young women aged between 15 and 19 and 45.8% of young men in the same age bracket reported they had never had sex implying high vulnerability.The study contends that children's learning has been affected by HIV/AIDS in many ways, as the pupils themselves are getting infected and some of them infect others. The attendance and performance in schools has also been affected making them dropping out of school while some are reported to have died due to suspected HIV/AIDS related causes. The teaching force has also been affected by HIV/AIDS as teachers' participation and performance in the learning process had been affected where some of the teachers have been infected and therefore are increasingly unavailable to the pupils.Among the recommendations is that pregnant women and children under five in high-transmission areas should be targeted for malaria control interventions, for free or subsidized ITNs and for appropriate effective treatment through maternal and child health services. Education planners and curriculum developers should

infuse in one of the subjects a topic on HIV/AIDS and management of Malaria and other diseases which impact on demand and supply of education based on a broader country approach.

Key words: HIV/AIDS, Malaria, impact, learning, education planning.

Introduction

Educational planning, as a strategic process for the improvement of teaching and learning, first appeared in the educational literature of the post-World War I era (Ornstein & Hunkins, 1988). Since that time, educational leaders have utilized several different approaches in designing programs to improve teaching and learning in light of changing societal factors (Hyman, 1973; Brandt, 2000).

Educational planning framework has effectively been utilized in the latter half of the twentieth century to improve teaching and learning. It was based on the premise that planning activities for the improvement of instruction should be designed to be cooperative, comprehensive, continuous and concrete (Krug, 1957). Planning for change, according to Krug, must not be done by individuals or small groups exclusively, but must be undertaken by large groups of stakeholders working in “cooperative” settings to develop implementation projects. The more people are involved in the problem analysis, the better, and more sustainable the solution. The planning process itself must be “comprehensive” and consider a vast array of real and potential intervening variables (people, things, and ideas) that may impact on the implementation of change. The planning process must be viewed as a “continuous” experience that may not have a specific “end-date.” There must be continuous monitoring and adjusting of the change itself as the context continues to change. The planning process must produce specific artifacts or events related to the changes in order for participants in the process to have “concrete” evidence that they can identify and celebrate as the outcomes of their collective efforts.

Contemporary educational leaders need to keep this twentieth century ‘four C’ planning model (cooperative, comprehensive, continuous and concrete) in mind to meet the everchanging educational landscape of the twenty-first century. Recent studies conducted on successful change efforts reinforce Krug’s planning orientation (Fullan, 2005). The sustainability of school reform efforts, according to Fullan, is related to, “. . . continuous improvement, adaptation, and collective problem solving in the face of complex challenges that keep rising" (Fullan, 2005, p.22). This planning perspective is, also, consistent with that advocated by strategic planners such as Kaufman, Herman, and Waters who stated that, "People are complex and so are the organizations they develop and to which they contribute. If we are not to dehumanize, oversimplify and artificially make our educational world linear and restricted, it is imperative that we develop strategic plans based upon the actual realities of our organization and society which are complex". (Kaufman, Herman & Waters, 2002, p. 109)

The Millenium Development Goals of education; Goal 1: To eradicate extreme poverty and hunger, this involves helping the people living on less than one dollar per day and those who suffer from hunger. It was also observed that poverty threatens children's rights to survival, health and nutrition, education, protection, among others, and this could indeed be one of the biggest challenges in Africa and a major impediment to education in particular and service delivery in general, Goal 2: Achieve Universal Primary Education (UPE) - there are over 100 million children who do not have access to basic formal education, majority of them are found in Africa with over two thirds of these being girls. Other vulnerable groups include the poor and disadvantaged, and Goal 6: Combat HIV/AIDS, Malaria and other diseases: This reflects on the number of children and adults affected in one way or another scourge of HIV/AIDS, Malaria and other diseases. Certainly in Africa, the number is in millions. No nation can produce or develop unless its members are healthy physically and mentally. These are some of the goals that serve the Education planners with guidelines they need to consider when planning for Education in the country.

Education systems can address some of these challenges, and educators need to carefully consider which academic and intellectual interventions can lead to improvements in interfaith and intercultural understanding. Schools and higher education institutions also need to devise appropriate policies to deal with the range of problems faced by social systems in diverse communities. Such policies should be accompanied by practices to improve the safety and security of the learners and teachers in institutions and in their communities. This process must be part of far broader public policy measures to obviate some of the current crises that have led societies. Most of these are influenced by the changes and initiatives caused by modern trends and innovations in Education, Science and Technology, the spread and Influence of Information and Communication Technologies, among others. At the same time, many societies, like those in Africa, experience widespread poverty, inadequate funding and facilitation in education, health, infrastructure and other related areas. Similarly, civil strife, political turbulence and sociocultural issues also impact strongly on the modern world. In the area of education, the above phenomena influence elements of access, quality, equity and relevance in education.

Katarina Tomasevski, former UN Rapporteur for the Right to Education, says that, in Education planning:

"The challenge […] is to integrate all human rights dimensions of education into educational settings and monitoring schemes. This requires real life problems to be identified, questions which they pose to be openly addressed, and solutions sought through comparative research."

The Education Sector has therefore recognized the importance of health to school children. The child friendly schools of UNICEF, the health promoting schools of WHO and the International School Health Initiative of the World Bank, are all part of the global efforts to improve educational outcomes and access, as defined in the Education for All initiative taken forward by UNESCO. Therefore school health programmes aim to improve learning and educational outcomes through enhanced health and nutrition. However, education planners have paid relatively little attention to children's health and nutritional status despite the everyday observations of many teachers and parents about the importance of ill health and malnutrition for absenteeism and inattention.

Over two decades since the first AIDS case was described in Kenya, HIV/AIDS still remains a huge problem for the country in its efforts for social and economic development. Responses to the pandemic have evolved over time as people became aware of this new disease, as they experienced illness and death among family members. Services have been developed to confront this epidemic. Initially many segments of society expressed denial of the disease and early in the epidemic in Kenya, political commitment was limited. While awareness of HIV/AIDS has been nearly universal for more than a decade, misconceptions still abound and many still have not dealt with this disease at a personal or community level. Malaria has links to other diseases as Malariaendemic countries are also plagued by diseases such as tuberculosis, polio, cholera and HIV/AIDS. These diseases have a cumulative effect, with one reducing a person's ability to cope with another. HIV/AIDS sufferers are at a higher risk of malaria morbidity and malaria reduces the survival rate from AIDS. Vertical, un-integrated, disease-specific intervention programmes have exacerbated the problem as they do not allow for the overarching aim of achieving universal coverage of malaria control interventions.

Malaria is important to school children for the health sector in Africa as the priority age group is younger than school age. For the education sector in Africa, malaria is of substantial importance with regards to early child Development Programmes. Malaria can have a devastating effect on children's education. Repeated infections cause children to miss large periods of school and anemia, a side-effect of frequent malaria attacks, interferes with children's ability to concentrate and learn and causes chronic fatigue. Repeated illnesses from malaria can also exacerbate any malnutrition, which can both decrease the effectiveness of anti-malaria drugs and increase children's susceptibility to the other main killer diseases: diarrhea and pneumonia. The impact of malaria on children remains a serious obstacle to the achievement of many of the Millennium Development Goals (MDGs), including Goal 2 (universal primary education) and Goal 4 (the reduction of infant mortality). In terms of impact on educational outcomes, malaria accounts for <3% - 8% of all reasons for absenteeism. Of preventable medical causes of absenteeism, malaria accounts for 13-50% of all school days missed (in Kenya for example, an estimated 1-6 million schooldays are lost due to malaria). The evidence also suggests that brain insult, as a consequence of cerebral malaria in early childhood, may have an effect on a child's cognitive and learning ability: residual neurological sequalae may hinder the developmental progress of 1% - 5% of children infected early in life.

The cost of malaria to Africa is estimated at $12.5 billion per year, which represents 1.3 percent of affected countries economic growth (GDP). In some countries, malaria accounts for up to 40 percent of total health expenditure and 20-50 percent of hospital admissions. Funding for malaria control has increased dramatically in recent years, from $592 million in 2006 to over $1 billion in 2008, and $1.7 billion in 2009. The Roll Back Malaria Partnership estimates $5.2-$6 billion a year will be required to achieve Global Malaria Action Plan targets for 2015. The current global recession is likely to decrease aid spending making funding for malaria uncertain. The estimated cost to support the prevention of HIV/AIDS in schools and institutions will be KShs 1.8 billion in 5-year period.

Statistics of HIV and AIDS, Malaria and other Communicable Diseases

In Africa malaria is the biggest killer of children under five years old, who account for with nearly 90 percent of all malaria deaths. This analysis indicated that, in areas of stable transmission, malaria is most common and severe in children younger than school-age, but remains an important cause of mortality (10-20% of all causes of mortality) and morbidity in schoolchildren. It is estimated that a child dies every 45 seconds from the disease. In infants this is because their immune systems are not yet fully developed while those aged five years and below, have not yet developed effective resistance to the disease. Moreover, in areas of low, unstable transmission, schoolchildren may be at greater risk of severe and fatal consequences of infection, due to the slow buildup of exposure-driven immunity.

In a survey of 1,827 girls and 805 boys aged between 15 and 19, 24.9% of the girls and 15.8 of the boys did not know any way of avoiding HIV/AIDS. In the same survey, 10.2% and 9.7% of girls and boys, respectively held misconceptions about how HIV/AIDS can be avoided. Specifically, 24.1% of the girls and 15.5% of the boys thought that a healthy looking person cannot have the HIV/AIDS virus. Studies also show that young people in Kenya are sexually active at an early age. According to the KDHS, only 56% of young women aged between 15 and 19 and 45.8% of young men in the same age bracket reported they had never had sex. The survey also showed that 17% of the young women sampled were already mothers while another 4% were pregnant at the time of the survey.

The number of people living with HIV/AIDS in Kenya includes about 1.1 million adults between 15 and 49 years, another 60,000 are ages 50 years and over and approximately 120,000 children. Urban populations have higher adult HIV/AIDS prevalence (10%) compared with rural populations (6%). Regional variation is significant—prevalence in Nyanza Province is 15% in adults and 10% in Nairobi. Adult prevalence in other provinces ranges around 5%, with the exception of North Eastern Province, where prevalence is less than 1%; it is the only region of the country where the epidemic is lowlevel. New infections in young women have significantly declined in the last 5 years, as evidenced by its decline in pregnant women under age 25. But HIV/AIDS prevalence in girls 15 to 19 years old is 6 times higher than in boys in the same age group, despite lower levels of sexual activity, and the rates in pregnant teens are even higher. Protecting teenage girls and young women remains a great challenge for controlling HIV/AIDS infection in Kenya. The number of TB cases has been rising rapidly, because of the spread of HIV infection (MOH, 2005)

Current on-going programmes/initiatives of HIV/AIDS, Malaria and other diseases

The Ministry of Health instituted an AIDS Control Committee in 1987, when it developed the first 5-year strategic plan for AIDS control (1987–1991). The second plan was for the period 1992–1996. The Sessional Paper No. 4 of 1997 on AIDS in Kenya marked an important change on the political front and outlined a new institutional framework. With the creation of the National AIDS Control Council, AIDS Control Units (ACUs) were put in place in all the ministries where the disastrous effects of HIV/AIDS had been felt the most and where it was anticipated that interventions would have the greatest beneficial effect. Increased public political commitment was evidenced in 1999 when the second President of Kenya declared AIDS a national disaster (MOH, 2005).

Greater international and national commitment to address HIV and AIDS throughout the world has been seen through the United Nations General Assembly Special Session on AIDS (UNGASS), the Abuja Declaration, and the Millennium Development Goals. This commitment has led to greatly increased resources and international support, including the World Bank Multi-country AIDS Project (MAP), the Global Fund for AIDS, Tuberculosis and Malaria (GFATM), the US President's Emergency Plan for AIDS Relief (PEPFAR), and other substantial bilateral, multilateral and charitable efforts. The WHO 3 by 5 Initiative—to place 3 million people on antiretroviral therapy (ART) by the end of 2005—has been a rallying cry for efforts to bring Africa and developing countries around the world into the treatment era for HIV and AIDS. With these efforts and resources, the last 5 years have witnessed an increase in the number of stakeholders and partners whoare fighting HIV/AIDS in Kenya. The goodwill created by the high level of political commitment and the evidence of local support and action has resulted in an increased flow of resources into the country's national HIV/AIDS programmes. But increases in funding and the number of people and organizations involved have also increased challenges in coordination to maximize efficiency and to minimize wastage and duplication of effort.(MOH, 2005)

Organizations such as Kenya Alliance for the Advocacy of Children's Rights (KAACR), Christian Children's Fund (CCF), ACTION-AID Kenya, and PLAN International have launched awareness projects that target children and adults. However, the tendency for NGOs to focus more on privileged groups of children such as those in schools excludes disadvantaged and vulnerable children. Many programmes are already moving towards free or highly subsidized malaria prevention and treatment. The government recognizes that reaching young people with information on HIV/AIDS is an important step in dealing with the problem (MOH, 1997; 1999). Although studies have assessed children's awareness of HIV/AIDS (KIE, 1994; Kiiti, Portzback, Gaturo, Wanga, 1995; Mukarebe& Morgan, 1995, KDHS, 1999), their main focus has been on adolescents, a factor that may explain the tendency for HIV/AIDS awareness campaigns to target adolescents. In most traditional African societies, parents played a minimal role in educating children on sexuality. This task was left to selected elderly women and men, grandparents, and persons who acted as guardians to initiates (Njau, undated). Parents continue to play a minimal role in contemporary Kenyan society has not changed. Previous studies (AMREF, 1998; KDHS, 1999) found that children and youth are exposed to information about sexuality mainly through their peers, teachers, mass media, and other social networks.

The MOES&T has been implementing a successful school-based HIV education and behaviour change intervention in its primary schools since 1999: the Primary School Action for Better Health (PSABH). This intervention reached 2,000 schools during its pilot phases and it is now being extended to 5,000 primary schools during the period between July2004 and June 2005. This intervention has also involved the Teacher Training Colleges (TTCs) and it has been applied in small groups of secondary schools. An extensive monitoring, evaluation and research component of this project has shown impact in four key areas since PSABH (Primary School Action for Better Health) is effective in getting HIV/AIDS programs into schools and schools are receptive to PSABH training and programs. Teachers and schools readily accept and teach components of the PSABH program that fit with cultural norms (that is, abstinence and strategies for abstinence) and are developing effective strategies for teaching components regarding information concerning condom use, which does not fit well with local cultural norms and, Pupils' knowledge, attitudes, beliefs and behaviors (delayed sexual initiation and increased condom use) related to HIV transmission are positively affected by PSABH. The KIE has developed series of textbooks on HIV/AIDS and life skills and living values. Teachers have also been orientated in the use of these materials in the classroom.

The MOES&T aims to protect the education infrastructure against the impact of HIV/AIDS and to maximize its potential to both prevent further infection and mitigate against the most damaging effects of the HIV/AIDS pandemic. The main strategies are to maximize the potential strengths of education institutions in all sectors to help prevent new infections by extending evidence-based initiatives to the widest scale possible, whilst maintaining effectiveness. The ministry also intends to utilize existing training capacity and teaching and learning resources strategically and cost-effectively and protect, care and provide support to the most vulnerable, including orphans, girls, those out of school and those with special needs in education. By leading others in developing strong multisectoral partnerships, they will mobilize education service providers to implement the HIV/AIDS policy to the full and in conjunction with other sectors strengthen and extend the response to the prevention and care needs of education service providers.

The overall programme goal of the HIV/AIDS investment programme is to strengthen the MOES&Ts capacity to provide HIV/AIDS prevention, care, and support and mitigation programs. The ministry has proposed prevention - in-service in primary schools; inservice in secondary schools and sub sectors; peer supporter initiatives in TTCs and technical institutions; orientation on KIE materials; provision of teaching and learning materials in sub sectors and provision of school health club activity kit. Care and support in terms of financial support to orphans; extended families support; apprenticeship scheme for child heads of families; big brother/sister mentoring; video shows on abuse, stigma, discrimination, harassment, sexual abuse, drug dependency, barriers to inclusion, retention and transition will also be provided. Workplace issues by strengthening establishment of Teachers Living with HIV/AIDS (TLWHA) networks, video on implementing the education sector policy on HIV/AIDS in the workplace and revision and distribution of guide on regulations and management of response by strengthening ACUs and supporting university ACUs in HIV/AIDS and drug dependency initiatives have also been proposed.

The MOES&Ts objectives as a prevention strategy hopes to reduce the rate of new HIV infections by empowering education service providers and learners in educational institutions and to initiate and support the mobilization of communities in their response to the pandemic. At the primary school level by June 2005 approximately 7,000 primary schools received the intervention and of these, approximately 2,250 received a peer supporter component for their pupils. The PSABH model has expanded to reach most of the primary schools and a refresher program has continued. About 1,000 schools receive a peer supporter component each year. At the secondary school level; the baseline situation in June 2005 was that approximately 250 secondary schools receive the intervention as a peer supporter component only for their pupils. Similar intervention implemented in 1,000 schools per annum for five years both at the adult and the peer supporter levels and behaviour change initiative implemented in 1,000 centers of teaching and learning in other sub sectors, as they reach appropriate levels of preparedness.

At the TTCs and technical institutions; the baseline situation by June 2005 was that each of the 28 TTCs receives some training for two tutors and some will have responded to this training by incorporating it in their teacher training and by encouraging peer support groups among the teacher trainees. About 50 tutors in each of 69 institutions trained and these institutions provided with a start-up fund to establish peer support groups. Start up fund fully planned for and implementation monitored in 69institutions including 28 TTCs, 4 polytechnics, 17 technical institutes and 20 vocational training centres. Another investment strategy will be orientation and adoption of materials produced by KIE for the use in education and training sector. Teaching notes generated on how best to use existing materials in different teaching institutions were to be developed and printed as well as audio versions of existing materials produced to support access by poorly resourced areas and those with special needs in education. In addition, teaching and learning materials were to be developed, adapted and printed to support the prevention of HIV infection in all sub sectors while at the same time, school health club kit were to be printed and disseminated to support schools in running clubs that address skills relating to the prevention and the response to HIV/AIDS. Multiple copies were to be produced and distributed to all the primary schools.

The management of this component was to be done by the various units and departments within and outside MOES&T. However, the ACU and KIE were to play the key role, especially the development, adoption, printing, dissemination and distribution of teaching and learning materials related to HIV/AIDS. This was to ensure that the materials reach the intended targets and thus prevent and reduce the spread of HIV/AIDS in schools and institutions.

Impact and challenges of HIV AND AIDS, Malaria and other communicable diseases to educational planning

A study on the impact of HIV/AIDS on Education in Kenya (UNICEF, 2000) show that HIV/AIDS has had wide spread effects on children's learning experiences. Children living in a world of AIDS experience many challenges. As parents, guardians and members of communities increasingly become infected by HIV/AIDS and eventually succumb to diseases, children are increasingly lacking basic needs such as food, clothing, shelter, health and even education. Children are now becoming subject to many psychosocio impacts of HIV/AIDS such as stigma, fear, worry, depression and hopelessness. All these impact negatively on their learning and development.

Households headed by the elderly and women, who already live below the poverty line, stretch their meager resources even further to accommodate additional children and there is an increasing number of households that are headed by children who struggle to survive. In the highly affected districts of Nyanza, Western and Central Provinces, the heavy orphan burden is diminishing development prospects, reducing school enrolment and increasing social instability, including rising numbers of working children. The challenge lies in coordinating a response to the needs of orphans and other vulnerable children. This will require multi-sectoral cooperation and partnerships as the needs stretch across many different areas. Schools have played a key role in identifying orphans, both in and out of school, and liaising with other sectors to mobilize a response to the specific needs of individuals or groups of orphans. The overall goal is to enroll and retain all school-aged children in an appropriate learning institution.(MOH, 2001)

Children's learning has been affected by HIV/AIDS in many ways, as the pupils themselves are getting infected and some of them infect others. The attendance and performance in schools has also been affected making them dropping out of school while some were reported to have died due to suspected HIV/AIDS related causes. All these are compounded by pupils' lack of love and guidance as well as material support as parents and guardians also get infected by HIV/AIDS. The teaching force has also been affected by HIV/AIDS as teachers' participation and performance in the learning process had been affected where some of the teachers have been infected and therefore are increasingly unavailable to the pupils. Pupils reported that they feared being taught by infected teachers. Teachers' participation in school is also being compromised by HIV/AIDS related commitments in the community. Teachers were also reported to be dying from HIV/AIDS related causes and they are not being replaced hence are lost to the educational system. The results of the study also indicate that the resources available to support education have increasingly been diverted to meet HIV/AIDS related needs.

A research was carried out for the Government of Kenya (GOK) and UNICEF Kenya Country Office (KCO) in response to the concern that the HIV/AIDS epidemic was posing a challenge to education and that the epidemic was resulting in significant changes in the economic, social, cultural and health environments in which education systems operate. The epidemic has also had major sectoral impacts in terms of the demand for education, the supply of education in terms of the supply of teachers and other educational personnel, the rates of retention, performance and completion within the formal education system, rates of retention, performance and completion within the formal education system, the costs of providing education, the planning and management of the educational system, the process of education, and the content process and quality of education. Education systems have a central role to play in responding to the epidemic. The epidemic is providing opportunities that challenge education systems to initiate reforms, and is stimulating them to move in directions that in themselves are good and desirable. The study also looked at the role of education in national development and sought information about the impact of educational interventions on reducing the progress of the HIV/AIDS pandemic in Kenya.

The implications of HIV AND AIDS, Malaria and other communicable diseases to demand for education

Many developing countries are still struggling to meet the EFA goal of providing basic education for all. The impact on the population size of the country by HIV/AIDS epidemic has been seen to reduce the demand for education in Kenya as the numbers of school age children become fewer. Fewer children will be born and some who are born will die young because of the HIV virus transmitted to them by their parents. HIV and AIDS make the achievement of EFA goals more difficult because children from affected families may not be able to make use of the available opportunities for schooling because they have fewer resources available for schooling to meet school-related costs. Several countries have introduced free primary education, but those attending school continue to bear some costs such as parent-teacher association levies, or the cost of a school uniform and educational materials or supplies that must be provided for the school. There is also an opportunity cost for those attending school – a cost that may be so significant that it will prevent those from poor households from attending school leading to dependence on child labour. HIV/AIDS has greatly increased these opportunity costs, especially for girls. These circumstances lead to non-attendance at school by children, highly irregular, 'stopstart' school attendance and non-completion of school.

HIV/AIDS has also made children not to have access to sustained basic learning opportunities depriving them of their human right to education as stipulated in MDG'S goal number 1, 2 and 6. Education for All in the context of HIV/AIDS shows that children are denied the protection against HIV infection that a school education can provide. In particular, girls are taken out of school more often than boys to help care for sick family members, or to help make up for lost family income.HIV/AIDS also changes the character of the school age population. Most importantly, it is causing a considerable rise in the number of orphans in the country who may not afford education who also live in child-headed households without basic needs. In addition to stigma, orphans have to overcome many barriers if they are to continue schooling. Stigma and prejudice lead to social isolation. About two thirds of children born to HIV positive mothers do not contract the virus and hence have the potential to grow up as any other child. Evidence suggest that AIDS orphans are more likely to die from preventable disease because of the mistaken belief that their illness must be due to AIDS, and that medial help is thus pointless (UNAIDS 1997).

Where malaria is highly endemic, adults generally develop partial immunity to the symptoms of the disease. Young children, however, bear a considerable burden in terms of malaria morbidity and mortality. Although this morbidity is most concentrated among pre-school children, school-age children also suffer the effects, resulting in school absenteeism. For example, in Kenya it was found that primary school students miss 11% of school days per year because of malaria, and secondary school students miss 4.3% of school days. Another study attributed 13–50% of medically related school absences to the disease. The adverse effects on schooling are likely to go far beyond the number of days lost per year, as absenteeism increases failure rates, repetition of school years, and dropout rates. An even more severe consequence can arise from the impact of malaria on cognitive development and learning ability. Although there is some debate about the direct relationship between malaria and mental functioning, a number of channels have been identified through which malaria can affect cognitive abilities in ways ranging from subtle to profound. For example, children with malaria are found to have poorer nutritional status than non-malarial children, an outcome that can impair brain development. In at least one area of cognitive development, the performance of fine motor functions, it has been found that parasitaemic children perform worse than nonparasitaemic children.

The Implications of HIV AND AIDS, Malaria and other communicable diseases to quality and supply for education

HIV and AIDS make it more difficult for an education system to ensure that there is a teacher in every class because teachers and other educators are dying in increasing numbers and at comparatively young ages, and it takes time before they can be replaced. In some other cases teachers who are ill are often unavoidably absent, and there is nobody to take over the affected classes.. Household sicknesses, family and community funerals are leading to increases in teacher absenteeism. The rural posting of teachers is becoming more difficult because teachers who know they are HIV positive want to be posted near health facilities, most of which tend to be in towns or at the larger administrative centres and teachers leave teaching to take up employment (often more lucrative) in other areas where AIDS has created vacancies. Teachers are also dying from HIV/AIDS while others are too sick to work thus denying the sector vital skilled human resources.(MOH, 2005). The trend at which teachers are dying due to HIV/AIDS infection in Kenya is worrying. In 2002, Kenya lost about 6,205 teachers to the HIV/AIDS scourge. In 2005, estimated 15,000 teachers died of AIDS-related causes. Four to ten teachers die in most districts countrywide every month due to the infection. In sub-Saharan Africa, teacher attrition from AIDS is estimated to be highest in Kenya (25,000), Nigeria (22,100), South Africa (44,900), Uganda (14,900), and Zimbabwe (16,200) (Terry and Mumukshu, 2007).

However, teachers are not the only ones affected because the epidemic affects personnel in other parts of the education system in similar ways. HIV prevalence among managers, planners, professional staff and support staff is likely to be as high as in comparable groups in the general population. The effects mount up to a severe depletion in the social capital available to the system – the norms, networks, institutional memories, understandings and working arrangements that sustain its smooth functioning and make it possible for it to maintain its daily operations. Deprived of this social capital, systemic ability to address the difficulties experienced in schools is weakened. Simultaneously, the problem of addressing its internal needs becomes of greater concern to the system, thereby further constraining its ability to respond to what is happening in schools and institutions.

Cost is an important factor in the supply of education. The HIV/AIDS epidemic affects the costs of education in various ways. The government has to spend on additional training and posting for replacement of teachers and other staff, payments of salaries to absent or sick personnel and the loss of the training costs invested in teachers and students who die young. There are also frequent payments of death and funeral benefits leading to premature payment of terminal benefits to teaching and non-teaching staff in educational institutions. The government also incurs costs of ensuring orphans' and other vulnerable children access education and teacher training in the relatively new curriculum area of HIV/AIDS preventive education, and the development and dissemination of the necessary materials. Additional management costs for the establishment of HIV/AIDS units or AIDS-in-the-workplace training programmes have also been availed and this has reduced the finances which could have otherwise been utilized for improvement of education in schools.

Time is a further factor in ensuring that the supply of education responds to known and envisaged needs. The educational managers are being required to give an increasing proportion of their time to responding to HIV/AIDS activities. Sometimes this may take them away from their other duties for prolonged periods as they participate in training sessions or workshops. In addition, HIV/AIDS make demands on their time through additional meetings, preparation for and follow-up of such meetings, epidemic-related paperwork, and responding to the concerns of colleagues who are infected and affected by the epidemic. Relentlessly, the epidemic increases their burdens and jams up systemic capacity to address both ongoing and new issues.

Schools, particularly those in rural areas, look to their communities to provide labour and inputs for school maintenance and development. The epidemic is reducing community capacity to do so. Because of the loss of community members to HIV/AIDS, those who are not infected find that they must give more time to maintaining their own levels of production, working on behalf of those who are ill, or assisting the families of those who have died. They no longer have time to participate in usual self-help activities for the benefit of the school. Illness and deaths among the administrative staff at national, regional and local level will negatively affect the system's ability to plan, manage and implement policies and programs, and will further distract the planning and managing of educational resources e.g. the projection and planning of future teacher deployment, management and planning of future teacher deployment, management and recruitment will be extremely difficult. The loss of trained and experienced teachers and interruption of teaching programmes due to illness will reduce the quality of educated.

The implications of HIV and AIDS, Malaria and other communicable diseases to education and national development

HIV/AIDS will also affect the process and content of education in Kenya. The seriousness of HIV/AIDS means that it needs to be integrated into curriculum for students throughout the country. A study by Armour-Thomas et al (1989), found that teacher qualification accounted for more than 90 of the variation in student achievement in mathematics and reading across the grade levels. The loss of the most qualified and experienced teachers represent a serious threat to the quality of education. An important challenge for HIV/ADIS awareness is how to reach as many people as possible, as soon as possible with relevant and correct information so as to help curb the menace, through positive behaviour change. Productivity by teachers can also be reduced and staff turnover increased by illness-related to absenteeism and children's education severely disrupted. Rural and poor populations carry the overwhelming burden of malaria because access to effective treatment is extremely limited. In rural areas, infection rates are highest during the rainy season - a time of intense agricultural activity. Research indicates families affected by malaria harvest 60 percent less crops than other families

Where malaria prospers most, human societies have prospered least. The global distribution of per-capita gross domestic product shows a striking correlation between malaria and poverty, and malaria-endemic countries also have lower rates of economic growth. There are multiple channels by which malaria impedes development, including effects on fertility, population growth, saving and investment, worker productivity, absenteeism, premature mortality and medical costs. The Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) prevalence rate among adults is high in Kenya, after rising to about 14 percent in 2000; it is currently estimated at below 9 percent. The increased mortality rate of adults has contributed to slow economic growth and an increased dependency ratio among the population. This continues to adversely affect all sectors of the economy. Human capital constitutes a key factor in economic growth. Modern economic theories have posited that returns to human capital are in fact increasing in scale, with the total impact on economic growth being greater than the sum of the individual contributions. The impact of malaria on economic growth rates through the mechanism of depressing the rate of human capital accumulation could be considerable. Although there have been some estimations of the loss of educational investment expenditures as a result of lost school days, the overall impact of malaria on human capital development in children remains largely unexplored and un-quantified.

The indirect effects of malaria can begin even before birth. As mentioned earlier, pregnant women are at a higher risk of malaria infection, and malarial pregnancy can result in miscarriages, neonatal and infant mortality, low birth weight and congenital infection. Acute and chronic malaria infections can alter the immune system and the body's response to vaccines, and increase vulnerability to other infections. Furthermore, chronic malaria is an important causal factor in anaemia, which has been shown to have direct physical effects, lowering worker productivity and output. Malaria is also associated with hyper-reactive malarial splenomegaly, chronic renal damage and the nephrotic syndrome, and Burkitt's lymphoma. Increasingly, malaria is becoming a factor in the transmission of human immunodeficiency virus (HIV), the virus that causes AIDS, as children with severe malaria often require blood transfusions, and much of the blood supply in sub-Saharan African countries is infected with HIV. To the extent that malaria is a factor in other illnesses, any assessment of the economic burden of malaria should include the range of costs that are associated with these illnesses.

More generally, reducing malaria transmission, and other communicable diseases, in low-income settings may well prove to be among the most effective available spur to overall economic development. Despite the enormous potential benefits of antimalarialprogrammes, the level of international spending on malaria control in poor regions has been dismal. While current spending has been running at less than US$100 million per year, actual needs are more than an order of magnitude greater. Detailed costing estimates prepared by the World Health Organization (WHO) Commission on Macroeconomics and Health find that effective malaria prevention and treatment will require an additional US$2.5 billion per year as of 2007, increasing to US$4 billion per year as of 2015. The cost of malaria to Africa is estimated at $12.5 billion per year, which represents 1.3 percent of affected countries economic growth (GDP). In some countries, malaria accounts for up to 40 percent of total health expenditure and 20-50 percent of hospital admissions.

In order to scale up the international effort on malaria control, the WHO and partner institutions have launched a campaign to 'Roll Back Malaria'. This important venture will probably be hampered in its mission as it is still considerably underfunded relative to the need for malaria control and the expected return on such investments in poorer countries. The newly announced Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria may finally deliver some succour, but even that fund remains grossly underfinanced at this point. Nevertheless, we should be optimistic that the new visibility for infectious disease symbolized by such programmes represents but the first step towards putting appropriate resources at the service of those fighting the global burden of this disease.

Conclusion

The Kenya government policy on HIV/AIDS is contained in the Sessional Paper No. 4 of 1997, which was approved on September 24th 1997. The policy framework was seen as a pre-requisite to effective leadership in efforts to combat the HIV/AIDS epidemic. The goal of the Sessional paper is to provide a policy framework within which AIDS prevention and control efforts will be undertaken for the next 15 years and beyond. This policy is operationalised through the establishment of a National Aids Control Council (NACC). While the policy paper addresses the plight of children in the face of threat of HIV/AIDS there is no mention of what the youth and children will do in this effort. History shows malaria control efforts must be sustained in order to be effective. But whether school health, hygiene and nutrition programmes should contribute to malaria control, and how they might do this, have not been fully explored.

The challenge now lies in expanding proven initiatives to national scale and in widening implementation into other sub sectors, particularly secondary schools and other kinds of specialized learning institutions which cater for the needs of primary and secondary aged children. Recent reports indicate that families and communities are in the first line of response to the pandemic. By 2001, 1.5 million Kenyans had died of HIV/AIDS, leaving over 1 million orphans, (1,700,000) with a doubling predicted by 2010. Families are struggling under the strain of HIV/AIDS, which is reducing their capacity to provide and care for children.

Education is an important tool, which may be used to stop the spread of HIV/AIDS. Pupils and community leaders called for the integration of HIV/AIDS education into the curriculum at all levels since as a result of education, children are able to take initiatives and look for more information about HIV/AIDS. However, there is a lot of information and messages children feel is not relevant to them, as they seemed targeted at adults. There seemed to be knowledge gaps and misconceptions about HIV/AIDS as pupils and students ask many basic and fundamental questions about HIV/AIDS. The recently launched education sector policy on HIV/AIDS (2004) forms an important basis for addressing the needs of education service providers who need support to be able to respond to appropriate prevention strategies for adults; their personal HIV status; the impacts of long-term illness in the workplace and the changing needs of pupils who are both infected and affected by HIV/AIDS. The challenge here lies in making this policy operational at all levels of the education system, from the school upwards.

Today in Kenya, the HIV epidemic is better understood. New information on the level of HIV infection comes from the first national HIV prevalence survey, the Kenya Demographic and Health Survey (KDHS, 2003), which estimated that 7% of adults age to 49 years in Kenya are infected with HIV and that rates in women are nearly double the rates in men. Annual sentinel surveillance at selected sites has demonstrated significant declines of HIV prevalence in pregnant women. Using these and other sources of information, prevalence of HIV infection in adults appears to have peaked at 10% in the late 1990s and has been declining in many parts of the country since then. Evidence to support these declines also comes from behavioural information, including from KDHS and the first national Behavioural Surveillance Survey (BSS).2

Children can be important agents for change. Health education through schools can help promote a community wide understanding of malaria and the need for control and can create a demand for health services (both private and public) to provide universal access to affordable and appropriate treatment. Skills based health education can promote the prevention of disease by encouraging the use of impregnated bed nets and the recognition of environmental risks. Schools can serve as the community focus for synchronised impregnation of bed nets. The adoption by children of lifelong healthy behaviours can, not only benefit the individual, but also the next generation of children. The management of treatment by and in schools appears an unaffordable and unattractive option. However, the promotion by schools of prompt and effective presumptive treatment provides an affordable option. Skills based health education can give children the ability to recognise the signs and symptoms of malaria, to recognise the need to seek treatment, and to differentiate symptomatic from curative treatment.

These education sector activities require an effective partnership with the health sector to achieve full impact. It is the health sector which retains overall responsibility for malaria control, and for the technical content of all advice and actions through schools. There is a particular need for consistent drug policies that promote universal access to affordable and appropriate treatment. A policy that was able to promote a single, readily recognizable "malaria treatment" that was readily available from multiple sources would greatly simplify the task of promoting prompt and effective presumptive treatment. In both Africa and Asia, malaria can be important for schoolchildren, and schools can indeed help to roll back malaria.

In rural areas where health services are a long distance from villages, the provision of community-based malaria treatment through home management of malaria will greatly increase access and the attendance of men and women for treatment and or testing for malaria. Education sessions should be developed alongside treatment, with messages targeted at different groups including mothers, pregnant women, men, fathers, male and female adolescents, and schoolchildren. These sessions could focus not only on early recognition of malaria, but also encourage prevention, more equitable household decision-making and the sharing of care giving activities. Researchers, programme managers and policy-makers working on malaria research, prevention and control need to be trained in gender analysis. Young men and women should be meaningfully involved in advocacy and education around malaria through participatory approaches such as peer education initiatives.

Recommendations

There are indications in some areas that women may not have full access to malaria prevention and treatment resources. Programme planners should determine if genderrelated barriers exist in their coverage areas and if so take steps to remove them. Pregnant women and children under five in high-transmission areas should be targeted for malaria control interventions, for free or subsidized ITNs and for appropriate effective treatment through maternal and child health services. However, in addition to targeting pregnant women and young children it is important that eligibility criteria must also ensure fair access for other vulnerable and disadvantaged groups (for example, people living with HIV/AIDS, orphan-headed households and widows). Malaria prevention in pregnancy using Intermittent Presumptive Treatment (IPT) and ITNs should be one of the packages delivered through antenatal care services.

Schools represent one of the longest standing institutions in Kenyan communities and form a widespread network reaching into some of the least accessible regions. Schools have particular features - their location is known, they are sustained within the community, their hours and mode of operation are known, they have established mechanisms for introduction of new programmesand accessing students, and the size of the target population is known. In addition, schools are linked to communities through families, and other community organizations, extending their reach and enhancing local ownership of interventions. Therefore the education planners and curriculum developers should infuse in one of the subjects a topic on HIV/AIDS and management of Malaria and other diseases which impact on demand and supply of education. The curriculum should be based on a broader country approach/framework which includes inter alia an emphasis on human rights, empowerment and sustainable development; social support, focusing on the most vulnerable groups; a protective and safe environment; and a teaching and learning environment for HIV and AIDS impact mitigation.

ACU units should be introduced in all the Universities (private and public), colleges, polytechnics, primary and secondary schools and all educational institutions to be managed by the Ministry of Education in conjunction with the Ministry of Health and any other organizations and programs involved in control of HIV/AIDS, malaria and other diseases which are affecting the education sector. The TSC should come up with a clear policy on teachers who are infected or affected with HIV/AIDS and their management so that the educational institutions should know how to handle them.

Where relevant, countries should immediately review their teacher development programmes so as to incorporate life skills and HIV and AIDS, and commence training without delay. Every teacher should be competent in life skills and HIV and AIDS education. Life skills and HIV and

AIDS must be integrated into the pre-service teacher development programmes. Advocacy and lobbying: trade unions and organisations representing teachers' interests (e.g. those living with HIV) need to be part of all strategic planning, meetings and implementation.

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CONVERSION OF USED TRANSPORT CONTAINERS INTO HOUSES FOR RESIDENTIAL AND SHOPS THROUGH INNOVATION AND CHANGING DYNAMICS OF BUSINESS FOR HUMAN RESOURCES EMPOWERMENT IN KENYA

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Abstract

The paper focuses on how Kenyans have converted the used transport containers into houses for rental and shops for business and commercial purposes. The problem is the used transport containers supposed to be disposed, are sold expensively by the merchants as compared to constructed permanent houses. The objective is to investigate why the merchants are selling the containers exorbitantly. The paper adopts observational method through analytical study of converted containers into houses for rental and shops in towns. The key findings are: the Kenyan Welders convertthe used transport containers into houses through innovation and lessened the cost of purchasing land and constructing houses; it is cheaper to convert a container into a house, within a day when the materials are available and start usingimmediately; containers are carried and located in available space within the region of preference. It is concluded the new technology through innovation is significant for human resource and societal empowerment so that alleviate the problem of house shortages for residential and shops for business enterprises in most towns in Kenya. It is recommended, merchants reduce the cost of the containers so that many people can have opportunity to purchase.

Key words: *Containers, empowerment Houses, Innovation, Shops*

Introduction to the study background

The technical knowledge and skills gained by the welders in Technical and Vocational Education Training Institutions (TVETIs) leads to innovation and development, in Kenya for transforming the society towards sustainable development.The introduction of technology is often cited as one of justifications for development of interactions between education and productive work in Africa. The justifications are based on increasing interest taken in the study of the impact of technology on all levels of the environment, on the appearance of new concepts such as those of alternative,intermediate,soft,appropriate and other technologies,and on the problems raised by the transfer (Carton,1984).as a matter of fact,historically and generally observed that economic development for example wealth accumulation and prosperity of any nation-state in the world has significant relationship with the level of technology towards industrialization within the state, such that the scientific and technological skills of the people are highly mobilized and directed to provide the necessary panacea to solving local problems and effectively exporting the excesses (Dauda,2000).

Definition of terminologies

Innovation is a term used in this the study to refer to both radical and incremental changes to changes in Information Communication Technology (ICT) products and process and technical skills applied in making things easier.in the university context, innovation is linked to performances, and growth through improvements in efficiency, quality competitive positioning market share, etc. (Wikipedia Encyclopedia). Technology refers to application of science especially to industrial and commercial objectives, or the whole body of methods and materials used to achieve such objectives in the conversion of used containers into houses for residential and shops for commercial purposes.UNESCO's definition of Technical and Vocational Education and Training (TVET) is: " a term referring to those aspects of the educational process involving, in addition to general education, the study of technologies related to sciences, and the acquisition of knowledge, practical skills, and attitude relating to occupations in various sectors of economic and social life" (UNESCO, 2005). However, according to Atchoarena, D. &Delluc, A. (2001) TVET is an education system which mainly leads the society to acquire the practical skills, knowhow and understanding not necessarily geared towards formal employment, but aimed at reducing unemployment.

As a country, Kenya hopes to be capable of providing high quality life for her citizens, if only the economy is technologically innovative (Some, 2012). There is no societal empowerment when there no sustainable development. Therefore, sustainable development is defined as development that meets people's needs without compromising those of future generations. This simple definition encompasses a complex dynamic that implicates values and value systems as well as interdisciplinary knowledge and experience, and stresses the interdependence of the environment, society and the economy (UNESCO, 2005). TVETS has enabled the conversion of used transport containers to houses through innovation into houses for rental residential and commercial purposes. The technological skills and knowledge gained has enabled the welders to be innovative and creative in their areas of specialization leading to societal empowerment. The conversion of used transport containers into houses has become a device for solving a problem of housing shortage problem in many towns in Kenya and other parts of the world.

The paper focuses on how Kenyans welders have converted the used transport containers into houses for rental and shops for business and commercial purposes. Transport containers refer to physical movement of people and commodities from one place to another by use of sealed containers by either train or Lorries. The containers are usually transported by road carriers, after unloaded from ships in the harbour, or rail wagons (Mwalo et al, 2004). Containerization is a system of intermodal freight transport using intermodal containers (Edmonds, 2017). Therefore, containers are standardized metal boxes of different sizes which Kenyan welders have changed into houses. Because of innovation, the used containers are converted into houses which used as shops for commercial purposes and residential rooms for rent.

Historical perspectives into the Origins of containers

In 1766 James Brindly designed the box boat "Starvationer" with ten wooden containers, to transport coal. Later in 1795,Benjamin Outrum promoted the horse drawn wheeled wagons on the gangway took the form of cotainers,which loaded with coal, could be transported from Canal Barges on the Derby canal (Ripley,1993).The first container appeared in America in 1955, when the brainchild of trucking company owner Malcolm McLean(Lewandowski,2014). For many years wondered how he could get the truck's entire cargo onto a ship as quickly as possible. When he started working with engineer Keith Tantlinger, the shipping container was born and in April 1956, the first container was loaded onto a converted World War II oil tanker, the SS Ideal X.it carried 58 containers on its maiden voyage from Port Newark to Houston in 1956.Malcolm McLean's dream was to achieve economies of scale by lifting a truck's entire trailer onto a ship onward transportation. "I just knew that if they picked up forty bales at once, it would be a lot cheaper than picking them up one at a time" (Malcolm McLean,1955). His prediction proved to be accurate beyond his wildest dreams. The new "intermodal" system saved an enormous amount of time and effort at the loading and unloading stage of cargo. And today in Kenya the used transport containers have be converted into houses saving time for construction a house, space and architectural designs and labour has been minimized.

Photograph 1.A transport containersnot yet converted into houses .Source, adopted by researcher from Google scholar (2019)

The statement of the problem

The problem is the used transport containers which are supposed to be disposed, are sold expensively by the merchants to be converted into houses as compared to constructed permanent houses. The common man cannot be able to buy and convert them in houses for residential and commercial purposes.

Objective of the study

The objective is investigated why the merchants are selling the containers exorbitantly.to study the benefits of converted containers into houses for rentals and commercial purposes. Study the role of Technical and Vocational Education Training Institutions (TVETIs) in societal empowerment.

Literature Review

The welders add ingredients of steel materials and glasses to convert the used container into complete house for use. This due to the fact that TVETIs have played a vital role in the social and economic development of a nation through growth of human capital, and by making structural changes that can improve the general population’s quality of life (Todaro 2011).Welding is the most significant joining technology in converting containers into houses.in the steel construction industry for example containers, welding accounts for a main part of the manufacturing costs and resources.in this sense welding plays a pivotal and irreplaceable role in modern manufacturing, of converted containers into houses for residential houses and shops for commercial purposes in Kenya. According Chung,et al.(2017), common welding technologies applied include Gas Metal Arc welding (GMAW),Manual Metal Arc Welding(MMAW) and Laser Arc-Hybrid Welding (LAHW),which all differ tremendously in their properties and potential in the realm of sustainable manufacturing. The typical operation mode of (GMAW) for the purpose of achieving high deposition rates and process speeds, is automatic with spray arc transfer (Chung, et al,2017).Though recently, manufacturer of welding power sources have developed modern arc processes as presented early by Dzelnitzki(2000) and later by Lezzi and Costa (2013).The modern modified spray arcs lead to reduced consumption which prove to be promising with respect to environmental aspects(Chung et al,2017).

Methodology

The paper adopts observational method through analytical study of converted containers into houses for rental and shops in towns. This study used observation method. Observation is a data gathering device that entails visual perception and recording of what is occurring in a given situation (Kathuri and Pals, 1993). To ensure that the process of observation is objective and systematic, the researcher used a camera to capture the converted used transport containers into shops in various Towns. Direct observation techniques were sufficient to be used along with interviewing of individual respondents and focus groups.

The Results

The key findings are first, the Kenyan artisans (Welders) have converted the used transport containers through innovation and lessened the cost of purchasing land and constructing houses.

The containers are of different sizes ranging from ten feet, fifteen to twenty five feet long, therefore they can be partitioned into different rooms of various sizes. Some of the containers have been converted into self-contained houses as illustrated in picture/photograph 2.When the two containers of the same size are joined, the rooms can be constructed from both sides. Further the containers of the same size can be placed on top of the other and designed into storey house, as illustrated in photograph 3. The welders add ingredients of steel materials and glasses to make the house become complete.

Photograph 2.Transport containers converted into self-contained house. Source, adopted by researcher from Google scholar (2019)

According to RoK (2008), the Government acknowledges the role that TVETIs play in imparting the community with the necessary skills for development and self-employment. The Government of Kenya gaps out that, investing in TVET, means investing in national security as this reduces idleness giving the majority energetic youths an alternative productive involvement rather than engage in dysfunctional behaviours. That is why the welders have used thetechnical skills and knowledge to convert the used containers into rental houses.

Photograph 3 A transport container converted into storey house .Source, adopted by researcher from Google scholar (2019)

Secondly, the research found it is cheaper to convert a container into a house within a day when the materials are available such as doors, windows, window glasses and so on, and start using it as shown in photograph 4. Thirdly, the containers are carried and located or fixed in available space within the area or region of preference. The containers have been converted and constructed storey houses and self-contained as shown photograph 3.

Photograph 4 A Container converted into shops for renting in one of the town in Kenya.Source Researcher 2019.

Photograph 5 Abusbody converted into houses for renting in Kenyan town.Source.researcher 2019.

Discussion and Conclusion

It is concluded the new technology is significant for societal empowerment so that to alleviate the problem of shortage of houses for residential and shops for business enterprises in most towns in Kenya. Moreover the containers converted into houses are durable because they manufactured from iron and steel metals. They are easily located in space where a house cannot be constructed and lead to space saving.

The County governments in Kenya should adopt the system of converted used transport containers into houses for residential and commercial purposes and solve the problems of slums in major in Kenya. And as a consequence would solve the problems of water borne diseases, crimes and other problems experienced in slum areas.

Recommendations

It is recommended, the merchants /sellers of the containers to reduce the cost of the containers so that many people can have the opportunity to purchase them and convert them into houses.

It is further recommended the containers to be innovated into mobile house by fixing wheels so that they can be transferred from one place to another.

The paper recommends that the welderswho are able to buy many used transport containers to convert them into houses and put them in display in the open market ready for purchase from interested customers.

It is recommended the county governments to adopt the converted used containers into houses to be placed in strategic places in towns and for rental to small holders business and demolish those which are constructed awkwardly and making town towns look unclean and unattractive.

It is furthermore recommended national government to use the converted transport containers into houses and place several of them in the slum areas to rehabilitate the slum dwellers, in Kebira, Korogocho, Kariobangi, Mathare, MukuruWaNjengaand so on, in Nairobi Kenya.

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RENOVATION OF RAILWAY LINE SYSTEM FOR SUSTAINABLE TRANSPORT INDUSTRY FOR CHANGING DYNAMICS OF BUSINESS IN KITALE TOWN WESTERN KENYA

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Abstract

There is no sustainable development where transport system is poor or inadequate that is why poor renovation of railway line system led to dilapidated, vandalized railway line which suppressed transport system in Kitale railway station. The problem why is railway transport system linking Kitale town not operating which led to collapse of Kenya Railway Corporation in the region . The railway station offices are used for renting as shops for business enterprises. The question which why are other railway lines in other regions like in central, part of rift valley, Nairobi and Coast operating and not in western Kenya? The paper investigates whether merchants owning tracks monopolize transport system influenced the railway line not to be renovated for sustaining of their tracks in transport industry. The paper is analytical study through documentary analysis in western Kenya region a case of Kitale railway line. It is concluded that leaders and County governments to renovate railway line to Kitale for sustainable business dynamics. The paper recommends County governments in western Kenya, renovate railway line system connecting Kitale town for sustainability of transport and commercialization of business development in western Kenya.

Key words: *Renovation, Railway system, Sustainable transport, sustainable development*

Introduction

There is no sustainable development where transport system is poor or inadequate that is why poor renovation of railway line system led to dilapidated, vandalized railway line which suppressed transport system in Kitale railway station. Renovate means to restore in good condition or to make new or as if new again or repair (Webster'sEncyclopedicUnabridged Dictionary). The renovation of railway line is a process or restoring the railway line connecting Kitale town in good condition for the purpose of transportation of maize production. Railway line system is one of the modes of transport on land. The Kenya railway system constitutes the second most important mode of transportation in the country (Ojany and Ogendo,2006;165). Transport is derived from two terms 'Trans'and 'Port'. Trans means across, beyond, over or to the far side of; and port refers to the carrying of goods. Transport is therefore defined as the carrying of goods, people and animals from one place to another. The railway transport was developed from the idea of vehicles moving along a fixed track developed from ruts made on mud roads by the wheels of vehicles. The first railways were used in Germany from the 16th century. In Kenya, the railway line network was developed covering some regions in the country.

The main railway line in Kenya is the historical Kenya-Uganda railway which runs from Mombasa to Kisumu (Kibuuka, et al,2006).The extension were later built to connected viable places or regions to facilitate the transportation of goods from such places to the industries in Nairobi and Thika. The new extension were later built from Nakuru through Eldoret to Malaba and on to Kampala via Tororo.Other branches were extended from the main line to connect the interior mining and farming areas in Kenya (Kibuuka, et al,2006). According to Ojang and Ogendo (2006),the railway line branches included;(i) From Voi through Taveta into Tanzania.(ii)Konza to Magadi.(iii) Nairobi to Nanyuki.(iv) Gilgil to Thomson's falls (Nyahururu). (v)Nakuru to lake port Kisumu and thence Butere.(vi) Rongai to Solai and finally (vii) Leseru to Kitale. The railway line network to Kitale in western Kenya was significant to industrial and agricultural activities for commercialization and sustainable development in western region. But there is no sustainable development of any kind where transport system is poor or inadequate, that is why the paper investigates why there is poor renovation of railway line system in western region leading to dilapidated railway line and suppressed railway transport system.

The Statement of the Problem

The problem why is railway transport system linking Kitale town not operating which led to collapse of Kenya Railway Corporation in the region. The railway station offices which were operating are used for commercial renting and used as shops for business enterprises. The question which most people especially research scholars pose is why are other railway lines in other regions like in central, part of rift valley, Nairobi and Coast operating and not in western Kenya?

Objective of the study

The paper investigates whether merchants owning tracks who monopolize transport system were interested and influenced the railway line not to be renovated and for the sake of sustaining their tracks in transport industry in Kitale western Kenya. In Kenya the railway transport is operated by the government through the Kenya railways corporation which was established in 1979, after the collapse of the east African and Harbors Corporation.

Literature Review

The railway line was constructed in Kenya to provide main link to the outside world in facilitating external or export trade in Mombasa (Irandu and Akivaga, 2011). Therefore, in Kenya, the main line was linking Mombasa to Kampala and Kasese in Uganda. Because of availability of resources in important regions, extension links were constructed from the main. This included Konza to Magadi purposely for transporting Soda Ash from Lake Magadi to Mombasa for export. Nairobi to Nyanyuki was constructed for the aim of serving tea and coffee zones in rich central highlands. The Gilgilto Nyahururu was to serve wheat producing areas and move diatomite minerals. Another link was constructed from Menengai to Solai to transport wheat and pyrethrum areas. Finally, Eldoret to Kitale line was constructed to transport wheat and maize in those zones. However, this is the area of study where the line is not on operation and makes farmers spending lotmoney in buying when equipment's delayed because of road transportation during planting season.

Over the last 30 years Kenya's railway network deteriorated from lack of mentaenance.by 2017 only half of Kenya's metre-guage railways remained in operation. The Rift valley Railways consortium in 2006 took over the operation of railways in Kenya and Uganda under a 25 years concession (Witere, 2016). But the Rift Valley Railways was unable to turnaround railway operations hampered by corrupt management and ageing infrastructure.in 2017,the World Bank found Us $ 22 million loan extended for purchase of locomotives had been diverted into shell company controlled by Rift Valley Railways executives(Railway Gazatte,3rd January 2018).in 2011,Kenya signed a memorandum of understanding with China Road and Bridge Corporation to build the Mombasa-Nairobi Standard Gauge Railway(SGR),for the purpose of the dynamics in changing business in Kenya and economic growth. Financing for the Standard Gauge Railway project, US $36 billion was finalized with the Exim Bank of China extending a loan of 90 percent of the projectcost, and the remaining 10 percent to come from Kenyan government (Daniel, 2016).The completion of the Standard Gauge Railway from Mombasa to Nairobi made transportation of heavy goods or cargo more easy and quick. The passenger service on the Standard Gauge Railway (SGR) was inaugurated on 31st May 2017 and the work of construction is underway to extend the SGR service to Naivasha and later to other towns in Kenya (Omusala, 2018). The commercial freight services began on 1st January 2018.The passenger uptake has exceeded expectations with the train carrying 2 million passengers in the first 17 months of operation (Ndubi,2018).

Methodology

The research is qualitative in literature review and a survey method was applied to study a case of Kitale Town, Trans-Nzoia County through documentary analysis in western Kenya region a case of Kitale railway line.

Research Design

Research design is a plan and the procedure for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Johnson & Onwuegbuzie, 2006). Therefore, the research is descriptive and in descriptive, survey research was adopted for the purpose of exploring and describing the causes leading to poor or no renovation of railway line system in western region, a case of Kitale railway station. Descriptive research design was used because this is a method of collecting information by informing or administering a questionnaire to a sample of individuals (Orodho, 2003). Kombo and Tromp (2006), also noted, concerning descriptive design, that such studies are not only restricted to fact finding, but may often result in the formulation of important principles of knowledge and providing solutions to significant problems. The research design is *ex-post facto* case study. The term ex-post facto is used to refer to an experiment in which the researcher rather than creating the treatment after that treatment has not occurred. For this reason, it is not always possible to assume a simple causative relation, between independent and dependent variables (Kathuri and Pals, 1993). The case study was applied because it is a method of exploring and analyzing of life of a social unit, be it a person, a family, an institution, cultural group or even entire community (Young, 1992). The research adopts the case study because it has the following advantages: when various cases are thoroughly studied and carefully analyzed, the researcher can arrive at various generations, which may be developed into useful hypothesis. Also in case study, the whole range of subject under study is studied and the range of knowledge is naturally enlarged. Case study is a way of organizing social data so as to preserve the unitary character of the problem being studied. Expressed somewhat differently, it is an approach which views any social unit as a whole (Goode &Hatt, 2005).Thus, Research methodology describes the overall approach to research design (Creswell, 2009). Kothari, (2009), argues that a research design constitutes the blueprint for the collection, management, measurement and analysis of data. Orodho (2008) defines it as the scheme, outline or plan of action that is used to generate answers to research problems. This study used a case study research design to represent other areas prone to poor renovation of railway line system in the county.

Key Findings

The railway is a very important part of transport infrastructure development, a RVR train in Kampala. The Uganda-Kenya railway line operator plans to repair dilapidated lines in the face of pending competition from Standard Gauge Railway in 2017. The Rift Valley Railways (RVR) has embarked on a multibillion shilling investment to renovate its dilapidated infrastructure in the face of expected stiff competition once the Standard Gauge Railway is completed in 2017.

The research found , due to delay of delivery of fertilizers, which are transported by tracks using road transport, farmers delay in the planting season of maize and beans in Kitale in Trans-Nzoia and Moi’s Bridge in UasinGishu counties respectively. This delay on planting season has devastating effects on the yields for the farmers.

Research found, the county government of Trans-Nzoia, started to renovate the bus stages for vehicles in Kitale town and shifted the stage temporary to the portion along the railway line near the show ground and District Commission Offices.

Conclusion

It is concluded that leaders and County governments are preaching about sustainable development, where sustainability of development is not possible due to norenovation of railway line in Kitale. There120 wagons imported from China on Saturday to facilitate renovation of railway line in rift valley. They are part of a 480 heavy duty railway wagons purchased by the company in the revival programme.Each of the wagons has the capacity to transport 60 tonnes per trip.

Photograph 1.Passenger train in renovate railway coast. Adopted by researcher 2019

The wagons are expected to increase the haulage capacity by 50 per cent.RVR is also expected to cut its charges by between 10 and 20 per cent, the current price is 40 to 50 per cent lower than road transport. “Most importantly, the new wagons are more cost-effective per trip, meaning, there will be to reduction of freight charges considerably and become more competitive than the roads”. The company has completed the rehabilitation of the most damaged sections of the railway track between Mombasa and Nairobi and reopened the 500km line between Tororo and Gulu in northern Uganda, which had remained disused for 20 years (New Times, December 8th, 2015).

Recommendations

The research recommends County governments in western Kenya, for sustainable development to renovate railway line system connecting Kitale town for sustainability of transport and commercialization of business development in western Kenya, to be at par with the rest other Counties in sustainable development in country.

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THE IMPACT OF AWARENESS REGARDING ENVIRONMENT PROTECTION LAWS ON ECOLOGICAL DEGRADATION

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Abstract

India's environmental troubles are gaining global significance because of the speedy and antagonistic speed of urbanization. Environmental degradation restricts the flow of environmental services. Dumping of pollutants in excess of its assimilative capacity into air, water and soil results in deterioration of the quality of these vital resources. The nature of environmental problem depends upon the level of economic development and the geographical condition of the area under consideration. India being a developing economy with a low per capita income, high population density, agriculture-dependent labor force, and high percentage of rural areas, the problems here are different from those in developed countries. The present paper highlights the impact of knowledge regarding environment protection issues on environmental degradation.

Keywords: *Environment Law, Environment Protection, Environment Degradation*

Introduction

In India, legislations directly aimed at environmental protection were implemented for the first time in 1974 in the form of the Water (Prevention and Control of Pollution) Act. Prior to that, however, there were certain legislations enacted which have a bearing on environment indirectly (e.g., Motor Vehicles Act, Factories Act and Insecticides Act). After the Water Act, two notable laws have been introduced-

First one is the 42nd Amendment of the Constitution in 1977 which has two sub divisions: (i) Entry 48A mentions that the state will protect and improve the environment and safeguard forests and wildlife; and (ii) Entry 51A suggests that it is also the duty of the citizens to protect and improve the natural environment including wildlife. The forty-second amendment was followed by the Forest Conservation Act, 1980; and subsequently the Air (Prevention and

Control of Pollution) Act, 1981. A comprehensive legislation on environment covering all aspects was enacted in 1986 in the form of the Environment Protection Act, 1986. Two international conferences on environment and development - one at Stockholm in 1972 and the other at Rio de Janeiro in 1992 - have influenced environmental policies in most countries, including India. Many countries and international agencies have accepted the 'polluter pays principle', the 'precautionary principle and the concept of 'intergenerational equity' as guidelines for designing environmental policies.

Objective

- To measure the correlation between knowledge and awareness about environment protection laws on environmental degradation

Hypothesis

H_0: The level of knowledge and awareness about environment protection laws is not associated with environmental degradation

Research Methodology

The present study has adopted the survey method to collect the relevant data. The primary data was collected on the basis of questionnaires administered to various respondents in the Western India (i.e., Uttarakhand, Uttar Pradesh, Himanchal Pradesh, Delhi/NCR, Haryana, Punjab, Rajsthan etc.). The individuals associated to industry, judiciary/ legal departments, non government organizations, social workers, agencies involved in policy formation and academic organizations have been selected for conducting the survey. The secondary data was collected from various published reports available nationally or internationally. It also includes portals of various environmental regulatory bodies. Necessary statistical tools shave been applied to explore the correlation coefficients as well as chi square values.

Data Analysis

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 38% individuals have aware of Water Prevention and Control of Pollution Act 1974, while rest

62 % people have no awareness of same. Out of 16% females, 25% have aware of Water Prevention and Control of Pollution Act 1974, while 75% females have no awareness of Water Prevention and Control of Pollution Act.

			You are aware of Water Prevention and Control of Pollution Act 1974		Total
			Yes	No	
Gender	Male	Count	64	104	168
		%	38.1%	61.9%	84.0%
	Female	Count	8	24	32
		%	25.0%	75.0%	16.0%
Total		Count	72	128	200
		%	36.0%	64.0%	100.0%
Chi Square Value = 5.001			Pearson R = 0.1		

The value of Karl Pearson coefficient of correlation is 0.1 which conclude that there is a positive correlation between gender and awareness of Water Prevention and Control of Pollution Act 1974. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 5.001 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Water Prevention and Control of Pollution Act 1974 differs significantly.

Water Prevention and Control of Pollution Cess Act 1977

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 19% individuals are aware of Water Prevention and Control of Pollution Cess Act 1977, while rest 81% people have no awareness of same. Out of 16% females, no one is aware of Water Prevention and Control of Pollution Act.

	You are aware of Water Prevention and Control of Pollution Cess Act 1977		Total
	Yes	No	

Gender	Male	Count	80	340	420
		%	19.0%	81.0%	84.0%
	Female	Count	0	80	80
		%	0.0%	100.0%	16.0%
Total		Count	80	420	500
		%	16.0%	84.0%	100.0%
Chi Square Value = 7.26			Pearson R = 0.19		

The value of Karl Pearson coefficient of correlation is 0.19 which conclude that there is a positive correlation between gender and awareness of Water Prevention and Control of Pollution Cess Act 1977. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 7.26 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Water Prevention and Control of Pollution Cess Act 1977 differs significantly.

Air Prevention and Control of Pollution Act 1981

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 31% individuals are aware of Air Prevention and Control of Pollution Act 1981, while rest 69% people have no awareness of same. Out of 16% females, 25% are aware of Air Prevention and Control of Pollution Act, while 75% females have no awareness of same.

			You are aware of Air Prevention and Control of Pollution Act 1981		Total
			Yes	No	
Gender	Male	Count	130	290	420
		%	31.0%	69.0%	84.0%
	Female	Count	20	60	80
		%	25.0%	75.0%	16.0%
Total		Count	150	350	500
		%	30.0%	70.0%	100.0%
Chi Square Value = 6.454			Pearson R = 0.048		

The value of Karl Pearson coefficient of correlation is 0.048 which conclude that there is a positive correlation between gender and awareness of Air Prevention and Control of Pollution Act 1981. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 6.454 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Air Prevention and Control of Pollution Act 1981 differs significantly.

Air Prevention and Control of Pollution Rules 1982

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 21% individuals are aware of Air Prevention and Control of Pollution Rules 1982, while rest 79% people have no awareness of same. Out of 16% females, 25% are aware of Air Prevention and Control of Pollution Rules 1982, while 75% females have no awareness of same.

			You are aware of Air Prevention and Control of Pollution Rules 1982		Total
			Yes	No	
Gender	Male	Count	90	330	420
		%	21.4%	78.6%	84.0%
	Female	Count	20	60	80
		%	25.0%	75.0%	16.0%
Total		Count	110	390	500
		%	22.0%	78.0%	100.0%
Chi Square Value = 0.5			Pearson R = -0.032		

The value of Karl Pearson coefficient of correlation is -0.032 which conclude that there is a negative correlation between gender and awareness of Air Prevention and Control of Pollution Rules 1982. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 0.5 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Air Prevention and Control of Pollution Rules 1982 differs significantly.

Wildlife Protection Act 1972

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 19% individuals are aware of Wildlife Protection Act 1972, while rest 81% people have no awareness of same. Out of 16% females, 13% are aware of Wildlife Protection Act 1972, while 87% females have no awareness of same.

			You are aware of the Wildlife Protection Act 1972		Total
			Yes	No	
Gender	Male	Count	80	340	420
		%	19.0%	81.0%	84.0%
	Female	Count	10	70	80
		%	12.5%	87.5%	16.0%
Total		Count	90	410	500
		%	18.0%	82.0%	100.0%
Chi Square Value = 8.781			Pearson R = 0.062		

The value of Karl Pearson coefficient of correlation is 0.062 which conclude that there is a positive correlation between gender and awareness of Wildlife Protection Act 1972. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 8.781 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Wildlife Protection Act 1972 differs significantly.

Forest Conservation Act 1980

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 17% individuals are aware of Forest Conservation Act 1980, while rest 83% people have no awareness of same. Out of 16% females, nobody is aware of Forest Conservation Act 1980.

	You are aware of the Forest Conservation Act 1980	Total

			Yes	No	
Gender	Male	Count	70	350	420
		%	16.7%	83.3%	84.0%
	Female	Count	0	80	80
		%	0.0%	100.0%	16.0%
Total		Count	70	430	500
		%	14.0%	86.0%	100.0%
Chi Square Value = 6.202			Pearson R = 0.204		

The value of Karl Pearson coefficient of correlation is 0.204 which conclude that there is a positive correlation between gender and awareness of Forest Conservation Act 1980. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 6.202 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Forest Conservation Act 1980 differs significantly.

Environment Protection Act 1986

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 21% individuals are aware of Environment Protection Act 1986, while rest 79% people have no awareness of same. Out of 16% females, no one is aware of Environment Protection Act 1986.

			You are aware of the Environment Protection Act 1986		Total
			Yes	No	
Gender	Male	Count	90	330	420
		%	21.4%	78.6%	84.0%
	Female	Count	0	80	80
		%	0.0%	100.0%	16.0%
Total		Count	90	410	500
		%	18.0%	82.0%	100.0%

Chi Square Value = 8.362	Pearson R = 0.204

The value of Karl Pearson coefficient of correlation is 0.204 which conclude that there is a positive correlation between gender and awareness of Environment Protection Act 1986. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 8.362 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Environment Protection Act 1986 differs significantly.

Power of Central Government

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 5% individuals are aware of Power of Central Government to take measures to protect and improve environment, while rest 95% people have no awareness of same. Out of 16% females, no one is aware of Power of Central Government to take measures to protect and improve environment.

			You are aware of the Power of Central Government to take measures to protect and improve environment		Total
			Yes	No	
Gender	Male	Count	20	400	420
		%	4.8%	95.2%	84.0%
	Female	Count	0	80	80
		%	0.0%	100.0%	16.0%
Total		Count	20	480	500
		%	4.0%	96.0%	100.0%
Chi Square Value = 1.589			Pearson R = 0.089		

The value of Karl Pearson coefficient of correlation is 0.089 which conclude that there is a positive correlation between gender and awareness of Power of Central Government to take measures to protect and improve environment. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 1.589 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is less than tabulated value therefore null hypothesis is accepted or it can be concluded that awareness of Power of Central Government to take measures to protect and improve environment does not differ significantly.

National Environment Appellate Authority Act 1997

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 2% individuals are aware of National Environment Appellate Authority Act 1997, while rest 98% people have no awareness of same. Out of 16% females, no one is aware of National Environment Appellate Authority Act 1997.

			You are aware of the National Environment Appellate Authority Act 1997		Total
			Yes	No	
Gender	Male	Count	10	410	420
		%	2.4%	97.6%	84.0%
	Female	Count	0	80	80
		%	0.0%	100.0%	16.0%
Total		Count	10	490	500
		%	2.0%	98.0%	100.0%
Chi Square Value = 0.777			Pearson R = 0.062		

The value of Karl Pearson coefficient of correlation is 0.062 which conclude that there is a positive correlation between gender and awareness of National Environment Appellate Authority Act 1997. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 0.777 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is less than tabulated value therefore null hypothesis is accepted or it can be concluded that awareness of National Environment Appellate Authority Act 1997 does not differ significantly.

Factories Act 1948

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 5% individuals are aware of Factories Act 1948, while rest 95% people have no awareness of same.

Out of 16% females, 25% are aware of Factories Act 1948, while 75% females have no awareness of same.

			You are aware of the Factories Act 1948		Total
			Yes	No	
Gender	Male	Count	20	400	420
		%	4.8%	95.2%	84.0%
	Female	Count	20	60	80
		%	25.0%	75.0%	16.0%
Total		Count	40	460	500
		%	8.0%	92.0%	100.0%
Chi Square Value = 14.95			Pearson R = -0.273		

The value of Karl Pearson coefficient of correlation is -0.273 which conclude that there is a negative correlation between gender and awareness of Factories Act 1948. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 14.95 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of Factories Act 1948 differs significantly.

Public Liability Insurance Act 1991

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 2% individuals are aware of Public Liability Insurance Act 1991, while rest 98% people have no awareness of same. Out of 16% females, no one is aware of Public Liability Insurance Act 1991.

			You are aware of Public Liability Insurance Act 1991		Total
			Yes	No	
Gender	Male	Count	8	412	420
		%	2.4%	97.6%	84.0%
	Female	Count	0	80	80
		%	0.0%	100.0%	16.0%
Total		Count	10	490	500

	%	2.0%	98.0%	100.0%
Chi Square Value = 0.777		Pearson R = 0.062		

The value of Karl Pearson coefficient of correlation is 0.062 which conclude that there is a positive correlation between gender and awareness of Public Liability Insurance Act 1991. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 0.777 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is less than tabulated value therefore null hypothesis is accepted or it can be concluded that awareness of Public Liability Insurance Act 1991 does not differ significantly.

National Environment Tribunal Act 1995

Out of the total respondents 84% are males while rest 16% were females. Out of 84% males, 12% individuals are aware of National Environment Tribunal Act 1995, while rest 88% people have no awareness of same. Out of 16% females, 13% are aware of National Environment Tribunal Act 1995, while 87% females have no awareness of same.

			You are aware of National Environment Tribunal Act 1995		Total
			Yes	No	
Gender	Male	Count	50	370	420
		%	11.9%	88.1%	84.0%
	Female	Count	10	70	80
		%	12.5%	87.5%	16.0%
Total		Count	60	440	500
		%	12.0%	88.0%	100.0%
Chi Square Value = 6.009			Pearson R = -0.007		

The value of Karl Pearson coefficient of correlation is -0.007 which conclude that there is a negative correlation between gender and awareness of National Environment Tribunal Act 1995. Calculated value of χ^2 for 1 degree of freedom at 5% level of significance is 6.009 and tabulated value of χ^2 is 3.841. Since calculated value of chi-square is greater than tabulated value therefore null hypothesis is rejected or it can be concluded that awareness of National Environment Tribunal Act 1995 differs significantly.

Conclusion

The nine variables "Awareness of Water Prevention and Control of Pollution Act 1974", "Awareness of Water Prevention and Control of Pollution Cess Act 1977", "Awareness of Air Prevention and Control of Pollution Act 1981", "Awareness of Wildlife Protection Act 1972",

	Proposed Relationship	**Results**
1	Gender - Awareness of Water Prevention and Control of Pollution Act 1974	+ve, Rejected
2	Gender - Awareness of Water Prevention and Control of Pollution Cess Act 1977	+ve, Rejected
3	Gender - Awareness of Air Prevention and Control of Pollution Act 1981	+ve, Rejected
4	Gender - Awareness of Air Prevention and Control of Pollution Rules 1982	-ve, Rejected
5	Gender - Awareness of Wildlife Protection Act 1972	+ve, Rejected
6	Gender - Awareness of Forest Conservation Act 1980	+ve, Rejected
7	Gender - Awareness of Environment Protection Act 1986	+ve, Rejected
8	Gender - Awareness of Power of Central Government to take measures to protect and improve environment	+ve, Accepted
9	Gender - Awareness of National Environment Appellate Authority Act 1997	+ve, Accepted

10	Gender - Awareness of Factories Act 1948	-ve, Rejected
11	Gender - Awareness of Public Liability Insurance Act 1991	+ve, Accepted
12	Gender - Awareness of National Environment Tribunal Act 1995	-ve, Rejected

"Awareness of Forest Conservation Act 1980", "Awareness of Environment Protection Act 1986", "Awareness of Power of Central Government to take measures to protect and improve environment", "Awareness of National Environment Appellate Authority Act 1997" & "Awareness of Public Liability Insurance Act 1991" & "Industry Type" are positively correlated with gender of the respondents. Whereas, the variables "Awareness of Air Prevention and Control of Pollution Rules 1982", "Awareness of Factories Act 1948" & "Awareness of National Environment Tribunal Act 1995" are negatively correlated with gender of the respondents. On the basis of Chi square results, it can be concluded that in spite of enough limitations, degradation is a continuous process due to lack of knowledge and awareness.

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EXAMINING THE IMPACT OF DEBT CAPITAL ON FINANCIAL PERFORMANCE OF SACCOS IN KENYA

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Abstract

Savings and Credit co-operative Societies (SACCOs) growth has been threatened by competition from other mainstream financial institutions due to member's discontent with the value for their contributions made. Studies have shown that adverse financial performance of SACCOs has made it difficult to maximize members' wealth and even survive in the competitive environment in which they operate. The failure to have positive financial performance by SACCOs is theoretically grounded to inappropriate capital structure, weak accumulation of institutional capital, poor savings culture by members towards share capital and members' deposits. The objective of the study is to examine the Impact of debt capital on financial performance of SACCOs in Kenya. The study used descriptive design in soliciting information on the measures of financial performance of SACCOS. The data was collected from the census of 46 SACCOs in Murang'a County using a questionnaire and document review tool. It was analyzed using descriptive, inferential statistics, and SPSS to establish relationship between variables selected for the study. Pearson's correlation co efficient was determined and linear regression analysis was also used to determine the impact of debt capital. The study finally that established that debt capital has positive significant effect on the financial performance of SACCOs

Key Words: *Financial Performance, Debt Capital, Capital Structure, Economic Development*

Background to the Study

Background Information

Capital structure refers to the combination of debt and equity that is used to finance the Sacco's investment in assets. Knowledge about capital structure has mostly been derived from data from developed economies that have many institutional similarities (Rooth et al 2001). Capital structure refers to the mixture of a variety of long term sources of funds and equity shares including reserves and surpluses of an organization (Damodaran, 2010). Maintaining the optimum capital structure is very important to the Sacco due to the cost-benefit relationship associated with debt and equity respectively. Having excess debt in the capital structure has its own benefits and costs and this is also the case in equity. Azhagaiah and Gavoury (2011) depict that too much debt may result into high gearing ratio, greater risk of bankruptcy and possibly high interest rates which may cause profits to deteriorate and eventually resulting into losses and bankruptcy. However debts have the benefit of providing tax savings due to the fact that interest is a tax allowable expense, this is why most entities use the mix of debt and equity. The Sacco which has no debt, has its capital structure as only equity. Different Sacco's have different capital structures (Ahmadpour and Yahyazadehfar, 2010). But the financing resources of Sacco's based on their financial policies are divided into two parts "internal financial resources" and "external financial resource ". On internal financial resources, the Sacco fund from accumulated earnings, that is, instead of dividing profit among shareholders, it uses the same mainly in the company's operational activities to obtain more return. And in external financial resources, the firm funds its operational activities from debt and stock (Titman and Grinblatt, 1998).

The famous agency theory by (Jensen and Meckling, 1976) narrates that the use of debt financing usually causes agency costs to monitor the relationships between owners and managers, and those existing between lenders and shareholders. This shows that the issue of optimum capital structure is still controversial due to the benefits and costs associated with leverage levels. There is no agreeable level of capital structure among scholars or researchers that is said to be optimum; this depends on the Sacco's own operations. In the light of these concerns it can be theoretically observed that capital structure decisions affect profitability of a

Sacco. For instance a highly geared Sacco may obtain tax savings from its interest expenses which may improve profitability but at the same time it may increase agency costs which may decrease profitability.

There are few studies that have been conducted in East Africa about similar topics. Bundala (2012) assessed the capital structures of listed non-financial companies in Tanzania more specifically whether they practice pecking order theory, agency cost theory or trade-off theory. However the study did not show the impact of capital structure on financial performance, which creates a research gap that this study is to fill. In the light of these issues, this study has empirically examined the influence of capital structure on profitability of the manufacturing companies listed in various East African stock markets. The study used various variables to represent capital structure, these include; Long Term Debt to Total Capitalization (LTDTC)

The Savings and Credit Co-operatives (SACCOs) are defined as cooperatives who provide their members with convenient and secure means of saving money and obtaining Credit at affordable interest rates (Bailey, 2001). Their objective is to empower members through savings mobilization, disbursement of credit and ensuring SACCOs long term sustainability through prudent financial practice.

Objective of the Study

To examine the effect of debt capital on financial performance of SACCOs.

Research Question

What is the effect of debt capital on financial performance of SACCOs?

Significance of the Study

This study is important as it will assist the Sacco chief executive officers in the co-operative movement in designing appropriate governance, financial policies and examining the professional integrity of financial staff in their respective organizations.

Scope of the Study

The study was conducted in the 46 active Sacco Societies in Kenya at the Murang’a County.

Limitations of the Study

The study respondents wanted to withhold important information from the researcher. The research instruments used in the study included questionnaires and interview schedules which were time consuming and costly.

Literature Review

Borrowed capital by Sacco Societies is to finance their operational and or members' needs. They include loans from commercial banks, loans from national unions of Sacco Societies, other financial institutions and well-wishers among others. Lenders of these monies retain title to the funds lent, and expect the same to be repaid within the stipulated time with interest thereon of a pre - determined rate. Interest is a cost of debt to the firm and its payment is a legal obligation. The amount of interest paid by a firm is a deductive expense for computing corporate income taxes. Thus it provides a tax shield to a firm, (kuscco, 2006) .

Capital structure refers to the mixture of a variety of long term sources of funds and equity shares including reserves and surpluses of an organization (Damodaran, 2010). Maintaining the optimum capital structure is very important to the Sacco due to the cost-benefit relationship associated with debt and equity respectively. Having excess debt in the capital structure has its own benefits and costs. Azhagaiah and Gavoury (2011) depict that too much debt may result into high gearing ratio, greater risk of bankruptcy and possibly high interest rates which may cause profits to deteriorate and eventually resulting into losses and bankruptcy.

Debts have the benefit of providing tax savings due to the fact that interest is a tax allowable expense; this is why most entities use the mix of debt and equity. The SACCOs which has no debt, has its capital structure as only equity. Different Sacco's have different capital structures (Ahmadpour and Yahyazadehfar, 2010). Through external financial resources, the firm funds its operational activities from debt and stock (Titman and Grinblatt, 1998).

The famous agency theory by (Jensen and Meckling, 1976) narrates that the use of debt financing usually causes agency costs to monitor the relationships between owners and managers, and those existing between lenders and shareholders.
The Savings and Credit Co-operatives (SACCOs) are defined as cooperatives who provide their members with convenient and secure means of saving money and obtaining Credit at affordable interest rates (Bailey, 2001).

In spite of these, there are a number of challenges in promoting quality financial management such as: - limited capital funding sources, loan delinquency, assessment and management of risks, (Mudibo, 2005).

Ademba, (2010) postulates that SACCOs in Kenya are faced with problems such as negative cash (liquidity), poor governance and lack of member confidence.

Ndung'u (2010), adds that the SACCOs are encompassed by mismanagement and poor investment decisions. Due to the above, the Government of Kenya has over time developed initiatives to enhance development of the SACCOs subsector of the cooperative sector in Kenya.

SACCOs are now building their capital adequacy through pooling of voluntary savings from co operators in form of shares, retained earnings through good financial management practices, statutory reserves, prudent management of loan book (to avoid loan delinquency and subsequent default) and debt capital, (Maina, 2007).

Therefore the study is interested in examining the impact of debt capital on financial performance of SACCOs.

Research Design

A research design is the arrangement of conditions for collection, measurement and analysis of data that aims to combine relevance to the research purpose Kothari (2010). This study adopted the descriptive survey design. This research design used to accurately portray the characteristics of a particular individual, situation or even a group taking Murang'a County as a case for this study.

Study area

The study was however carried out in Murang'a County because it has diverse SACCOS accommodating the three types of SACCOS the study was interested in (Urban, Rural and Transport) and convenience to the researcher.

Target population

The target population of the research was 46 CEOs of all SACCOS in Murang'a County which were in existence for over three years in the year 2015. There are forty six SACCOS in the county excluding the dormant ones.

Data Collection Procedure

When collecting primary data CEOs were requested to fill the semi structured questionnaires with the assistance of the Research Assistants. For secondary data collection the researchers used document analysis guide.

Data Analysis, Interpretation and presentation

Data was analyzed by use of both qualitative and quantitative techniques. Quantitative data was analyzed by use of descriptive statistics presented in frequency tables, graphs, pie charts and measures of central tendency.

Sampling procedure and sample size

Sampling Procedure

It is recommended that 30% of the population as ideal for effective representation.

Sample Size

The 46 CEOs (respondents) who were more than the threshold of 30% participated in the study.

Data Collection Instruments (Methods)

The study used questionnaires, focus group discussion and documentary review guide to collect data from respondents.

Results and Discussions

To examine the effect of debt capital on financial performance of SACCOs The first objective of the study was to examine the effect of debt capital on financial performance of SACCOs. The findings answered the first research question of the study "what is the effect of debt capital on Sacco Performance?" as well as examining the hypothesis of the study; there is no effect of debt capital on financial performance of SACCOs. This was achieved through descriptive and inferential statistics.

Debt Capital response

The respondents were required to state whether they agree or disagree with statement on questionnaire relating to performance of SACCOs financially. The results are as shown in table 1.

Table 1: Debt Capital response

Debt Capital	SD	D	U	A	SA
Our Sacco has been financing its business by loans AND registering high Return on equity(ROE)	2.4	2.4	9.5	72.8	11.9
We run our business on loans and we have high Return on investment (ROI)	4.8	4.8	7.1	73.8	9.5
Loans from commercial banks have built our assets and now our return on assets is high. (ROA)	2.4	7.1	7.1	78.6	4.8
Average	3.2	4.8	7.9	75.1	8.7

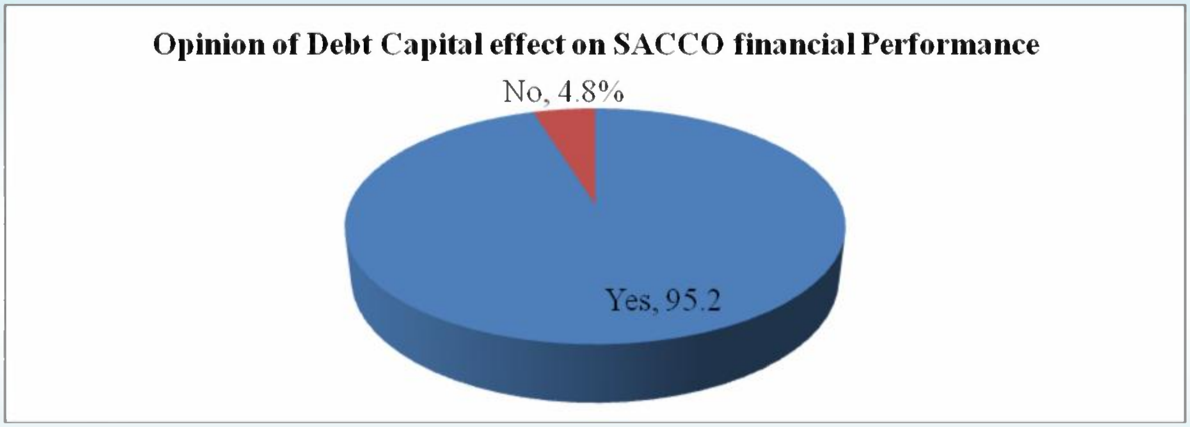
From table 1, the study findings revealed that majority of the respondent agreed that debt capital has effect on financial performance of Sacco. Of the total respondents, 72.8% of them agreed that their SACCO has been financing its business by loans and registered high Return on equity. However, only 4.8% of the respondents did not confirm that they have registered high Return on equity as a result of business loan. A combined 83.3% of the respondent of which 73.8% of them agreed that they ran their business on loans and they have high Return on investment and the remaining 9.5% of the respondents strongly agreed they have high Return on investment. However 7.1% which represent those respondents who were not sure whether their business have high Return on investment as a result of business loan. Consequently, 78.6% of the respondents agreed that loans from commercial banks have built their assets and their return on assets is high while 4.8% of the respondents strongly agreed with that statement. This view was against 7.1% and 2.4% of the respondents who agreed and strongly disagreed respectively.

Debt Capital on Financial performance

Over Seventy five (75.1%) of the respondents and 8.7% of the respondents agreed and strongly agreed that debt capital has an effect on the financial performance of their SACCO. 9.0% of the respondents were undecided whether it has effect on the financial performance while 3.2% of the respondents strongly disagreed with the contribution of debt capital on financial performance while 4.8% of them disagreed.

Opinion of Debt Capital effect on SACCO financial Performance

The researcher sought the opinion of respondents on how debt capital affects the financial performance of SACCO. The result as shown in figure 2



From figure 2, majority of the respondents revealed that debt capital has positive effect on the financial performance of SACCO by 95.2%. This was due to the fact that the funds were available to be loaned out to the borrowers at an interest which resulted to increase in financial performance of SACCO through high return on investment. However 4.8% of the respondents confirmed that it has positive effect on financial performance due to interest amount associated with the debt capital thereby affecting return on equity of the SACCO.

Pearson Correlation Analysis: Debt Capital and Financial Performance

Pearson correlation analysis was performed to find out the effect of debt capital on financial performance of SACCO. This was necessitated by the fact that descriptive analysis revealed 95.2% of the respondents showed that debt capital has positive effect on the financial performance of the SACCO. This was done to find the strength and the significance of the effect using Pearson Correlation (R) coefficient.

Table 2: Pearson Correlation Analysis: Debt Capital and Financial Performance

		Debt Capital	Financial Performance
Debt Capital	Pearson Correlation	1	.396**
	Sig. (2-tailed)		.009
	N	42	42
Financial Performance	Pearson Correlation	.396**	1
	Sig. (2-tailed)	.009	
	N	42	42

**. Correlation is significant at the 0.01 level (2-tailed).

From table 2, there is a positive linear significant relationship between debt capital and financial performance of Sacco with R=0.396**, P<0.01 with 99.0% confidence level. The findings indicated that debt capital has positive effect on the financial performance of Sacco as debt capital increases, financial performance of SACCO also increases significantly due to availability of loans to give to customers. Since the significance level is less than 0.05, there is sufficient evidence for the study to reject the null hypothesis as there exist an effect of debt capital on financial performance of SACCOS

Linear Regression Analysis: Debt Capital and Financial Performance

Linear regression analysis was done to find the changes in performance that is being accounted for by debt capital. This was arrived at by the use of R square which is the coefficient of determination i.e. the percentage change in performance of SACCO that is being accounted for by debt capital.

Table 3: Linear Regression Analysis: Debt Capital and Financial Performance

R	R Square	Adjusted R Square	F Ration	Sig Value
.396[a]	.157	.136	7.438	0.009

From table 3, R square of 0.157 indicated that 15.7% of variance in financial performance is been accounted by debt capital leaving 84.3% of the performance to be explained by other factors. This percentage change in financial performance of SACCO is statistically significant with $F (1, 42) = 7.438$, $p<0.05$ further indicating that debt capital has significant effect on the financial performance of SACCO.

Table 4: Regression Coefficient: Debt Capital and Financial Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.139	.863		1.320	.194
Debt Capital	.593	.217	.396	2.727	.009

Table 4 shows regression coefficient that was used to predict financial performance of SACCO from debt capital. When debt capital is held at zero, financial performance of SACCO was statistically insignificant at 1.139 with $t=1.320$, $P>0.05$. Debt capital with a positive beta weight implying that when other variables in this current study are controlled, a change in debt capital by one percent will result to change in financial performance of SACCO by 0.593. This positive change in financial performance of SACCO is statistically significant at $t=2.727$, $p<0.05$ indicating that Debt Capital is good predicator of financial performance of SACCO.

Summary, Conclusions and Recommendations

Summary

Pearson correlation analysis indicated that debt capital had significant positive effect on financial performance of SACCOs in Murang'a County with R=0.396**, $P<0.01$ with 99.0% confidence level. This positive effect significantly accounted for 15.7% of change in financial performance of SACCOs in Murang'a County with $F(1, 42) = 7.438$, $p<0.05$.

Conclusions

The study established that debt capital has positive significant effect on the financial performance of SACCOs in Murang'a County as it ensures funds are available for disbursement whenever applied. With respect, reject the null hypothesis as there is effect of debt capital on financial performance of SACCOs.

Recommendations

SACCOs should source additional capital through capital debt as this will make SACCOs have additional fund to give loan to its members hence improving financial performance through return on asset

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SPORTS AS EMERGING HUMAN RESOURCE FRONTIER FOR ECONOMIC DEVELOPMENT AND CHANGING DYNAMICS IN BUSINESS FOR INTEGRATED TALENT MANAGEMENT IN KENYA

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Abstract

Sports are important both to individual health and economic development in Kenya. Sports specifically athletics has been successful contributor to economic development in Kenya since independence. The long distance athletes from Kenya have been champions and awarded gold medals yearly wherever the competition are held in any part of the world. The money rewarded for the athletes are used in economic development and this has led to construction of storey houses in major towns in Kenya where the sportsmen and women come from. The paper focuses on how sports become a major contributor to economic development in Kenya, a forgotten field which should be distinguished for its role. The paper uses descriptive-survey study method that will base on the available empirical data. Sports has made sportsmen and women to become rich through participating international sports such as Olympics, Commonwealth, All Africans Games and others, leading to economic growth and regional development in their area of origin. The paper encourages the sportsmen and women to continue to exploit their talents for sustainable economic development.

Key words: *Athletics, Frontier, Sports, Venture*

Introduction

Sports are important activities in the society. Sports is defined for the purposes of development, as all forms or physical activities that contribute to physical fitness, mental well-being and social interaction, such as play, recreation, organized or competitive sport, and indigenous sports and games"(UNESCO 2003). Some of the activities for competition that often capture interest of the participants and stakeholders mostly in sports include; soccer, net ball, volleyball, hand ball, hockey, soft ball, table tennis, badminton, cricket, squash, rugby; Athletics sprints, walking race, relays, marathon, field events; jumps pole-vault, long jump, high jump, triple jump; Throws: javelin, discus, shot put, hammer; swimming, dance and tug of war. Sport as a fundamental right to access to and participation in sport and play has long been recognized in a number of international conventions. UNESCO (1978) described sport and physical education as a "fundamental right for all". Sports are important activities to both individual health and development in the country. It is the Greeks sports that laid the foundation for many subsequent education programmes. Sport is part of the physical education which incorporates many areas of participation in competition.

Sports have historically played an important role in all societies, be it in the form of competitive sport, physical activity or play. Sport and play are human rights that must be respected and enforced worldwide, for increasingly recognized and used as a law cost and high impact tool in humanitarian, development and peace building efforts, used by non-governmental organizations, government, development agencies, sports federations, armed forces, the media and UN systems (UN,2003). Sports can no longer be considered a luxury within any society but rather an important investment in the present and future, in the developing countries. An investment in which person exploits talents or gifts given from God. There are minimal bias /corruption practices because it is a matter of participating and showing the skills of taking first position and receiving a reward for it. It does not take long time for a person to change from poverty to richness as the reward given in terms of money are changed into physical investments in the mother country and leading to regional development. Sports played a vital role to promote social integration and economic development in different geographical, cultural, and political context. In does not prejudice on basis of region, tribe, religion, age, gender, color or race, it is a matter of skills and stamina to finish a head of others in sports and taking position one.

Statement of the Problem

Sports and athletics trades have not been properly utilized as a major contributor to the economic development in Kenya and other developing countries, a forgotten field which has not been distinguished for its role. Sports have contributed in to economic development in many regions in Africa and other parts of the world since colonization's and after independence but nobody recognizes. But today, the right to play and sport has too often been ignored or disrespected. Nowadays sport is a field which offers opportunities for employment with huge salary and not for fun and luxury to sports men and women, thus should be exploited for regional economic development globally.

Objectives

The objectives are to ascertain the extent to which the sports and athletics contribute to the process of economic development in Kenya and also analyze the role played by the sportsmen and women towards economic development.

Literature Review

Sports and athletics are commonly viewed as lesser activity, also permeate many levels of contemporary society is deeply embedded in the nations' business live, status systems, patterns of gender and relationship, automotive design, ethical values and language (Zanden, 1990). Sport is competitive physical activities based upon set rules, which follows institution structure- a form of organized social behavior-with norms, values, symbols, statuses and roles for human resource management. Zanden (1990) argues that top athletes are awarded multimillion dollar contracts, more than incomes of the nation's most successful scientists, physicians and public officials.

Sport builds physical, emotional health and it is seen as instilling teamwork, *espirit de corps*, and character. Viewed from functionalist perspective, sport is a vessel by which a society transmits important values and norms to its members. These values find expressions in such maxims as "there is no I in team", "who passed you the ball when you scored ?","when the going gets tough, the tough get going" and "A quitter never wins ; a winner never quits" (Snyder,1972;Fine,1987). Viewed in this manner, athletes are significant social figures because they are symbolic stand-ins for important societal values like courage, integrity, and poise (Barrel, 1981).

A sports team functions as a powerful unifying source for a community – a people – place bond for regional economic development. Sportsmen and women from international participation are welcomed by the family members, community and the country at large. In Kenya, many emerging and rebuilding cities such as Eldoret, professional sports are seen as a potent symbol of urban progress. Similarly, regions of the world for example in USA, Boston, Celtics produced sixteen championships' in thirty years, this mean everything to Boston because they are part of the working class, professional class in the whole city (Butterfield, 1986a).

Sport as a patriotic sentiment

Globally a team become symbolic stand in for a nation – a rallying point for a patriotic fervor-in the course of international competition at times national loyalties reach such a feverish pitch during world soccer games that riots ensue and people lose their lives(Zanden,1990). This has been exemplified through the treatment and promises made by dignitaries, when a team wins, whole country wins and this promote patriotic spirits among citizens.

Sports metaphors include such as sport speak as "players", "struck out", "long-ball hitter"," hit a home run", "cover all the shots", "playing a hard ball", "delivering the knockout punch", "making an end run", "won't play ball", "go the distance", and "a goal- line stand"(Wells,1988).In the same way, the division of labour in sports has been tied to traditional values and beliefs with historically relegated to secondary roles as spectators, cheerleaders today (Eder and Parker,1987). Women were thought to have no active place in sport, and participated as uninvited, unwelcome guest because barred were from the event. When women ran their first Olympic Marathon in 1984, nothing happened as they were only limited by their own and society's sense of limitations (Gross, 1982:23).

Sport and economic development

The 2012 London Olympic and Paralympics village established lasting legacy in the city as 2800 apartments were transformed into homes and 1379 sold to the local community. In this occasion, 75 pence of every sterling pound paid on tickets was invested for future development of the area hence living a long term development effect in that region (Nation February 13, 2012). The communities after the games were supported by new parks, open space, transport links, and community facilities including a Paralympics facility that was turned into sports academy with 1800 places. Local people are involved in the games at different levels so as to build their skills and create interest enabling them manage the facilities when the games were over (Nation February 13, 2012). Sportsmen specifically athletes exemplifies how one's fortunes in sports can change very fast in life. Sports like athletics has changed and fuelled the desire to make athletics a source of livelihood for many in the agriculturally rich regions through rewards of millions earned from sports not only help individually but collectively to the community because they have to go back to the community (Nation November 14, 2011).

Sport is acquiring wider meaning as a competitive employer in the local market, as footballers in Kenya's premier league top club, for instance earns about Ksh. 50,000 or more in salaries and allowances (Nation July 9, 2012). The earnings now enables footballers in the country to live a fairly comfortable life and pursue the sports more seriously as a career, unlike in the past when they had to find other jobs and only play for fun. Some companies have expressed interests in creating training and employments opportunities to youths who excel in school and also gifted in sports. Talents can be used to better one's opportunities in life, therefore a good sports person should be an all-round individual good in academics as they are in sports to have more promising careers (Nation July 9th, 2012). In sports, sports persons love their talents train and practice so that to earn them a living as once gifted in any sport automatically, wins a gold, silver, or bronze medals and rewarded can be an open way for investment and for economic regional development.

Methodology

The paper uses descriptive-survey study method on the available empirical data. A survey research allows the researcher to obtain information that describes the existing phenomena by asking individuals about their perception, attitude and behavior values (Bryman and Bell, 2011; Mugenda and Mugenda, 2003).

Key findings

Sports improve community cohesion by tackling tension both within and across communities creating positive role models leading to regional development and reduction of crime and antisocial behavior among youths. Sports world wide reduce barriers for marginalized groups for example disabled young people, get opportunities to participate expressing their talents. Sports involvement in educational training improves attendance and acquires skills for the work place and life. Sports reduce misuse of drugs and alcohol and improve psychological health and emotional well-being among youths. Active sport, being a short term job, makes it absolutely necessary for a player to understand prudent management of income for regional sustainable development.

The sports persons get scholarships overseas, since they bring victory at regional, continental and global contests. As they get scholarships overseas as they pursue their course in sports, which would graduate them to be ambassadors of the nation (Nation, October 17th, 2011; 4). According to Collymore, (2013) the sportsmen and women, who participate in sports inspire all with their hard work, determination and indomitable spirit and deliver best result for African continent (Nation, August 7th, 2013; 69).

Sport is a powerful tool to strengthen social ties and networks, and to promote ideas of peace, fraternity, solidarity, non-violence, tolerance and justice. Sport is used to reach out to those in need including refugees, child soldiers, victims of conflict and natural catastrophes, impoverished, persons with disabilities, victim of racism, stigmatization and discrimination, persons living with HIV/AIDS, malaria and other diseases. It is an integrated tool in short-term emergency humanitarian aid range activities, or in long term development cooperation projects, on local, regional or global scale. Sport plays a significant role of promoting integration and economic development in different geographical, cultural and political contexts.

Sport is a powerful tool to strengthen social ties and networks, and to promote ideas of peace, fraternity, solidarity, non-violence, tolerance and justice. According to (UN,2003) system draws on the unique convening power of sport as a cross cutting tool for celebrations such Fundraising, advocacy, mobilization raising public awareness: in particular by appointing athletes or soccer players as ‘Ambassadors’ or ‘spokespersons’ of their countries and leveraging the potential of sports events as outreach platforms. The mobilizing power of sport is often used as a ‘door-opener’ to convey crucial messages about HIV/AIDS, child’s rights, the environment, education, cultural and other aspects.

Conclusion

Sport is a field of discipline which boosts the economy within a very short period, as the sports persons get rewarded. Money rewarded is invested in construction dissent storey houses for residential and commercial purposes, purchase vehicles for their use and commercial purposes and leading to regional development. This investment changes their standard of living from low level to high, from poverty to richness, from low esteem to high, from low status to high status quo in the region of their origin. Sportspersons are recognized as heroes/ heroines by others from various different fields of excellence. Sports are fields which do not require large capital (money) investment for a sports person to start with, but only training skills, practices and good health. Sport at the end of training skill and practices, leads to competition and winning leads to rewards (money) needed for investments for sustainable regional development. Development sports based activities can help previous approaches in the sport and development field have implemented sporting activities and then looked to incorporate development objectives after (International Platform, May 28th, 2013).

Sport has done much to bring blacks high visibility in a white dominated society. Blacks have also had a substantial impact upon sport (Zanden,1990).In Africa, particularly in Kenya's prowess in athletics owes a lot to un sung man called Nyantika Mayioro, the barefooted athlete racists branded 'lap monkey', who made history in 1956 Olympic Games by finishing the 5000m in seventh position a head of white runners who at time believed a black person (Negroid) has neither the skills nor the stamina to finish a head of Caucasian. He was called many names but that did not deter him from creating a name for him and the country internationally. His effort and other African runners led to the international Olympic committee to abolish racial segregation in sports in October 1963(Nation, Friday June 14, 2013).This consequence led to many African countries participate in international sports worldwide including; south Africa, Nigeria, Ethiopia, Uganda, Tanzania, Ghana, Egypt ,Algeria, Tunisia and the rest of Africa.

Recommendations

The research recommends governments in African countries allocate capital for constructing complex stadia or sports/ fields which can accommodate international competitions like world cup and Olympic Games. African countries had inadequate facilities until 2010 when South Africa hosted world cup competitions for the first time in Africa since world cup competitions started. Corruption should be curbed from the world of sports in order to promote human resource frontier of economic development and integrated talent management.

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INNOVATION AND TALENT DEVELOPMENT IN EDUCATION: TURNING THE PAGE ON UN-MET LABOUR MARKET NEEDS IN KENYA

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Abstract

While acknowledging that education equips people with wisdom, knowledge, competencies and attitudes that enable them to adapt to and function well under different circumstances, it is here-in noted that education as introduced to Kenya in the mid 1800s is inadequate to handle the challenges facing Kenya in the 21st century. As a remedy, it is suggested that it would be timely for Kenya to delve into early identification and nurturing of students' talent. Literature reviewed in this study has shown that innovations out of students' talent have the potential to yield huge returns to a country's economy. Many now acknowledge that innovation of computers by Bilgates may have been the turning point of not just American economy but world economies. Thus besides addressing the unemployment menace, talent development could enhance the productivity of individuals. Further, talent development could increase Kenya's chances of grooming talented young people who possibly will offer solutions to burning issues such as corruption, insecurity and poor governance thus leading to the much needed socioeconomic development. Thus the study recommends the need for formulation of a government policy in order to have a legal framework for implementation of talent development in Kenya. There is also need for study exchange programmes between Kenya and developed economies to enable a deeper understanding in talent growth and development.It is further recommended that there is need for massive sensitization in order to realize positive change of attitude in society towards talent growth and development in various fields. There is also need for establishment of talent academies in every county to nurture younger talents.

Key words: education, talent, growth, development, creativity, innovativeness

Acronyms: EFA- Education for All; KHT- Kenya House of Talent;MoE- Ministry of Education

Introduction

Education has been defined variously by different scholars. Dewey (1916), for instance, defines education as a form of learning in which knowledge skills and habits are transferred from one generation to the next through teaching, training, research or autodidacticism. On his part, Jackson (2011) argues that education is a moral enterprise whose business is to make everyone a better person. Certainly, education is the process of acquiring knowledge, skills, attitudes and habits. This happens formally through schooling or informally through life experiences (Sifuna, 1990). Ultimately, it is meant to enable people to adapt to and function better in their environments. It is for these reasons that education was affirmed as a basic human right in the Universal Declaration of Human Rights in 1948 (UN,2000), the International Protocol that established Education for all (EFA) in Jomtien, Thailand (UNESCO, 2000) and the world Education Forum (WEF) in Dakar, Senegal (UNESCO, 2004).

Acknowledging that constant exposure to new ideas and skills through education makes people better workers and thinkers, the government of Kenya has committed to promoting education. For example at the time of Kenya's independence in 1963, shortage of skilled manpower was a major obstacle to attainment of the nation's development goals. To remedy this situation, Kenya invested in the massive expansion of her education sector. Consequently, the student enrolments increased from 0.9 and 0.03 million in 1963 to 7.1 and 0.9 million in 2003 in primary and secondary schools respectively (Kimenyi et al, 2006).

Although education enables its successful recipients to participate meaningfully in all facets of society, the arguments in this discussion largely drawn from a desk review coupled with reflective experiences of the author, suggest that Kenya's education sector could do better. The reason being, that society is dynamic hence, education as introduced to Kenya in the mid-19th century (Bogonko 1992), may not adequately address the emerging challenges of the 21stcentury. According to several authors (Wainaina, 2012; Nzioka, 2011; World Bank, 2013), the following is an outline of some of the major challenges facing Kenya today:

- Youth and graduate unemployment resulting partly from education expansion and population growth;
- Ethnic conflicts over ownership of finite resources like land;

• Insecurity resulting from terrorism attacks and influx of refugees;

• Internal tensions arising from groups such as Mombasa Republican Council (MRC) the Sabaot Land Defence Force (SLDF) and Mungiki;

• Corruption;

• Quest for sustainable technological, economic and industrial development; and,

• Poor governance systems coupled with the need to address historical injustices in order to chart out sustainable democracy.

Notably, these challenges are not unique to Kenya alone. Countries world over are experiencing similar challenges. However, the difference is in the way each country refocuses its education sector to address the challenges. Observing countries which have gained massive ground in economic growth like South Korea and China, also called the Asian Tigers, one realizes that perhaps the greatest importance of education is not in generating human resource. Rather, the value of education lies in the critical role it plays in transforming the human resource into human capital. While human resource refers to people's skills and abilities seen as something a accompany, organization, business sector or country can make use of, human capital refers to the stock of competencies, knowledge, social and personality attributes including creativity, embodied in a people and put to use by a country, organization or company. To this regard, it has been especially noted that the Asian Tigers have invested heavily in talent development with a sharp focus on creativity and innovation in science, technology, industry and entrepreneurship, (Webb, 2010).

At this point, some people may wonder why emphasis is laid on talent development which is possessed naturally. Indeed, talent is an innate ability to perform a given task in an extra-ordinarily excellent manner (Wheeler, 2006; Sorensen and Crabtree, 2000). This notwithstanding, there is need to open debate on the importance of identifying and nurturing talent.

Why Talent Development?

A quick scan of literature on the value of talents reveals that if every talented person had an opportunity to put their talent to proper use, possibly, Kenya's vision 2030 could be achieved sooner. The following is a delineation of some of the reasons why talent development is essential.

The Need to Eradicate Unemployment

In Kenya as is the case of most developing countries, it was previously known that academic subjects were highly rewarding compared to their technical, vocational and creative arts counterparts (Mutua and Namaswa, 1992; Psacharopoulos, 1993). Perhaps this explains the clamour for highly academic courses that led to employment in the white collar job sector. Currently, job opportunities in formal employment seem to be shrinking by the day hence, reducing the possibility of employment of university graduates (Wambugu, 2011). Not surprisingly, unemployment is a huge menace in Kenya. It is, therefore, necessary to consider all alternatives for job creation.

To this end, it is likely that creativity and innate ability could bring the much needed relief. This is stated in cognizance of the growing fans base for sports and creative arts. For instance, the local theatre industry has attracted a large following. Many Kenyans today go home to watch television drama series like Machachari on Citizen Television, Lies that Bind on Kenya Television Network (KTN) or Mali on Nation Television (NTV). Not to mention, comedy series like Churchill Live by Charles Ndambuki on NTV, Hawayu by Eric Omondi on KTN, XYZ show by Jeff Koinange on NTV, Kenya Kona by Mshamba, Jalango and Otoyo on KTN and Naswa on Citizen TV. Also, local music series such as 'Mambo Mseto' on Citizen TV and 'Stra8t Up' on KTN have won awards for best youth television programmes. Apart from watching television series, Kenyans have demonstrated their willingness to pay fees as high as Ksh.1000 per show to watch live 'Kenya Kona' comedy shows. On the international scene, most households in Kenya watch Hollywood movies, Bollywood movies or Nollywood movies christened afrocinema on Citizen TV. All these point to potential job opportunities should Kenyans establish their own 'Kollywood movies'. Undoubtedly, talent development seems to be the key to unlocking this potential.

Talent Development and private rate of returns

Until the late 1990s, Kenyans predominantly adored foreign talent in music and other creative arts. This is because the few Kenyans who ventured into this industry hardly earned enough money for self-sustenance. Today, the local arts industry is so lucrative that university graduates such as David Mathenge an acrchitect, better known by his stage name 'Nameless', his wife WahuKagwi a mathematician and Eric Wainaina a medical doctor have abandoned their academic professions to try their luck in music. It is estimated that they earn more from their music than from their professional careers. This is stated considering that talent can never be compensated in the same way an academic profession is compensated. For instance, in a single performance at a music concert, so much money is raised as entry fees. In Kenya, apart from the money raised from using songs as ring tones in the mobile phone industry and the profits accruing from the sales of music, these entry fees determine the remuneration of a talented musician. This is gradually leading to increased investment in talent development. As such, the annual Tusker Project Fame Academy has become a household programme attracting participants from the whole of the East African region (Walubengo, 2011). Moreover, the fore going discussion is proof that with talent development in the creative arts, even those who are otherwise academically gifted will have some job to fall back to in case their professional careers do not work out.

In sports, Kenya has produced world renowned sportsmen such as David Rudisha the athlete and Humphrey Kayange the rugby player just to mention but a few. The returns to their talents are enormous not only to themselves but also to the entire Kenyan society. For instance, the classy Kipkeino School along the Eldoret-Webuye road in UasinGishu County is one of the social accomplishments of Mr. Keino an athlete who was the 1987 sportsman of the year (Keino, 2013). Similarly, a marathoner, Wesley Korir who is the president and co-founder of Kenyan Kids Foundation is known for his role in improving education and healthcare in Kenya. More specifically, Korir is constructing a new hospital in Kitale town where people are treated whether they can pay fees or not, he has also invested in school fees payment for children in his Biribiriet hometown and in agricultural training for farmers in Cherengany area (Nzwili, 2013; Schenk, 2013). For these reasons, it is not surprising that Wesley was recently elected member of parliament for Cherangany Constituency in Trans-Nzoia County because of his contribution to the area' socio-economic growth. Given this state of affairs, it is likely that if the education sector delves into talent development, it will emerge with a successful strategy for fastereconomic growth.

The Extraordinary Productivity of Talented Persons

A critical look at outstanding Kenyans in various sectors reveals that talent enables people to be creative, innovative and to achieve extra-ordinary results on whatever tasks they are given. The celebrated Kenya Television Network (KTN) investigative journalists Mohammed Ali and John Allan Namu fit in this category. Any body who has watched their 'JichoPevu' series on KTN can confirm this. Lately, playwright CleophasMalala, turned politician, is the most sought after theatre guru. He hit Kenya's news headlines in April 2013 for his talent in producing and directing award winning plays such as 'Black Rhino the Messiah' and the controversial 'Shackles of Doom' (Orido, 2013). Further, during the hearing of the presidential election petition filed by Prime Minister RailaAmoloOdinga, one young lawyer, Kethi Diana Kilonzo exhibited outstanding talent in matters law there-by attracting massive following on social media (Kwamboka, 2013).

In the education sector, world renowned researchers like Professor George Psacharopoulos and Maureen Woodhall have demonstrated exceptional talent in research work. As such, they have conducted and published various studies commissioned by the World Bank. Professor Psacharopoulos' publications include 24 publications in different languages (Psacharopoulos, 2002). With this, it is likely that his work has reached many people in different parts of the world. Similarly, Maureen Woodhall boasts of achieving 34 publications with the United Nations Educational Scientific and Cultural Organization (UNESCO) (UNESCO, 2013).

At the local level, scholarly publications of our mentors who are also widely published such as Professors Fredrick A. O Otieno, John Shiundu, Judy Achoka and Dr. Stephen Odebero demonstrate the invaluable contribution of talent to outstanding scholarly outputs. A review of their publications reveals that they are talented academically. Hence, there is need to invest in nurturing academic talent. It is only unfortunate that the private returns to academic talent are fairly dismal in Kenya. This is because, although it is argued that an individual's wages increase with her/his level of education, (Psacharopoulos and Woodhall, 1985), Kenya has witnessed less educated personnel with exorbitant earnings particularly, in the political sector compared to professors engaged in the education enterprise with meagre earnings. Considering these discussions, the question is; could investment in nurturing academic talents perhaps produce brilliant minds to tackle issues that have dodged Kenya for long such as corruption, insecurity and poor governance?

The Need for Optimal Utilization of the Human Resource

Often, it has been misconceived that talented people realize gains from their talents effortlessly. But, this is where we may go wrong. Reflective thought reveals that although people are born with talent, they still have to nature it in order to achieve extra-ordinary returns on it. In any case, some people have become quite good at accomplishing some tasks as a result of practice even if they do not have much talent .As such, one may say, put talent to use, it will bear fruit but sleep on talent, it will simply get wasted. Perhaps this is the reason why renowned books of history such as the bible contain passionate quotes about talent. For instance in Mathew 25:16-18, it is written:

He who had received five talents went at once and traded with them and made five talents more. So also he who had the two talents made two talents. But he who had received one talent went, dug the ground and hid his master's talent.

Undoubtedly the holder of one talent wasted it. It is for this reason that Kenya needs to invest in talent development so that its talents are not wasted. This is because, although access to education is on the increase in Kenya (Kimenyi et al, 2006), apparent shortages of the right people, with the right skills, in the right places remains a major concern (Kenya House of Talent (KHT), 2013).

In this discussion, the author investigates the role of education in talent development. Further, an outline of the challenges militating against talent development in Kenya is presented. The purpose of this discussion is to open intellectual debate on the need for Kenya to rethink its human capital development strategy and redefine the role of education in Kenya towards attainment of Vision 2030. These are presented as follows.

Role of Education in Talent Development

Firstly, in an attempt to develop students holistically, Kenya's education sector plays a key role in talent development by offering co-curricula activities through drama festivals, ball games, science congress, music festivals, racket games and athletics. Concurrently, academic talent and the creative arts are developed through the core-curriculum (Chege, 2013; MoE, 1992). However, it is worth noting that in Kenya, while most of the corecurricula subjects are compulsory and examinable, the co-curricula activities are neither compulsory nor examinable. For this reason, most students do not participate in cocurricula activities.

Secondly, education contributes heavily to positive personal character development (Docheff, 1998). Personal development involves activities that enhance self awareness, realization of one's aspirations, improvement of health, spiritual development and acquisition of a values system to steer individuals through life successfully. Perhaps this is the reason why a difference has been noted between talented people who are well education and the illiterate but talented individuals. For instance, questions have been raised about why some celebrities have made so much money but died so poor. Yet, others have earned lots of money but still grown old gracefully and died wealthy. Joe Masiga is an example of the later group. He is a practising dentist in Nairobi who was a talented football and rugby player in his youthful years in the 1980s.

On the basis of the foregoing reasons, it is apparent that education enhances the value of innate abilities through identification and nurturing of talents in schools and, through positive character development.

Challenges Militating against Talent Development in Kenya

In recognition of the crucial link between education and talent, the Prof. Douglas Odhiambo Task Force (MoE, 2011) recommended for a change in Kenya's Education structure from 8-4-4 to 2-6-6-3 in order to focus on early identification and nurturing of talent in individual learners by the end of the Junior secondary school phase. However, there are several hindrances to talent development in Kenya. These include:

Negative social attitudes: attitudes are strongly held beliefs, opinions and feelings which are reflected in people's behaviours. A study carried out by some researchers (Wagah, Indoshi and Agak, 2009) revealed that negative social attitudes towards the general field of talent development especially in the creative arts has not only hurt students readiness to take the subjects but also their commitment to excelling in the subjects. The negative social attitudes could be attributed to the discriminative experience of Africans in low quality vocational education during the colonial period (Bogonko, 1992).

Insufficient time allocated to talent development: this is stated in the light of the criticism that Kenya's education curriculum, as is the case of most countries in subSaharan Africa, is narrow focussed, theoretical/academic and examination oriented (Kerre, 2006). More specifically, most subjects in the secondary school curriculum are handled theoretically as teachers complain of insufficient time to cover the practical aspects of the wide syllabuses. Also, some subjects that support creative talent development such as the technical and creative arts are highly optional. Moreover, cocurricula subjects are not only optional but also un-examinable. This is suggestive of a lack of commitment by the government to development of these subjects.

Lack of a government policy statement and guidelines on talent development: although there is a mere mention of harnessing talent in the science, technology and innovation policy and strategy (Ministry of Science and Technology (MST), 2008), there is no express policy statement and guideline on talent development in Kenya. This signifies a gap in Kenya's strategy for attainment of Vision 2030.

Impatience: it is natural for human beings to desire quick returns to any investment made. And, when systems do not seem to work, people tend to give up. However, Kenya has paid a dear price for loosing hope in this fashion. For example, in the 1980s and 1990s, Kenyan teachers did a lot to develop pupils' talents in gymnastics. But, when some pupils sustained injuries in the process, instead of under-studying best practices of gymnastics in countries like China where children win gold for balancing on the toes of one leg (Blake, 2012), the sport was abandoned altogether. Certainly, there must have been a valid goal for starting gymnastics in Kenya in the first place. As such, it is depressing to note that giving up is not likely to earn gold for and/or steer Kenya to the much needed economic growth.

Conclusions

It has emerged from the foregoing discussions that the need for talent development can not be overemphasized. Clearly, talent development is essential for addressing challenges such as the diminishing number of job opportunities in formal employment. What is more, talent development enables people to be creative and innovative in performing tasks. Importantly, substantial returns accrue from talent development and, this could be the key to unlocking Kenya's potential for faster economic growth.

Furthermore, it is evident that Kenya's education sector plays a critical role in talent development through both core-curricula and co-curricula activities which are organized from schools to national festivals. Unfortunately, after national festivals, the talents identified are not nurtured to greater heights. In addition, a combination of education and talent enhances individuals' productivity, their personal character and management of their personal resources.

It also emerged that several obstacles hinder talent development in Kenya. The hindrances included negative social attitudes, insufficient time allocated to talent development in schools, lack of government policy guidelines on talent development and impatience. If Kenya has to rip valuable returns from its currently untapped talent, then these challenges have to be addressed.

Suggestions for Way Forward

There is need for formulation of a government policy in order to have a legal framework for implementation of talent development in Kenya. There is also need for study exchange programmes between Kenya and China to enable Kenyan scholars to go to China and understudy Chinese practices in talent growth with a view to enriching Kenya's knowledge base in talent development.

There is need for establishment of talent academies in every county. In the academies, if this recommendation is adopted, both academic and creative arts should be offered. Also, professional talents should be identified and used to nurture younger talents.

A pilot programme should be conducted to determine the feasibility of the 2-6-6-3 system of education recommended by the Professor Douglas Odhiambo Task Force. This is stated considering the recommendation's emphasis on early identification and nurturing of talents.

Massive sensitization is essential in order to realize positive change of attitude in society towards talent development in the technical and creative arts. This should start with teachers who discourage talent development amongst their students.

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STUDY ON HUMAN RIGHTS: AN INDIAN CONTEXT

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Abstract

Human right is those basic fundamentals rights which every human being has in the capacity of being human. These rights are not the ones which are enforced by law or any other institutions but are universal in nature and equal for all. The concept of human rights is “multidimensional’ as it includes all the social, political, economical, cultural rights etc.within its domain and contravention of any single right is accrued as violation of human rights. The situation of human rights in India is a multifarious one, as a result of the country's large size and wonderful multiplicity, its status as a developing country and a supreme ruler, secular, democratic republic, and its history as a former magnificent territory. The Constitution of India provides for Fundamental rights, which include freedom of religion. Clauses also provide for Freedom of Speech, as well as separation of executive and judiciary and freedom of movement within the country and abroad.

Keywords: ***Rights for human, violation, freedom, justice***

Introduction

The commencement of conversation on the idea of human right started in the year 1948 with the signing of “united nation declaration of human rights (UDHR)”. For the very first time focused on the issue of universal human rights and its violation since, than there had been much convention, intervention laws etc. regarding the protection of these rights. Similarly in the Indian context of India with the adoption of the constitution in the year 1949-50 and the fundamental right in the part III of the constitution it ought to provide all social,political,cultural, economical right to every citizen on its land. But given the diversity subsistence of different welfares, religion, customs, cast, class etc.this beautiful dream in our constitution remain to be grounded by everyone. Therefore we see today several threats to minorities, dalits, adivasis, etc. and issues like poverty, inequality, in opportunities and so on which is not only a violation of the human rights but a direct threat of justice,equality,liberty,and most importantly humanity As a whole.

Literature Review

India is the biggest democracy in the world. Being a democratic country one of the main objectives is the security of the basic rights of the people. Government of India has given due consideration to the recognition and guard of human rights. The Constitution of India recognizes these rights of the people and shows deep concern towards them. According to the United States Library of Congress, although human rights problems do continue living in India, the country is generally not regarded as a human rights concern, unlike other countries in South Asia. Based on these considerations, the 2010 report of Freedom in the World by Freedom House gave India a political rights rating of 2, and a civil liberties rating of 3, earning it the highest possible rating of free. In its report on human rights in India during 2010, Human Rights Watch stated India had "significant human rights problems They identified lack of responsibility for security forces and impunity for abusive policing including "police violence, extrajudicial killings, and torture" as major problems.

Objective of the Study

Human right is a condition for the development and growth of an individual personality, which ultimately contributes in the expansion of the nation as a whole. Objective of human rights for defense of human life and liberty, to preserve the pride of people, promoting healthy development, maintaining equality.

Issues and Challenges of Human Rights in India

With the growing crimes, violations, scams and scandals human rights are being despoiled and taken for granted and in the recent years conditions have become worst and deteriorate in India. Violence against women is increasing at a deplorable rate and they are at a far above the ground risk of sexual harassment, trafficking, and forced labor including violations of equal contribution in political, economic and social life. Despite the various strong laws and acts frame by the government, women across India still continue to suffer from domestic violence, acid attacks, rape and murder etc. Not only this several issues and challenges have occur and broken with the violations of human rights. Now given the growing crime nature and extent of violence there is an instant need to specially address the women issue including the dalit and other marginalized communities issues more strongly. Now the issues of Women empowerment have been taken up as a Human right issue. It is high time that women in our society should be treated at par with men in all the field of our society. In the recent years the government of India under the leadership of Prime Minister Narendra Modi has taken important strides particularly with the legal reform with respect to the action of women.

Human Rights an Indian Context

The Constitution of India is known as one of the most right-based constitutions in the world. It was drafted around the same time when the Universal Declaration of Human Rights by the United Nations came into force (1948). Indian constitution provides the strength of human rights in its opening and the sections on Fundamental rights and order Principle of State Policy. Individual partly and wholly expects that he/she should be provided the good environment for his/her overall development. Rights provide that environment. Rights have been defined as those claims of an individual that are necessary for the development of his/her own self and recognized by state or society. Some of the rights provided by the state and enshrine in the constitution are known as fundamental rights

The Indian constitution is based on the theory that guided India’s struggle against British colonialism, which was marked by the violation of civil, political, social, economic and cultural rights of the people. Therefore, after independence the framers of the constitution provided some fundamental rights to the citizens which are enshrine in the part III of the constitution. These fundamental rights are defined as basic human freedom for a proper and pleasant development of personality of every Indian citizen. These fundamental rights apply to all Indian citizens, irrespective of caste, creed, color, sex, race or place of birth. They are also enforceable by the courts, subject to certain restrictions.

Suggestions & Conclusion

Human Rights are rights relating to life, liberty, equality and self-esteem of the individual definite by the Constitution or embodied in the International contract and enforceable by courts of different nations including Indian judiciary, Our Constitutional commitment to the protection and promotion of Human Rights finds suggestion in the introduction and various other provisions relating to fundamental rights, Directive Principles of State Policy and fundamental duties. To conclude human rights issue remains to be a harious and an 'immediate issue'. It could be said that –'violation of a right of a human, is violation of humanity itself ''. Thus in order to save this tree of humanity from shedding all its tears ,a bottom to top approach needs to be taken, starting from a human itself ,to the countries specifically ,and to the world as a whole.

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