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5.2.2 **Abstract**

5.2.3 **Introduction**
5.2.4 **Literature review***(where necessary)*
5.2.5 **Methods**
5.2.6 **Results**
5.2.7 **Discussion**
5.2.8 **Conclusion**
5.2.9 **Acknowledgements** *(where necessary)*
5.2.10 **References**

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The title must be bold, black, 16 point Times New Roman font, maximum of 16 words, single spaced, and centred on the top line(s) of the title page only. List all authors with their organizational affiliations through a superscript on the title page immediately following the title and put an asterisk for corresponding author and provide the email.

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All manuscripts must include a maximum 200 word abstract on the title page immediately following the author(s)' names. The first sentence of the abstract should indicate the objectives of the study. Subsequent sentences should indicate the location of the study, methods, and summarize major findings. The last sentence should articulate the major conclusion(s). Add up to 6 keywords one line below the abstract.

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This section should extend (but not repeat) the background to the article already dealt with in the Introduction and lay the foundation for the work being reported. It should identify the most relevant previous literature on the topic (but not in excessive detail) in order to position the paper and demonstrate how it will make a significant contribution. It (or a separate section) should set out (and justify) the theoretical or conceptual framework adopted in the paper. It may identify a number of hypotheses to be tested or research questions to be explored. In short, this section (or sections) should explain what the motivation for the paper is and why its contribution is original and significant.

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Materials and Methods should be complete enough to allow experiments to be reproduced. However, only truly novel procedures should be described in detail; earlier published procedures should be cited, and significant changes of published procedures should be mentioned briefly. Subheadings should be used. Methods in general use need not be described in detail.Specify the measurements and statistical tests used as well as related levels of significance.

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Results should be presented with simplicity, clarity and precision. The results should be written in the past tense when describing findings in the authors' experiments. Summarize all relevant data and study findings. Do not repeat in the text the data reported in tables and figures verbatim, but do refer to the data and emphasize important findings.

5.3.7 Discussion

The Discussion should **e**valuate and interpret the findings. Compare them with those of other related studies.

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Should be drawn from the findings of the research. This section should also make clear what is the original contribution of the paper, discuss the policy

or management implications of the findings, provide a critical assessment of the limitations of study, and outline possible further research.

5.3.9 Acknowledgements *(where necessary)*

This section must identify the source(s) of funding for the research. It should acknowledge any research assistants or others who provided help during the research (e.g., carrying out the literature review; producing, computerizing and analysing the data; or providing language help, writing assistance or proof-reading the article, etc.) but who are not included among the authors. It should state where and when any earlier versions of the paper were presented (e.g. at a seminar or conference). Lastly, it should acknowledge the help of all individuals who have made a significant contribution to improving the paper (e.g., by offering comments or suggestions).

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Harvard Referencing System is preferred for citations and references. Regardless of the formatting style used, a bibliography/reference list is required at the end of the manuscript. Do not mix formatting styles in the text. Reference: The references should be brought at the end of the manuscript, and should be in an alphabetic order. The reference list should be cited in accordance with the following examples:

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7.2 The manuscript file should be Microsoft Word file format. The manuscript should be arranged in the following sequence: Title-page, Abstract, Text, Acknowledgement(s), References, Legend to Figure(s), Table(s), Figure(s). Manuscript, after it has been thoroughly checked by the corresponding author for conformity with the instructions as detailed above, should be submitted as email attachment to the *Editor-in-Chief* at both e-mails: asbs@cut.ac.zw, asbsjournal@gmail.com; chiefeditorasbs@cut.ac.zw. The author(s) should maintain consistency in the English chosen. The covering letter should certify thatthe manuscript has not been submitted elsewhere, has been seen by all co-authors, and should have the corresponding author's functional email and telephone number. Covering letter should also contain emails of all authors. A manuscript tracking number will be assigned to each manuscript and the authors shall quote this number in all subsequent correspondence. The manuscripts will be handled by Associate Editors with expertise, as far as possible, in the area of the manuscript.

EDITORIAL COMMENT

This issue is born out of many threats to the life of our journal- Annals of Social and Behavioural Sciences (ASBSJ). In any life-threatening environment, it's the survivors who remain to carry on with the vision and dream of stakeholders and sponsors. Our stakeholders' dream has always been to nurse a high impact journal, that will serve as a reliable platform for disseminating transformative research outputs, influencing policy, interrogating existing theoretical trajectories and providing existential pointers to practitioners in whatever sphere of human endeavour. Indeed, call the current issue, `a survivors' issue'. A lot has happened that militated against our living up to our stakeholders' dreams and aspirations. Frankly speaking, one phenomenon can neither give succor to our restless audience nor justify our moribund existence. It suffices to say a lot of things beyond and not before our control have been threatening our*raison d'être*. Topping our challenges have been the impact of the world-wide health tremors of the Covid-19 pandemic, loss of some of our journal's best brains to other work stations, lethargic and demotivated work rate by some of our volunteer reviewers and lack of a dedicated secretariat for the journal. Cumulatively, these stand out as our major encumbrances and the rolling out of the current issue is testimony of our main sponsor's determination to overcome these ills of the past, learn from them and chart a more reliable future for the journal. We therefore remain deeply grateful to our main sponsor, the Chinhoyi University of Technology's authorities for keeping the fire burning despite a torrent of oddities. The greatness of any player is not measured by the ability to remain great in whatever sport one is, but by the ability to rise from a fall and become great again.

To our revered stakeholders, we remain alert to your dream and fervently aware of the cannons of a good journal, that is, blind review of articles submitted for publication, regularity of issues, quality of articles, frequency of citation of articles from the journal, circulation and allegiance to niche market. We commit ourselves to be always in

pursuit of these lofty values. Let no man judge us from our checkered past, as that past only serves to remind us now of the things we should avoid in order to remain on the desired course. We would like to take this opportunity to recognise the sterling contribution made by some of our erstwhile colleagues who left our work station for the call of duty elsewhere, after serving our journal well as reviewers and editorial team members for a considerable period. Your contribution is well appreciated. You helped in laying a foundation for the `intellectual giant in the making'. Since your departure, we have reconstituted, putting in place a new look editorial committee and board equally fired up and well experienced to run with the ball and fulfill the dreams of our stakeholders.

The articles in this issue have made it out of a very rigorous blind review process. Indeed, many have fallen by the way side hence we congratulate the authors who have made it for this issue for both rigour and patience. Doubtlessly, the long delay in publishing this issue caused anxiety among most of our would-be authors. We are profoundly regretful.

In this `survivors' issue' we feature articles with diverse and intellectually stimulating issues. The issues straddle a variety of disciplines.

Globally, ecotourism is touted as a bulwark of cascading the benefits of tourism to local communities but not many studies have been commissioned to interrogate the notion and its practicality on the ground. In the paper with the title `*Re-thinking ecotourism and community development: the case of Ngomakurira Hills project, Zimbabwe'* the authors subject the concept of ecotourism to its litmus test of community benefits. In pursuit of this, an evaluation of the Ngomakurira Hills project revealed that the benefits were not evenly distributed among the community members. This orchestrated an overt intra-community polarization over the issue of differential access to benefits.

In the field of higher education institutions (HEIs) a concern has been raised that developing countries have been copying and using performance management tools that are developed in the West which are obsolete and not adding value to concerned institutions. In the paper, *`A review of performance management systems in higher education institutions across the globe,'* the authors review literature on performance management systems in HEIs to gain insights on performance management system that can be used for quality assurance and its enhancement in higher education institutions in developing countries. From the study they make an observation that performance management in higher education can be improved by taking the strengths of the current systems (lean sigma, balanced score card, performance prism, performance pyramid and performance appraisal) and adopt them to current conditions and realities of the adopting institutions.

The renewed commitment and interest by African leaders to modernize agriculture due to increased global demand for food; need to address sustainable development goals and a general decline in traditional funding sources for agriculture has reignited the long standing debate on the best approach to financing agriculture. In the paper entitled, *`Commercial agriculture finance in Zimbabwe: past experiences and lessons for the future'*authors highlight challenges and headway made in funding commercial agriculture in Zimbabwe.

Natural springs can be an asset for Wellness and Spar tourism when packaged well. The springs in Makonde district are generally remotely located, with poor infrastructure. As a result their economic value is hardly realised. The paper, *`Packaging natural springs into community hubs for Wellness and Spa tourism: a case of Makonde District in Zimbabwe'* explores strategies that could be adopted to package natural springs into community hubs to

optimise their appeal for Wellness and Spa tourism.These are, among others, infrastructure development, research and innovation, product and site marketing,community socialisation and involvement.

This journal issue also taps into the domain of natural resource utilisation and management. Many countries across the globe have `bad land' and `underutilised land' which could be considered for afforestation as one land use option with great economic potential. Despite the growing significance of afforestation in the development discourse world-wide, its uptake by farmers as an economic activity of tremendous ecosystem value and services remains a peripheral consideration.In the article *`The challenges of adopting afforestation as an alternative and sustainable land use for economic development'* the authors engage in a world-wide scanning of literature on forestry to establish the major encumbrances to the adoption of afforestation as a land use option in a manner that helps meet policy targets. A close analysis of the spectrum of challenges zero in on three (3) that are critical to optimizing uptake of afforestation, in order of importance, namely, security of land tenure or land rights, access to extension services and access to investment capital. Dealing with these three challenges is pivotal to meeting policy targets for adoption of afforestation as an alternative land use for economic development.

To our valued stakeholders, we promise more intellectually stimulating research outputs and regular issues from now on.

Editor-in Chief
Professor Patrick Walter Mamimine

Contents

Commercial agriculture finance in Zimbabwe: Past experiences and lessons for the future.

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Abstract

The renewed commitment and interest by African leaders to modernize agriculture due to increased global demand for food; need to address sustainable development goals and a general decline in traditional funding sources for agriculture has reignited the long standing debate on the best approach to financing agriculture. Agricultural finance is viewed as a vital instrument for realizing economic and social integration of both small and large farm households. Using content analysis, this paper reviewed historical experiences in financing commercial agriculture, paying special attention to policy initiatives made since the colonial era up to present day. It highlights challenges and head way made in funding commercial agriculture. A review of success cases elsewhere has been made and related to the current challenges Zimbabwe is experiencing, leading to recommendations on what should be done to ensure that farm activities are fully financed with special consideration of hybrid financing schemes for commercial agriculture in Zimbabwe. What emerged from the literature and historical experiences of Zimbabwe is that unplanned and ad-hoc state interventionists' policies do not work, but rather a well-coordinated effort by all stakeholders particularly the private sector in harnessing savings towards agriculture is the master stroke to realising full potential of agriculture. The State role should be confined to regulatory and incentivising with limited direct funding to agriculture. Hybrid financing models proved to yield better results the world over in transforming

commercial agriculture particularly to economies that embarked on land reform programs.

Key words: Agriculture finance, commercial agriculture, hybrid financing Schemes

1. Introduction

Agriculture plays a critical role in the national economy through employment creation, foreign currency generation as well as gross domestic product (GDP) contribution. A majority of Zimbabwe's population relies on it for livelihoods and source of income as 70% of her population lives in rural areas (ZimStats, 2016). Its role has been reinvigorated by the recent increase in global demand for agriculture food and it's by products and the subsequent drive by the global community to fight hunger in its various forms as well as creation of wealth (end poverty). Given that Zimbabwe is an agro based economy and has vast tracks of fertile land, it is prudent for authorities to expend much of their efforts to find ways of boosting agriculture output and since finance forms the life blood of farming efforts, it is critical to review past experiences in agricultural finance and draw lessons for future efforts. This paper seeks to review past initiatives to draw lessons for future policy interventions particularly in light of the need to address sustainable development goals.

Background and historical review of commercial agriculture finance in Zimbabwe

Commercial agriculture refers to the growing of crops and rearing of animals with the intention of wealth creation through selling of produce.

This can be done on a small, medium and/or large scale depending on land size owned by a given farmer. Colonialism brought large scale commercial agriculture to Africa including Zimbabwe, with promise of modernisation and jobs but habitually disposing citizens and exploiting labourers . The origins of commercial farming or agriculture in Zimbabwe can be traced way back to the scramble for Africa period after the Berlin 1885 Colonial Conference which approved the taking over of African soil. The white settlers came to Africa in the late eighteenth century. Their interests were in mining and agriculture. A number settled in the then Southern Rhodesia taking over fertile land from the black people.The settlers divided the land into large farms with title deeds to the settlers which made the land bankable. The title deeds then facilitated the commercial farmers to access loans from financiers.

Historically, large scale commercial agriculture dominated farming and was the main beneficiary of most of the formal credit facilities in the agricultural sector. The formal banking institutions and successive white regime traditionally supported large scale commercial agriculture which was predominantly white owned with little financial support going to few black commercial farmers. The result was a highly skewed distribution pattern between the white settler community and the small holder farming community predominantly black indigenous farmers as the later could not access quality credit from formal financial institutions.

After the political independence of 1980, the large scale commercial farming sector continued to dominate as they still had preferential treatment with

respect to access to formalcredit from financial institutions such as banks, finance houses, agricultural cooperatives and other organisations in the agriculture value chain on the basis of title deeds . This enabled commercial farmers to mechanise and capitalise most of their operations. Mechanisation of their operations and the added advantage of bonding of properties as loan collateral led to commercial farmers repay their loans and this aided them in attracting foreign investments from Brazil and the European Union mainly as a result of their good credit ratings ;Rukuni, 2012).Most of these commercial farmers were members of the Commercial Farmers Union, an umbrella body that facilitated the transfer of expertise through workshops, funding through group scheme models as well as information sharing. Funding was coming from the European Union and the World Bank (Malaba, 214) . The model for financing such farmers mostly borrow from the social capital theory which allows for reduction of transaction costs by reducing information seeking cost as alluded to above (Scoones, Mavedzenge, and Murimbarimba, 217. Table 1.1 gives the composite of commercial farming before independence, levels of financial support for the white minority settlers as well as key crops dominating commercial agriculture.

Table 1 Summary of Zimbabwe's agricultural development experience

Key areas	First agricultural revolution (pre-independence)	Second agricultural revolution (post-independence to 1996)	The beginning of the third agricultural revolution (1996-2016)
Agricultural exports	-Tobacco leading export based on state support	-Tobacco leading export	-Reduced production for most export commodities (tobacco, cotton)
Food security	-Limited information on blacks -Drought and emergency relief	-Increase in maize production in communal areas -10-15% of smallholders produces most of the marketed output	-In 2002/3 over 49% of the entire population in rural and urban areas required food aid -Maize production declined from 2.1 million tonnes in 2000 to 1.5 million tonnes in 2001 to 500,000 tonnes in 2002
Agricultural financing	-Increased credit availability to white farmers	-Increased credit to smallholders -Long term loans for large scale commercial farmers for infrastructural development	-Targeted funding (crop packs, irrigation, livestock, tobacco) by government -Private sector funding limited to cotton, barley, horticulture
Technological development	-Hybrid maize development -Cotton insects and disease control thus boosting production -Tobacco development	-On farm research surveys in communal areas	-Merging of research and extension (AREX) -Limited resources and inexperienced personnel
Extension and research	-Master farmer training introduced by Alvord -Training centres introduced (Gwebi, Mlezu, Domboshawa, etc.)	-Reduction of extension worker to farmer ratio (1:1000 in 1980, to 1:800 in 1990)	-Massive recruitment of extension officers with limited experience -Limited resources for research and extension
Agricultural marketing and pricing policies	-Agriculture declared a controlled industry and Agricultural Marketing Authority (AMA) coordinated parastatals -Massive subsidies to white agriculture -Tobacco auctions started	-Increase in marketing infrastructure in the communal areas -Liberalization of marketing due to ESAP -Abolition of AMA and semi-privatization/ commercialization of parastatals	-Control of maize and wheat marketing -Price controls and decontrols introduced across the board for all agricultural inputs and outputs -Revival of AMA
Land reform	-Increased land for European settlers -Creation of native purchase areas	-Market assisted land reform and slow progress in resettlement in the 1990s -3.6 million hectares acquired and 71,000 families resettled	-Large-scale commercial farming sector comprising of 4,500 commercial farmers has lost 90% of the land, whilst 135,000 blacks have obtained access to quality land

Source: Rukuni (2012); Sukume, Moyo, & Matondi, (2003)

Pre-independence experience

Pre- independence commercial agriculture was predominantly white commercial farmers producing a wide range of agricultural products chief among them tobacco (leading foreign currency earner), horticulture, sunflower, livestock among others (Rukuni, 2012). Tobacco was the leading cash crop and was nicknamed the Golden leaf as its contribution to export earning was almost at par with gold . Commercial famers used Commercial Famers Union (CFU) for networking and net weaving. The structure of plantation of large scale settler farming of pre-independence Zimbabwe brought with it a multiplicity of benefits which include being enclave, large self-contained agri-business. Theyenjoyed economies of scale as they could hire skilled labour and engaged into vertical integration which may guarantee markets for produce and access to resources through support of suppliers.

According to Agricultural Finance Corporation (AFC) was the main funder of commercial agriculture with the support of foreign players mostly from European Union (EU) There were massive subsidies targeting mainly white minority farmers which significantly reduced production costs. AFC got credit lines from both EU and World Bank as the western world heavily supported the white minority farmers. Credit for commercial agriculture was readily available as most of international financiers were willing to partner with the settlers partly because of bankability of their land and their experience.

Post independence experiences

The post-independence period of commercial farming in Zimbabwe as shown on table 1.1 above saw reforms that reflect the new order which was ushered in by the second *chimurenga*. Political independence of 1980 brought about remarkable rise in the participation of small scale farmers in the general economy. Between 1980 and 1985, the portion of total maize sales coming from the subsistence farmer recorded a huge leap from 8 to 45%. During this period the new order was moving to correct the historical imbalances that were brought about by the coming of white settlers. Land reform was initiated late 1986 on a willing buyer willing seller basis as negotiated during the Lancaster house conference . The land reform was progressing slowly as most of the white settlers were not prepared to part with their source of livelihoods. The government acquired 3.6 million hectares of land and resettled 71 000 predominantly black families and the size of most farms per household were less than ten hectares. These were mostly small scale commercial farmers and chose to mainly grow maize with a few selected cash crops.

The smallholder farmers justification for farming and selling mostly maize after independence were increased producer price for maize by two fold and its upholding ahead of price increase of general goods over the time in question . The authorities also gave handouts of hybrid seed and fertilizer as a strategy to re-establish black small holder commercial farmers in the aftermath of the liberation war and the little rainfall of the early 1980s. During this period financial support for commercial agriculture was maintained though now capturing the once disadvantaged black small scale

commercial farmers. Land was still privately held and blacks could buy land from white settlers and get title deeds, this made it easy for farmers to access loans from both local and foreign financiers as land was bankable. Tobacco was leading in export earnings though other cash crops such as cotton began to gain ground on the international market . Agricultural finance was driven by AFC; however, given the increased need for support of small holder farmers and peasant farmers, the scope of AFC was expanded by making it a deposit taking institution through transforming AFC into a fully-fledged bank (Agricultural development bank of Zimbabwe- a commercial bank). This was been done in order to increase the finance base to help support the newly resettled small holder farmers. noted that much attention by government was shifted to small holder farmers to fight poverty and enable such farmers to create wealth for themselves.

Extension services for both commercial and communal farming significantly increased as the new administration intensified effort to expand agriculture as this was seen as the main stay of the economy (Woodend, 2003), though emphasis was placed on small holder farmers as a way to address historical imbalances. Concurring to the above posited that after realising that the black majority who constituted the bulk of communal and small holder farmers were finding it difficult to access loans from commercial banks most of which whose ownership was predominantly white as they were perceived to be high risky clients, the ministry of agriculture had to assist the newly resettled farmers of the 1988 by expanding their skill base. The ratio of extension officers to farmers improved from 1: 1000 of 1980 to 1:800 by 1990, which subsequently led to increase in output. During this period

agriculture productivity reached all time high levels as reflected by its contribution to output (21% to GDP in 1995), export (40%) and employment creation (contributed above 30% to national employment), this was accounted by both communal and commercial farming and was accompanied by increase in agriculture lending by more than 50%.

The land redistribution of the late 1980s was well planned and structured with the former colonial masters Britain paying for the process, though the pace of the transition was very low. The black majority became restive as a result

The period 1996-2017 as highlighted by Table 1.1 saw massive transformation in agriculture as the regime moves with speed to correct historical imbalances, this saw the commercial agriculture landscape significantly changing as exhibited by . This is the period when the Land Commission of 1997 was done which led to the subsequent grabbing of land thereby resulting in change of ownership structure of land as the country revoked title deeds of the white settlers and the land was proclaimed to belong to state. This had serious far reaching repercussions on bankability of Zimbabwe land as commercial farmers lost ownership of land and lost security to bank credit.

Large scale commercial farming sector comprising of 4500 white commercial farmers lost 90% of its land whilst black majority obtained access to high quality land as a result of land holding changing from private to state land with out title deeds . This resulted in loss of collateral on farmers as

newly resettled commercial farmers could not use their offer letters to access credit from financial institutions and multilateral institutions as these documents are not bankable (99 year lease- land belongs to state but being leased by commercial farmers), thus creating a new national problem on access to financial resources by farmers as they turned to government for sole supply of inputs financial resources thereby over stretching the treasury . The new farmers lacked expertise and finance among a host of problems and this reduced agriculture output, export value as well as threatened national food security . Table 1.2 show the trend as a result of the massive change in land structure

Table 1.2: Production levels for cash crops (in "000" tonnes)

Crop/Year	1996	1997	1998	1999	2000	2005	2010	2015
Tobacco	177	178	171	226	197	68	59	123
Cotton	56	229	273	274	303	333	211	260
Sugar					541	429	259	334
Horticulture	34	41	46	54	63	57	35	43

Source: Abridged Zimstats Reports (2001 &2016

The economy turned from a bread basket to a basket case and agriculture finance experienced an all-time significant deep as yester year funders particularly the European union and the world bank deserted the new farmer reportedly due to their limited documented experience, and credit ratingas well as non-bankability of their leases. In response the Government

of Zimbabwe as noted by came up with the Agriculture Sector Production Enhancement Facility (ASPEF) through the Reserve Bank of Zimbabwe to address financing needs of the newly resettled farmer by providing loans through commercial banks, though the large chunk was disbursed through the land bank (Agribank). The credit was mainly to address short term needs at the farm. In a bid to capacitate the farm, the government through RBZ negotiated with Brazil through the agriculture mechanisation policy to provide on credit irrigation equipment to large scale commercial farms, tractors, boom sprays all at concessionary interest rates. Due to nepotism and corruption most of the equipment ended up in wrong hands, some lying idle at political elite`s farms . The repayment for the equipment ranged between five and six years, however due to government involvement and allocation on party lines repayment rate was less than 10%, the government ended up assuming the debt which critics argue that the ruling elite as beneficiaries were supposed to repay on their own than to burden tax payers with such repayment .

This worsened the general perception by lenders, in particular commercial banks that the black commercial farmer is not credit worthy and lacks necessary skills to run farm enterprise. This coupled with undercapitalization of most banks added on the woes of genuine commercial farmers, banks became cautious in their lending to agriculture and short term expensive credit dominated agriculture finance. Agriculture Value chain financing at the turn of 2010s turnout to be a force to reckon particularly on cash crops such as soya beans, tobacco, and sugar beans as mutual beneficial contract arrangements such as contract farming and joint

schemes complimented government in financing agriculture. However, most farmers complained of exploitative rates and limited scope of such value

chain financing schemes. In 2016 government once again continued with its interventionist policies in agriculture, this time in the mould of operation "*Maguta*" initially promulgated and introduced in 2007/8 targeting primarily maize production. This was directed at both commercial and smallholder farmers, the result was an increased maize hectarage and output, In the following years the programme was expanded to cover other crops and later livestock farming. The model was shelved in 2018 due to funding challenges as the government adopted the "austerity for prosperity measures", thus leaving the funding gap unaddressed. The government has however done little to capacitate state institutions such as the land bank through allowing private ownership, little has been done on keeping or coming up with a database of farmers with corresponding loans taken as well as their payment patterns and the subsequent rating of farmers (Hlupo, 2018) .

Methodology

The paper adopted a systematic review of literature by sifting through scholarly articles on the subject (agriculture financing). The review model was driven by the rapidly increasing number of scientific publications in the last decades (Rapple, 2011). It used the synthesis method. Journal articles from science direct, Elsevier, Taylor and Francis group of journals as well as local and regional articles on the subject from reputable journals were reviewed. The key terms which were used to

search relevant journals were agriculture finance, rural financing, funding high risk business projects

.

Results

Financing challenges experienced by agriculture stakeholders in Zimbabwe and beyond

Agricultural finance in Zimbabwe is faced by several challenges which have contributed to its failure. This include dependency on unsustainable financing sources, low lending rates (unable to attract investment), high loan delinquencies as well as high transaction costs . Since the turn of the new millennium government has turned to be the main financier as reflected by its direct interventionist policy through operation maguta, '*Zunderamambo*", and command agriculture and indirect through Agribank and Reserve Bank of Zimbabwe (RBZ) and other commercial banks. Operation maguta dismally failed as most farmers did not repay back the loans, to them they viewed the advancing of input through the model as a political campaigning too which should not be repaid back . The Agribank and RBZ model has been heavily criticised due to undercapitalisation and its overreliance on national treasury rather than being self-financing (Chigumira, 2018).

This has been worsened by the new policy direction of "Austerity for posterity" with thrust on cutting expenditure which has already seen the withdrawal of state funding in Agriculture as the nation move towards market forces in addressing finance challenges in agriculture . Agribank remains wholly owned by the government since its inception, this has

drained the central government as the credit repayment rate remains very low (below 20%). The borrowing rates in real terms are very low which has discouraged lending to agriculture. This has been worsened by low savings and high loan delinquency. Commercial banks have shunned agriculture financing due to high delinquency as well as lack of quality collateral as farming land is no longer bankable . A lot needs to be done to address these challenges, thus addressing the funding gap in agriculture. Recent developments on agriculture finance success stories elsewhere can help future policy initiatives` drive towards sustainable agriculture financing.

Successful cases of agriculture Finance: Lessons for Zimbabwe

Structuring of agriculture credit is critical to success of deployment of agricultural finance initiatives. Lessons can be drawn from experiences elsewhere. Success examples in agriculture finance, globally, have been modelled around innovative techniques and hybrid techniques such as the Grameen Bank's Group Based Model.(Pantoja *et al*, 2017). The Grameen Bank of Bangladesh, Thailand's Bank for Agriculture and Agricultural Cooperatives and Bank Rakyat Indonesia are notable cases of efficacious agriculture credit institutions that give loans to farmers. Through group based credit programs, finance is advanced through peer groups, with members of such group co-guaranteeing pay back for each other's loans. Peer pressure and collective responsibilities are used as collateral substitutes by banks. A distinguished likeness among the successful agriculture credit institutions is that they all offer wholesome banking from savings mobilization to lending as opposed to just being conduits for channelling funds to the farm, thus they view agricultural finance from both supply side

and demand side which provides an expanded view to agriculture lending. The financial institutions are also generally market dependent on both deposits and lending rates used and offer incentives and or bonuses to borrowers and staff for good loan performance.

Bangladesh Grameen bank

The finance system to support rural growth and agriculture should be structured in a way that address real issues in finance. They should be structured around innovative techniques through anticipation of customer's needs and address them at a profit. Grameen Bank in Bangladesh`s group based model provides such an example of highly innovative techniques in financing agriculture. The Grameen bank was transformed into an independent institution by 1983 with the Bangladesh government controlling sixty (60) of the shareholding and the balance of forty (40%) being owned by borrowers. The bank at its inception was a task oriented institution created for the purposes of improving the rural livelihoods particularly women through group lending. The sustainability of the Grameen bank model sources is reflected by the gradual decline in government ownership from initial 60% to 7% as authorities moved to capacitate the bank to address rural livelihoods, thus the bank has moved from dependency on treasury to own internal financing. This allowed the government to concentrate on other development goals of the nation. Unlike most failed rural financial institutions which viewed agricultural funding only from one angle, the Grameen model integrates lending to savings such that resources wont dry up, efforts are made on both fronts-harnessing resources for agriculture and rural livelihoods through savings mobilisation while at the same time lend the raised resources through

group lending schemes. The clientele base of the bank grew to more than two million and annual loan disbursement of more than 29 million by 1994, boasting of more than US$800 million disbursement.

Bank Rakyat Indonesia (BRI)

In Indonesia the government introduced the rural credit program in 1984. The bank managed over the years to grow significantly its savings and deposit mobilisation base, thus reducing its dependency on government subsidies. The banks adopted a business model to increase its asset base. It adopted market based lending and deposit lending, thus operating commercially to ensure efficient intermediation between savers and borrowers . The bank in a bid to reach out to the most underprivileged member of the society use mobile banking techniques thanks to a good network system of Indonesia. This has significantly reduced operating costs and improved on ease of doing business on clients. Use of incentives and bonus linked to loan performance to borrowers and bank employees resulted in high repayment rates on loans, thus boosting business through BRI. The model like the Grameen model is grounded on market performance view which argues for integration of demand and supply issues in addressing agricultural finance .

4.2.3 Standard Chartered Bank of South Africa (SCBSA) model

The success of SCBSA is traced from the innovation perspective on financing of agriculture. The bank adopted a highly innovative approach to providing credit to farmers without the use of collateral security. Most of farmers lack quality collateral security, thus the bank advances credit to

farmers throughagri-contractors. The contractor in the arrangement act as a middlemen and is closer to the farmer, thus the contractor knows the farmer better than the bank, knows the character of borrowers, thus eliminating adverse selection in loan granting. Funding is provided for all stages of production from land preparation to marketing upto when the products are delivered (Pantoja *et al*, 2017). This lending model removes the risk from the farmer to the contractor. It is the contractor and the bank that takes the responsibility of hedging the prices at contracting stages through engaging in derivative financial securities such as forwards and or options. Through such a model the bank has managed to finance production area of more than 40 000hectares in 2010 farming season for various crops. In addition to commercial scale financing the bank through group lending schemes is also financing smallholder farmers which has been credited for cost cutting. In addition ABSA has also successfully extended loans to commercial farmers through value chain financing with contract farming as an example.

Crowd funding case in Nigeria

Nigeria in its bid to diversify from an oil dependent nation with agriculture, had to explore new ways of financing agriculture as most financial institutions were more inclined towards oil production as the risk in agriculture had been perceived to be high. Eighty percent of the farmers are small to medium holders with the remaining 20% being into commercialagriculture. New agro tech start-upsdominated commercial agriculture, thanks to diffusion of technology. Throughfarm start-ups like FarmCrowd and ThriveAgric, agriculture ventures accessed funding from

middle class Nigeria to fund their operations. The entire process happened online, many middle income Nigerian citizens saw the potential in agriculture and use such platforms as FarmCrowd to invest in agriculture. FarmCrowd with its network of over 3 500 commercial farmers managed to provide the farmers with funds, equipment and technical support, it administered credit of more than USD$400 million per year. Besides financing, FarmCrowd assist farmers with quick sale of produce by securing orders from prospective buyers before each harvest cycle to ensure that supply matches demand, thus assuring return to its crowd funders. With a majority of its clients being smallholder lacking capacity to operate at scale, FarmCrowd`s business model allows farmers access to capital to hire more skilled labour and equipment to cultivate larger farmlands. Since its inception in November 2016 Farmcrowd, has managed to attract over 1000 farm sponsors with a 76% rate of repeat investment, thus signifying its huge potential to harnessing resources for agriculture. Since its launch the timeline for securing a sponsor for this model has been reduced to only a few minutes less than 20 minutes since it already has a large database of potential financiers, thus cutting processing time of formal banking institutions.

ThriveAgric on the other hand operates on an almost similar model with a minor twist. Rather than financing existing farmlands, the organisation leases farmlands from communities and then contracts farmers to plant crops based on demand, the farmers should be highly skilled and have a proven record on farming. Subsequent to that, ThriveAgric secures purchase orders for farm produceto ensure farm sales after harvest, since its

formation the model has funded more than 300 hundred commercial farmers and contributed significantly to export earnings. Both schemes in order to protectinvestor`s funds, they insure farms during the harvest cycle against all forms of risks. In addition to provision of finance the two crowd farming initiatives also focus on improving the value chain by providing technical support to partners. The future of crowd farming from these two national initiatives will in the midterm see the government realising its dream of seeing an adequately funded agriculture to meet the ever increasing demand of food.

CONCLUSION

Zimbabwe despite being faced with a myriad of challenges in financing commercial agriculture as depicted by the historical experiences can realise its dream of a well-resourced agriculture by borrowing from experiences elsewhere. A closer look at the success stories elsewhere with regards to market orientationand innovation shows that if adopted in Zimbabwe Agriculture finance headway may be done. The land bank should be autonomously run to unlock funding for agriculture, more than twenty years after its inception the government still remains the sole funder with 100% stake, if the success story of the Grameen Bank is something to go by (government shading off its stake from an initial 100% to the present 7% and subsequent increase in loan portfolio to agriculture from a mere less than USD$60 000 to more than USD$800 million loan portfolio to agriculture) the nation stands to benefit. Also innovative collateral substitution models can be adopted by commercial banks, in which banks can engage contractors in

advancing loans. This highly innovative model eliminate the need for collateral as contractors absorb some of the risk and can hedge against adverse price movements using hedging techniques. Thus allowing banks to advance loans without the need for collateral. In addition, the government can initiate crowd funding models of the Nigerian type by incentivising companies willing to mobilise resources for agriculture through public platforms to do that without being taxed for some time (tax holidays), thus harnessing resources for agriculture. These companies can lease idle land and subcontracts qualified farmers to do production and be rewarded later. Savings mobilisation through the BRI model of Indonesia can be adopted, where players are given autonomy to attract and retain savings for onward lending to agriculture. All the resources we need as a country we have, to reinforce this we borrow from Kagame (2018) who had this to say:

I would rather argue, that we need to mobilise the right mind set to harness resources we have, rather than more external funding….. After all, in Africa, we have everything we need….”

REFERENCES

Anseeuw, W., & Ducastel, A. (2010). *New Agricultural Investment Models and Agrarian Change in South Africa*. Retrieved from http://agritrop.cirad.fr/566100/1/document_566100.pdf

Bergius, M., Benjaminsen, T. A., & Widgren, M. (2018). Green economy, Scandinavian investments and agricultural modernization in Tanzania. *Journal of Peasant Studies*, *45*(4), 825–852. https://doi.org/10.1080/03066150.2016.1260554

Boum, E. (2015). *Corwdfunding in Africa - Fundraising goes Digital in*

Africa: The emergence of Africa-Based Crowdfunding Platforms. 62. Retrieved from http://afrikstart.com/report/wp-content/uploads/2016/09/Afrikstart-Crowdfunding-In-Africa-Report.pdf

Chibango, C. (2013). The Future of Agricultural Credit in Zimbabwe A Stakeholder-Perspective. *International Journal of Academic Research in Economics and Management Sciences*, *2*(3), 152–166. Retrieved from www.hrmars.com

Chisasa, J. (2014). Rural credit markets in South Africa: A review of theory and empirical evidence. In *Corporate Ownership and Control* (Vol. 12). Retrieved from https://www.scopus.com/inward/record.uri?eid=2-s2.0-84909582006&partnerID=40&md5=95380f3cbf4e5e9a871cd60939f9c05f

Dube, L., & Mugwagwa, K. E. (2017). Technical Efficiency of Smallholder Tobacco Farmers under Contract Farming in Makoni District of Manicaland Province , Zimbabwe : A Stochastic Frontier Analysis. *Scholars Journal of Agriculture and Veterinary Sciences*, *4*(2), 68–78. https://doi.org/10.21276/sjavs.2017.4.2.5

Essien, U. A., & Arene, C. J. (2014). An analysis of access to credit markets and the performance of small scale agro- based enterprises in the Niger Delta Region of Nigeria. *International Journal of Food and Agricultural Economics*, *2*(3), 105–120. Retrieved from http://www.foodandagriculturejournal.com/vol2.no3.pp105.pdf

Foti, R., Moyo, M., Chikuvire, J., & Mlambo, N. (2007). Determinants of Farmer Demand for Fee-for-Service Extension in Zimbabwe: The Case

of Mashonaland Central province. *Journal of International Agricultural and Extension Services*, *14*(1), 95–104. https://doi.org/10.5191/jiaee.2007.14108

Hall, R., Scoones, I., & Tsikata, D. (2017). Plantations, outgrowers and commercial farming in Africa: agricultural commercialisation and implications for agrarian change. *Journal of Peasant Studies*, *44*(3), 515–537. https://doi.org/10.1080/03066150.2016.1263187

Hall, R., Tsikata, D., & Scoones, I. (2017). The pros and cons of commercial farming models in Africa. *The Wire*, (june), 2–5.

Hlupo, P. (2018). a critical analysis of sustainable rural fanance: the case of Mkokha village in matobo, zimbabwe. *International Journal of Information ,Business and Management*, *10*(2).

Joshee, R. C. (2008). Grameen model : Problems and Prospects. *Microfinancegateway.Org*.

Kazeem, Y. (2017). *Nigerian crowdfunding agribusiness startups are helping the middle class back to the farm — Quartz*. Retrieved from https://qz.com/1087188/nigerian-crowdfunding-agribusiness-startups-are-helping-the-middle-class-back-to-the-farm/

Kohler, K., Guschanski, A., Stockhammer, E., Karwowski, E., Moore, G. L., Wildauer, R., & Reddy, N. (2018). *The impact of financialisation on the wage share: a theoretical clarification and empirical test*. (January). Retrieved from http://www.postkeynesian.net/downloads/working-papers/PKWP1802.pdf

Malaba, S. (2014). the State of Funding for Agriculture and the Whole Value Chain As Well As Prospects for the Forthcoming Agricultural Summer Season. *Commercial Farmers Union of Zimbabwe 71st*

Congress, 1–13. Retrieved from www.cfuzim.org/~cfuzimb/images/bazpres14.pdf

Manatsa, D., Mukwada, G., Siziba, E., & Chinyanganya, T. (2010). Analysis of multidimensional aspects of agricultural droughts in Zimbabwe using the Standardized Precipitation Index (SPI). *Theoretical and Applied Climatology*, *102*(3), 287–305. https://doi.org/10.1007/s00704-010-0262-2

Masiyandima, N., Chigumira, G., & Bara, A. (2011). Sustainable Financing Options for Agriculture in Zimbabwe. *ZEPARU Working Paper*, (March), 33. Harare: ZEPARU.

Maurer, K. (2004). Bank Rakyat Indonesia : Twenty Years of Large-Scale Microfinance. *Scaling Up Poverty Reduction: A Global Learning Process and Conference, 25-27 May*, pp. 1–13.

Mbizi, R., & Gwangwava, E. (2013). Rotating savings and credit associations: an alternative funding for sustainable micro enterprises in chinhoyi. *Journal of Sustainable Development in Africa*, *15*(7), 181–193.

Ministry of Finance. (2017). *Zimbabwe the 2017 National Budget Statement*. 173. Retrieved from www.zimtreasury.gov.zw/index.../budget-policy-statements?...2017-national-budget

Mullin, J. P., Morgan, W. P., Nagle, F. J., & Ross, M. A. (2006). Factors Contributing To the Success of College Oarsmen. *Medicine & Science in Sports & Exercise*, *8*(1), 52. https://doi.org/10.1249/00005768-197621000-00040

Mutami, C. (2015). Smallholder Agriculture Production in Zimbabwe: A

Survey. *Consilience: The Journal of Sustainable Development*, *14*(2), 140–157.

Mwamakamba, S. N., Sibanda, L. M., Pittock, J., Stirzaker, R., Bjornlund, H., van Rooyen, A., … Kashaigili, J. J. (2017). Irrigating Africa: policy barriers and opportunities for enhanced productivity of smallholder farmers. *International Journal of Water Resources Development*, *33*(5), 824–838. https://doi.org/10.1080/07900627.2017.1321531

Mwanamambo, B., Salin, V., & Mukumbuta, L. (2007). *Lending to Agribusinesses in Zambia*. (381-2016–22205), 35

Pantoja, B. R., Alvarez, J. V., & Sanchez, F. A. (2017). Assessment of Agribusiness Venture Arrangements and Sugarcane Block Farming for the Modernization of Agriculture. *Phillipine Institute for Development Studies*. Retrieved from https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1735.pdf

Parirenyatwa, K. T., & Mago, S. (2014). Evolution and Development of Contract Farming in Zimbabwe: A Reflection for Agribusiness. *Mediterranean Journal of Social Sciences*, (April). https://doi.org/10.5901/mjss.2014.v5n20p237

Persero. (2018). *1H ' 2018 – Financial Update Presentation*.

Rau, P. R. (2017). Law, Trust, and the Development of Crowdfunding. *Ssrn*. https://doi.org/10.2139/ssrn.2989056

Rukuni, B. M. (2012). *Why Zimbabwe needs to maintain a multi-form land tenure system*. (July).

Rukuni, M., Tawonezvi, P., & Munyuki-hungwe, M. (2006). Zimbabwe's Agricultural Revolution Revisited. *University of Zimbabwe Publications*, 27. https://doi.org/10.1016/B978-012199370-2/50005-5

Scoones, I., Marongwe, N., Mavedzenge, B., Murimbarimba, F., Mahenehene, J., & Sukume, C. (2012). Livelihoods after land reform in zimbabwe: Understanding processes of rural differentiation. *Journal of Agrarian Change*, *12*(4), 503–527. https://doi.org/10.1111/j.1471-0366.2012.00358.x

Scoones, I., Mavedzenge, B., & Murimbarimba, F. (2017). Sugar, people and politics in Zimbabwe's lowveld. *Journal of Southern African Studies*, *43*(3), 567–584. https://doi.org/10.1080/03057070.2016.1187972

Sukume, C; Moyo, S and Matondi, P. (2003). Land Use, Farm Sizes and Viability Considerations. *Utete Report*, pp. 38–55. Retrieved from http://www.sarpn.org/documents/d0000746/P840-Utete_Report_August2003_Farms.pdf

Taffesse, S. (2010). *FINDINGS 1 Zimbabwe: Growth prospects for commercial agriculture (2932 words)*..

Utete. (2003). *Agricultural Financing During the Pre-* (pp. 1–32). pp. 1–32.

Woodend, J. J. (2003). Potential of Contract Farming As a Mechanism for the Commercialisation of Smallholder Agriculture the Zimbabwe Case Study Report. *Food and Agriculture Association*, (September).

Re-thinking ecotourism and community development: the case of Ngomakurira Hills Project, Zimbabwe

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Abstract

Many ecotourism projects have been funded and undertaken in developing countries, but their success and actual benefits to the local communities are hardly evaluated. This study evaluates ecotourism as a community development strategy using the case study of Ngomakurira Hills Project in Goromonzi District, Zimbabwe. The evaluation was conducted using in-depth interviews carried out between January and March 2016 and the data were analysed using the thematic approach. The main findings of the study were that ecotourism contributed to the expansion and capacitation of small business enterprises which opened employment opportunities for local people. Despite the success registered by the ecotourism project, its benefits were not evenly distributed among the community members thereby orchestrating community polarization. For the project to contribute substantially to

community development, the study recommends the development of a sustainable ecotourism model which could ensure the sustainability of the project as well as sustainable community support for the project by enhancing trans-generational preservation of natural and cultural resources, and equitable distribution of ecotourism benefits.

Keywords: CBNRM, community livelihoods, community participation, conservation, ecotourism.

INTRODUCTION

Globally, there is a strong argument that ecotourism contributes positively to livelihoods of host communities, conservation of natural and cultural heritage, Gross Domestic Product and development of a nation at large (Jiang, 2008; Kiper, 2013). Ecotourism is defined by the International Ecotourism Society (TIES) as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (Hunt et. al., 2015). Ecotourism enhances community development by providing more sustainable alternate sources of livelihood to local communities (Sinclair-Maragh, 2019; Kiper, 2013). Community development is a process where local people can create more jobs, income and infrastructure, to facilitate their community to effectively manage change (Cavaye, 2006). According to Sabuhoro et al. (2017), most African governments have taken up the idea of ecotourism as a roadmap for community development. Ecotourism has thus been embraced as a key community development strategy b**y** most developing countries including Zimbabwe as it brings about benefits to the

nation at large. However, despite the highlighted benefits, ecotourism has been associated with a lot of criticisms in the past. Kiss (2004) argues that most Community Based Ecotourism projects cited as success stories actually involve little change in existing local land and resource-use practices, providing only a modest supplement to local livelihoods and remaining dependent on external support for long periods, if not indefinitely.

Many ecotourism projects have been undertaken and funded in developing countries, but their success has not been widely monitored and the actual benefits to the local communities remain largely unquantified (Goodwin & Santilli, 2009). If this situation persists, ecotourism projects may fail to deliver net benefits to the community, and there may not be any basis for validating claims of ecotourism as a development strategy. It is against this background that this study sought to fill this gap by evaluating the role of ecotourism in community development in Zimbabwe. The findings of this study provide insights on what is actually transpiring on the ground in some ecotourism projects and strategies that may be adopted to achieve broad-based benefits and sustainable ecotourism development.

Literature Review

Ecotourism is a growing niche market within the larger travel industry, with the potential of being an important sustainable development tool (Saurombe et. al., 2017; UNEP, 2003). Ecotourism has been advanced as a form of sustainable tourism that is expected to boost conservation and rural community development in Southern Africa (Chiutsi et al., 2011). Chiutsi et al., (2011) points out that community development employs community

structures to address social needs and empower groups of people thereby improving the situation of a community, not just economically, but also strengthening community functionality. Cavaye (2006) further posits that community development improves the ability of communities to collectively make better decisions about the use of resources such as infrastructure, labour and knowledge.

Saurombe et al. (2017) argue that ecotourism focuses on local and regional benefits through supporting the well-being of local people and advocating local ownership and business opportunities for local people, especially in rural areas. Ecotourism strives not only to be a conservation mechanism and an economic development tool, but also a development process that seeks to remain harmonious with local cultural and social needs (Currie, Stack & Kaufman, 2018; Epler-Wood, 2004).

Chiutsi et al. (2011) observe that the rise of sustainable tourism in Southern Africa has seen the development of a multiplicity of tourism projects packaged under ecotourism as a more sustainable form of tourism than mass tourism. Ecotourism is therefore largely associated with small-scale controlled tourism and long-term societal well-being (Reichel & Uriely, 2008). It requires active participation of the community in order for it to be successfully implemented and practiced. The activities that have emerged through ecotourism initiatives include village cultural tours, sport hunting, photographic safaris, fishing, and a lot of other downstream activities which support the eco-tourists during communal tours 2011).

Ecotourism has become an alternative approach for overcoming the

problem of traditional tourism with the assumption that there will be minimum negative impacts and maximum benefits for the local people and their environment (Fletcher, 2018; Nyampane & Thapa, 2010). Bob et al. (2008) state that ecotourism promotes an enhanced appreciation of the natural environment and environmental education by exposing visitors and locals to nature and conservation. Ecotourism projects show the importance of integrating and ensuring genuine participation of local communities and the subsequent flow of benefits to these communities (Muzvidziwa, 2013). Ecotourism is important in a number of ways: (i) it contributes to Gross Domestic Product and the livelihood of the locals in developing countries, (ii) it promotes locals' active participation and empowers them by building self-esteem, (iii) it encourages intercultural appreciation and communication between host communities and tourists, and (iv) it contributes to long-lasting economic development, and drives the development of other related industries (Jiang, 2008; Kiper, 2013).

Benefits of ecotourism range from infrastructural development to income generating investment and annual dividends. Ecotourism has also created a lot of jobs for the local residents in rural communities where they earn income from the tourism related jobs they will be involved in through the conservation of local systems and culture (Kuuder & Wuleka, 2012; Mbaiwa, 2003**).** With a history deeply rooted in the conservation movement, ecotourism has provided a highly strategic source of revenue to natural areas that need protection (UNEP, 2003). Ecotourism is therefore regarded as a panacea for solving many of the environmental and eco problems of less developed countries. It was originally conceived as an alternative approach

to the increasing threat posed to both the culture and the ecological environment of the destination areas by conventional tourism (Wearing & Neil, 2009).

Community based ecotourism (CBE) is a form of ecotourism where the local community has substantial control over, and involvement in its development and management. A major proportion of the benefits remain within the community (Denman, 2001). Kiss (2004) noted that CBE is a form of community-based natural resource management (CBNRM), a popular choice of activities in an enterprise-based strategy for biodiversity conservation and a common element in integrated conservation and development projects (ICDP). The concept of CBE originated under the Communal Areas Management Programs for Indigenous Resources (CAMPFIRE) program and operates on the basic philosophy of entrusting management and conservation of natural resources to local inhabitants (Mbaiwa, 2008). CBE projects have for over three decades been promoted as a means of development whereby social, environmental and economic needs of local communities are met through offering a tourism product (Goodwin & Santilli, 2009).

It is purported that through proper management, CBE projects can become efficient tools for dealing with the myriad socio economic problems that bedevil destinations which depend on natural resources (Manu & Kuuder, 2012). One essential principle of CBE is total community control over tourism development (Afenyo & Amuquando, 2014). The aim of the community based ecotourism projects is to promote rural development

conservation of natural and cultural heritage and sustainable land use based on wildlife in agriculturally marginal rural areas (Nyaruwata, 2011). Environmental conservation and livelihood enhancement are other goals of community based ecotourism projects.

The growth of CBE and the associated positive economic impacts to the nation as a whole have increased its importance in Southern Africa (UNWTO, 2008). Kontogeorgopoulos (2005) argues that CBE strives to merge sustainability and conservation with ecotourism. The envisaged benefits, control and involvement, underpin community development. CBE and ecotourism in general have however been viewed as green washing terms popularised by sustainable tourism development with no real proof in practice on their role as community development tools (Brandt et al., 2019; Barry, 2012; Ross & Wall, 1999). This indicates the need for continuous monitoring and evaluation of ecotourism projects so that there may be sound basis for validating claims of the importance of ecotourism as a community development strategy. Using the case of Ngomakurira Hills Ecotourism Project in Zimbabwe, this study therefore contributes to the ecotourism body of knowledge by evaluating ecotourism as a community development strategy.

Methodology

Study area

Ngomakurira Hills Ecotourism Project is located in Goromonzi District in the Chinamora Communal Lands in Zimbabwe (Figure 1) (Appendix). It is one of the early Communal Areas Management Programs for Indigenous Resources (CAMPFIRE) projects and was established in 2002 (Government of

Zimbabwe & Japan International Cooperation Agency, 2017). The project was initiated by CAMPFIRE in conjunction with the National Museums and Monuments of Zimbabwe (NMMZ) which is responsible for managing the Ngomakurira Hills Heritage site. The main ecotourism attractions offered by Ngomakurira Hills Ecotourism Project include cave viewing, bird watching, village tours, mountain climbing, camping, and hill trekking, game drives, and crafts production.

Data collection and analysis

This case study adopted the qualitative research methodology to gather data from respondents (Patton, 2002; Leedy & Omrod, 2005). Respondents were purposively selected from the communities and management of Ngomakurira Hills Ecotourism project on the assumption that they had in-depth knowledge of the issues under investigation. In-depth interviews were conducted between January and March 2016 and each of them lasted between 45 to 60 minutes. The guide was piloted on selected experts in the field. The in-depth interviews were conducted with seventeen respondents; namely one project officer, eight community trust members, one local community leader and seven local community members. According to Kumekpor (2002) and Saunders (2007) a minimum of fifteen in-depth interviews are adequate for qualitative studies.

To evaluate the contribution of ecotourism to community development, the in-depth interviews were guided by a framework by Epler Wood International (2004) on how ecotourism can be measured as a community development strategy. According to the framework, five (5) questions informed the interviews and these are: (i) Has ecotourism contributed to the

expansion of local business opportunities? (ii) Are ecotourism business and employment opportunities reaching greater segments of the population? (iii) Have collective benefits to the community been enhanced? (iv) What are the social and cultural impacts of tourism? (v) Has ecotourism improved access to information and allowed for more participation within society? According to Koens, Dieperink & Miranda (2009), ecotourism projects do not only give benefits, but also drawbacks. In view of this, a question on drawbacks or challenges associated with ecotourism was added to the interview guide. Permission to collect data was granted by the National Museums and Monuments of Zimbabwe (NMMZ) and consent was sought from each interviewee before the start of the interview.

All the interviews were recorded on a voice recorder and the interviewer also took notes during the interviews. The data were coded and analysed according to themes. Following Koens, Dieperink & Miranda (2009), the results were analysed under two main themes; 'benefits' and 'drawbacks' where the five questions from Epler Wood International (2004)'s framework formed the main sub-themes. For the purpose of validating the responses, only issues raised by three or more respondents were included in the analysis.

Findings and Discussion

Demographic profiles of respondents

The respondents consisted of nine males and eight females. Only one

interviewee had a college diploma while eleven had secondary education and five had primary education. All the respondents had been involved in ecotourism for a relatively long period where five had been involved in the ecotourism for a period ranging from six to ten years while the remaining twelve had been involved in the project for more than ten years.

Community benefits from Ngomakurira Ecotourism Project

The study noted that the ecotourism project had a number of benefits which included broadening local business opportunities, creating employment opportunities, capacity building for small scale entrepreneurs, , enhancing cultural awareness and appreciation, and improving access to information and technical knowledge. The findings are discussed in the sections below.

Expansion of local business opportunities

Eight of the respondents were of the view that the development of Ngomakurira Hills Ecotourism Project resulted in expansion of local business opportunities. The new business opportunities included crafts production and sale to tourists, as well as selling traditional dishes to the tourists. According to respondent 1:

> *Many people, especially women, have been able to develop small businesses in this area because of ecotourism. Local people used to rely on agriculture only, particularly selling tomatoes to markets in Harare, but nowadays it's not bringing much revenue to the community but communities now have an alternative form of livelihood. They are now selling crafts to tourists and the amount of money they earn depends with the amount of sales made in a day*.

These findings concur with Stronza & Gordillo (2008) who noted that ecotourism minimises or eliminates dependence on activities that exploit

natural resources such as agriculture and cattle ranching by opening up business opportunities in tourism. Moreover, UNWTO (2008) highlighted that to ensure there is poverty reduction in communities there should be direct sale of goods and services to visitors by the community as this is an effective way of minimizing leakages and increasing linkages. Weaver (2001) posits that retention of profits to the local communities is another crucial element of ecotourism projects. As such, there is need to reduce leakages from the local community and build linkages within it by focusing more on the long tourism supply chain by the formation of businesses enterprises that are managed by the communities. This also ensures that the poor are not only employed as a source of cheap labor, but as local entrepreneurs who participate in the supply of goods and services to the tourism organisations (UNTWO, 2008).

The increase in business opportunities has also made it possible for the local communities especially women to participate at business expos which helped them to market themselves, and instill a sense of pride and self-esteem among community members. However even though there was growth in crafts production, there were still other community members not benefiting much. Respondent 10 commented:

> *there is expansion of business opportunities, but only to a few community members, especially women.*

Women were said to be benefiting more than other community members. Ass Sanderson et al. (2013) and Madzara (2011) pointed out, the tourism industry has more opportunities for women than men., Futhermore,women tend to have major strides in starting their own small to medium enterprises

such as craft initiatives, participating in community based ecotourism ventures and setting up their own small to medium sized accommodation facilities in resort towns. This could be attributed to gender roles within societies. For example, Mondal (2006) pointed out that crafts production such as carving, embroidery, weaving, paper making, and bamboo and cane weaving in Bhutan is mainly done by women.

Business and employment opportunities from ecotourism

Employment opportunities

All the respondents attested to the fact that a number of community members managed to get employment opportunities from ecotourism with some being employed on full time basis, while others like general hands were employed as part time workers. Respondent 5 mentioned that:

> *Many people are employed on full time and part-time basis. In terms of salaries, full time workers are allocated salaries while part-time workers such as general hands receive some wages depending on what they would have done.*

These findings show that at Ngomakurira, ecotourism development attracted both skilled and unskilled labour. The results concur with Wearing & Neil (2009) who noted that one of the most obvious and an immediate benefit of ecotourism associated with local communities is the increase in employment opportunities and generation of local entrepreneurial activities amongst the local communities. Through employing a number of community members, ecotourism at Ngomakurira can thus be said to be contributing to community livelihoods at Ngomakurira. Kuuder & Wuleka (2012) and Madzara et al. (2012) also posit that income from tourism

related jobs helps improve the standards of living of the local people. Ashley (2000) and Shah (2000) suggested that although casual earnings per person maybe very small, they are more widely spread enough for instance to cover up school fees for children and sustain basic living. According to Agrawal & Redford (2006), newly generated jobs and income are the most common indicators for success of ecotourism projects. Elsewhere in Sankoyo Village in Botswana, Mbaiwa & Stronza (2010) provide an example of a successful project based on its potential to generate benefits such as income and employment.

Capacity building for small-scale entrepreneurs

Six of the seventeen respondents noted that business opportunities for small business owners was received through training, mostly conducted through workshops, where the communities were trained in areas like tour guiding. Respondent 3 had this to say:

> *I managed to acquire tour guiding skills from tour guiding training workshops conducted by NMMZ and I am currently pursuing a diploma in tour guiding.*

Other community members managed to gain skills from the workshops conducted in the community. Besides the individual skills community members obtained from these training workshops, community members managed to teach each other some important skills. Women from the community were now able to do self-jobs like making handicrafts because of the skills they acquired, which in turn helped them financially. Respondent 5 mentioned that:

> *I am now able to produce handicrafts using the skills learnt from other*

> *women in the community, able to sustain my family as a widow and also managing to pay school fees for my children using the income that I get from selling crafts.*

Here it can be said that ecotourism facilitated training and empowerment of the local communities which had the potential to improve their skills and to some extent solve the problem caused by lack of education which is usually faced by the poor. These findings are in accordance with Stronza & Gordillo (2008) who also noted that ecotourism leads to skills enhancement through training programs that are conducted within the communities. Nyaruwata (2011) postulated that training is imperative for those that are involved in ecotourism projects as there is need to develop skills that can help enhance tourist satisfaction with the products and services offered and potentially expand tourists demand for the local products. Epler-Wood (2004) mentioned that training is fundamental to the success of tourism as a tool to expand local business opportunities for the rural communities. However, communities were mainly trained in tour guiding and crafts making, though there is need to train them in other crucial areas like project management, tourism, administration, accounting, and customer care. Chiutsi et al. (2011) revealed that there is need to train local residents in customer care, so that they have an appreciation of the service dynamics of tourism and can be able to create and sustain demand by providing high levels of guest satisfaction**.** Ashley et al. (2001) also noted that important skills in tourism include language and an understanding of tourist expectations, to be able to deliver quality visitor experience and retain visitors. The communities therefore still lacked many skills which they needed to succeed in the tourism industry. Kiss (2004) pointed out that even when communities possess local skills and

knowledge that might not be enough for them to be successful in the tourism industry, which is a complex sector not appropriate for communities with few business competencies.

Collective benefits

Collective benefits like improvement in infrastructure within the community such as roads, water, health facilities were still very few in Ngomakurira. All the respondents pointed out that the only major development that had taken place as a result of the ecotourism project was the improvement in water facilities from boreholes that have been sunk in every ward. Respondent 6 stated that:

> *Yes boreholes have been sunk in each ward, but there is still need to construct tarred roads in the area.*

These findings are not in sync with what is expected from ecotourism and can be a reflection that the community in Ngomakurira has not benefited much from ecotourism. For instance, Stronza & Gordillo (2008) identified a number of collective benefits that include improvement in roads, water, and health facilities in the community, while Sebele (2010) identified the development of community assets such as schools, boreholes, roads and grinding mills from funds generated through ecotourism. As Ashley et al. (2001) point out, the development of physical capital such as roads, water and other tools also ensures that the marginalised rural communities benefit within their community. These results from Ngomakurira are worrying as they may be pointing to the fact that the ecotourism project has not been fully able to live to its objective of sustaining the well-being of the community as a whole.

Enhancement of cultural awareness and appreciation

Only three of the respondents had the opinion that community members participating in the ecotourism project postulated that they now appreciated their culture more through working together and through the use of indigenous knowledge, materials and labor. Moreover, they put forward that their cultural values were also enhanced through working together there by strengthening social ties. It can therefore be concluded that ecotourism at Ngomakurira was thus empowering the local community as it promoted cultural awareness and provided an opportunity for local communities to generate benefits from ecotourism. These findings are in support of Wearing & Neil (2009) who argue that working together strengthens cultural appreciation in that it provides self-esteem and incentives for maintaining traditional arts, crafts and traditional knowledge.

Improved access to information and technical knowledge

About nine of the respondents were of the view that ecotourism at Ngomakurira improved access to information by local people through workshops that are conducted within the community, as well as through attending travel expos such as the Sanganai Travel Expo held in Zimbabwe every year. Respondent 14 had this to say:

> *Through this project we have participated at the Sanganai Travel Expo where we*
>
> *have managed to learn a lot as well as benefited from interacting with members from other ecotourism projects.*

This is in line with Madzara et al. (2012) who posited that Sustainable Tourism Enterprise Promotion Zim (STEPZIM) & Zimbabwe Tourism

Authority (ZTA) have facilitated the participation of community based ecotourism enterprises at Sanganai Travel Expo and this has served more as an information source. This shows that ecotourism has the potential to improve access to information and technical knowledge which in turn allows for more community participation. According to Epler-Wood (2004), a project can be named a success depending on its ability to improve access to information and technical knowledge.

Weaknesses of Ngomakurira ecotourism project

Besides the limited community benefits discussed in the section above, it was also noted that the ecotourism project had inherent weaknesses which included limited financial capital, unequal distribution of benefits, power-sharing conflicts and cultural erosion. These findings discussed in the sections below.

Limited financial capital

Thirteen of the respondents postulated that the project had not successfully availed long-term capital outside the initial donor contribution. Moreover, respondents were concerned that there was no credit income available to the communities as they had no access to getting loans from financial institutions. Responded 12 had this to say:

> *We are failing to grow the business because we have no access to funds. We have even tried to get loans from banks but the banks wouldn't give us any since we are not*
> *formally employed and we do not have collateral.*

It can be argued that even if community members have been able to develop

small businesses because of ecotourism, they have not really been able to grow their businesses due to lack of financial capital. According to Ashley et al. (2001) financial capital is imperative for the rural communities to be able to expand informal sector activities within tourism such as crafts business. In this case, ecotourism has not been sufficiently able to financially empower the communities.

Unequal distribution of benefits

Almost all the respondents mentioned that fights because of unequal distribution of benefits from ecotourism have negatively affected the community in Ngomakurira. This was mainly due to the fact that some community members were benefiting, whilst others were not benefiting at all. Respondent 12 commented:

> *When the project was established we were promised that we were all going to benefit whereas in reality only those located close to the site are benefiting a lot compared to us who are located far from the site.*

These results concur with Madzara et al. (2012) who also noted that in most ecotourism projects there are unclear benefit sharing arrangements either among community members themselves or between communities and private players involved which leads to mistrust between parties. This distribution gap is unhealthy as it is likely to discourage community support for the current and even future community projects that may come to the community.

Moreover, a number of respondents complained that there was lack of

transparency in distribution of benefits between NMMZ and the communities, where the communities felt that they were being prejudiced in the distribution of benefits. Coria & Calfucura (2011) noted a similar trend of the uneven distribution of benefits from ecotourism between indigenous communities and other stakeholders outside protected areas. This disproportionate benefit distribution among stakeholders can erode their support for or lead to the failure of ecotourism projects. Although this challenge of inequality in benefit sharing is common among many ecotourism projects (He et al., 2008), it still indicates that Ngomakurira Ecotourism Project has failed to deliver promises of community-level benefits.

Power-sharing conflicts

All the seven local community members who participated in the study were unhappy with the issues of power-sharing due to the fact that there had been no appointment of new committee members since the establishment of Ngomakurira Ecotourism Project. Respondent 1 revealed that:

> *Conflicts have arisen because there is no appointment of a new committee; the same members have remained in position since inception.*

These findings are in support of Madzara et al. (2012) who noted that in most cases office bearers remain in position for a long time because of lack of stringent enforcement of rules and regulations particularly relating to tenure of office bearers. This dissatisfaction in relation to power-sharing that the community expressed may portray the leaders as being more advantageous in accessing the benefits from the project. This is because,

usually there are perceptions amongst communities that since leaders are more powerful, they derive more while the "powerless" gain less (Afenyo & Amuquandoh, 2014). The resultant effect of such dissatisfaction may be the withdrawal of support for the project by unhappy community members and this has the potential of weakening the trust and unity in local communities.

Cultural erosion

About four of the respondents indicated that another undesirable effect of ecotourism in Ngomakurira Hills was cultural erosion which was reflected by the desecration of certain cultural practices. Respondent 1 observed that:

> *Elders from the community complain that the Ngomakurira heritage site is no longer sacred as it was before, take for instance, jewellery and shoes are not allowed to be worn whilst going up the mountain, but tourists do not observe the rules.*

On the same issue Respondent 3 also had this to say:

> *Ngomakurira used to be sacred, but it is no longer and the elders are unable to perform rituals as in the past all because the hills have been literally overrun by tourists.*

The above state of affairs has similarities with the findings of another study conducted in Kodagu district, India, where Vishwanatha & Chandrashekara (2014) noted that ecotourism caused a distortion of local customs and changes in local culture. Epler-Wood (2004) and Wearing & Neil (2009) also observed that tourism often brings changes in local systems there by threatening indigenous identity. Although it is happening elsewhere, these results may indicate that at Ngomakurira Ecotourism Project, the vulnerability of the cultural resource being promoted is being threatened by the activities being carried out. This cultural erosion may be evidence that the project has failed to foster respect for local culture which is one of the

characteristics of ecotorism (Trofimov & Soimu, 2011).

CONCLUSION

The findings of this study were that Ngomakurira Ecotourism Project contributed to the expansion of local business opportunities, capacity building in small business enterprises, and opened employment opportunities for local people and others. However, regardless of these benefits, there was an unclear benefit sharing scheme between NMMZ and local communities, coupled with uneven distribution of benefits among community members, which discouraged community participation and created divisions and conflicts within the community. Considering the definition of ecotourism espoused by the International Tourism Society (TIES) as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (Hunt et al., 2015), we conclude that while some tangible benefits were realized, ecotourism in Ngomakurira has also largely failed to sustain the well-being of the community as a whole. If these issues are not addressed, the Ngomakurira Ecotourism Project may eventually lose any basis or claims of contributing to community development through equitably delivering benefits to the community, andI preservation of cultural identity. For the project to contribute substantially to community development, the study recommends for the development of a sustainable ecotourism model which could ensure the sustainability of the project as well as sustainable community support for the project by enhancing trans-generational preservation of natural and cultural resources, and equitable distribution of ecotourism benefits.

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References

Afenyo, E. A. and Amuquandoh, F. E. (2014), Who benefits from community-based ecotourism development: Insights from Tafi Attonne. Ghana. Tourism Planning Development. Volume 11 Number 2, Pg. 179-190.

Agrawal, A. and Redford, K. (2006), "Poverty, development & biodiversity conservation: Shooting in the dark", Working Paper no. 26, Wildlife Conservation Society.

Ashley, C. (2000), "Applying livelihood approaches in natural resource management initiatives: Experiences in Namibia and Kenya", Overseas Development Institute working paper 134. London.

Ashley, C., Ashley, C., Goodwin, H., and Roe, D. (2001), "Pro-poor tourism strategies: Expanding opportunities for the poor", ODI: London.

Barry, K. S. (2012), "Women empowerment & community development through ecotourism", Capstone Collection, Paper 2579.

Beeton, S. (2006), "Community development through tourism", Landlinks Press: Collingwood.

Bob, U., Swart, K., Maharaj, B., and Louw, P. (2008), Nature, people and environment: Overview of selected issues. Alternation. Volume 15 Number 1. Pg. 17-44.

Brandt, J. S., Radeloff, V., Allendorf, T., Butsic, V. and Roopsind, A. (2019), Effects of ecotourism on forest loss in the Himalayan biodiversity hotspot based on counterfactual analyses. Conservation Biology. Volume 33 Number 6. Pg. 1318-1328

Cavaye, J. (2006), "Understanding community development", Cavaye Community Development.

Chiutsi, S., Mukoroverwa. M., Karigambe. P., and Mudzengi. B. K. (2011), The theory and practice of ecotourism in Southern Africa. Journal of Hospitality Management and Tourism. Volume 2 Number 2. Pg. 14-21.

Coria, J., and Calfucura, E. (2011), Ecotourism & the development of indigenous communities: The good, bad and the ugly. Journal of Ecological Economics. Volume 73. Pg. 47-55.

Currie, J. J., Stack, S.H. and Kaufman, G.D. (2018), Conservation and education through ecotourism: Using citizen science to monitor Cetaceans in the Four-Island Region of Maui, Hawaii. Tourism in Marine Environments. Volume 13 Number 2. Pg. 65-71.

Denman, R. (2001), "Guideline for community-based ecotourism development", WWF International.

Epler-Wood, M. (2004), "Evaluating ecotourism as a community and economic development Strategy", Epler-Wood International.

Fletcher, R.J. (2018), "Ecotourism". In Companion to Environmental Studies. Castree, N., Hulme, M. and Proctor, J.D. Eds. Pg. 591-594. Routledge.

Goodwin, H., and Santilli, R. (2009), "Community-based tourism: A success", ICRT

Occasional Paper. Volume 11 Number 1. Pg. 37.

Government of the Republic of Zimbabwe (GOZ), and Japan International Cooperation Agency (JICA). (2017), "Community-Based Tourism Master Plan: Targeting Poverty Alleviation in the Republic of Zimbabwe".

He, G., Chen, X., Liu, W., Bearer, S., Zhou, S., Cheng, L.Y., Zhang, H., Ouyang, Z and Liu, J. (2008), Distribution of economic benefits from ecotourism: a case study of Wolong Nature Reserve for Giant Pandas in China. Environmental Management. Volume 42 Number 6 Pg. 1017-1025.

Hunt, C. A., Durham, W. H., Driscoll, L., and Honey, M. (2015), Can ecotourism deliver real economic, social, and environmental benefits? A study of the Osa Peninsula, Costa Rica. Journal of Sustainable Tourism. Volume 23 Number 3. Pg. 339-357.

Jiang, J. (2008), "Evaluation of the potential of ecotourism to contribut to local sustainable development: a case study of Tengtou Village, China", Doctoral thesis, Massey University.

Kiper, T. (2013), "Role of ecotourism in sustainable development", InTech.

Kiss, A. (2004), Is community-based ecotourism a good use of biodiversity conservation funds? Journal of trends in ecology & Evaluation. Volume 1 Number 5. Pg. 232-237.

Koens, J.F., Dieperink, C. and Miranda, M., 2009. Ecotourism as a development strategy: experiences from Costa Rica. Environment, Development and Sustainability, 11(6), p.1225.

Kontogeorgopoulos, N. (2005), Community-based ecotourism in Phuket & Ao Phangnga. Thailand: Partial Victories: & Bittersweet remedies. Journal of Sustainable Tourism. Volume 31 Number 1. Pg. 4-23.

Kumekpor, T. K. B. (2002), "Research methods and techniques of social research", SonLife Press and Service, Ghana.

Kuuder, M. I., and Wuleka, C. J. (2012), Community-based ecotourism & livelihood enhancement in Sirigu, Ghana. International Journal of Humanities & Social Sciences. Volume 2 Number 18.

Leedy, L.D. and Ormrod, J.E. (2005), "Practical research planning and design". Person Educational International. Boston, United States of America.

Madzara, A.M. (2011), Economic empowerment of women in the tourism sector. The World Bank finance and private sector development unit, Harare, Zimbabwe.

Madzara. A., Yekeye. T., and Revayi. J. (2012), Report for the national review of the status of community-based tourism enterprises in Zimbabwe, STEPZIM & ZTA.

Manu, I., and Kuuder, C. J. W. (2012), Community-based ecotourism and livelihood enhancement in Sirigu, Ghana.

Mbaiwa, J. E. (2008), The realities of ecotourism development in Botswana. Responsible tourism: Critical issues for conservation and development. Pg. 205-223.

Mbaiwa, J. E. and Stronza. A. (2010), The effect of tourism development on rural livelihoods in the Okavango Delta, Botswana. Journal of Sustainable Development. Volume 18 Number 5. Pg. 635-656.

Mbaiwa, J. E. (2003), The socio-economic & environmental impacts of tourism development on the Okavango Delta, North western Botswana. Journal of Arid Environments. Volume 54. Pg. 447- 467.

Mendes, P. (2008), Teaching community development to social work

students: A critical reflection. Community Development Journal. Volume 44 Number 2. Pg. 248-262.

Mondal, S. R. (2006), "Women in Bhutan: Aspects of their status and role", Women across Asia: issues of identities.

Muzvidziwa. V. N. (2013), Ecotourism, conservancies & sustainable development. The case of Zimbabwe. Journal of Human Ecology. Volume 43 Number 1. Pg. 41-50.

Nyampane, G. P. and Thapa, B. (2010), Evaluation of ecotourism: A comparative assessment in the Annapurna Conservation Area project Nepal. Journal of Ecotourism. Volume 3 Number 1. Pg. 20-45.

Nyaruwata, S. (2011), Tourism, biodiversity conservation & rural communities in Zimbabwe. Journal of Sustainable Development in Africa. Volume 13 Number 8. Pg. 225 -238.

Patton, M. Q. (2002), "Qualitative research & evaluation methods", 3rd edition. Thousand Oaks. CA: Sage.

Reichel, A. & Uriely, N. (2008), Ecotourism and simulated attractions: tourists' attitudes towards integrated sites in a desert area. Journal of Sustainable Tourism. Volume 16 Number 1. Pg. 23-41.

Ross, S. & Wall, S. (1999), Ecotourism: Towards congruence theory & practice. Tourism Management. Volume 20 Number 1. Pg. 123-132.

Sabuhoro, E., Wright, B., Munanura, I. E., Nyakabwa, I. N. and Nibigira, C. (2017), The potential of ecotourism opportunities to generate support for mountain gorilla conservation among local communities neighboring Volcanoes National Park in Rwanda. Journal of Ecotourism. Pg. 1-17.

Sanderson, A., Nyamadzawo, J., Nyaruwata, S. and Moyo, C. (2013), "Positioning the Zimbabwe tourism sector for growth: Issues and

challenges", USAID Strategic Economic Research and Analysis–Zimbabwe (Sera) Program.

Saunders, M. (2007), "Research methods for business students", 4th edition. London: Financial Times Prentice Hall.

Saurombe, H.A., du Plessis, Y. and Swanepoel, S. (2018), An integrated managerial framework towards implementing an ecotourism culture in Zimbabwe. Journal of Ecotourism. Volume 17 Number 2. Pg.107-122.

Sebele, S. L. (2010), Community-based tourism ventures, benefits & challenges: Khama rhino sanctuary trust, central district, Botswana. Tourism Management. Volume 31 Number 1. Pg. 136-146.

Shah, K. and Gupta, V. (2000), Tourism, the poor and other stakeholders: Experience in Asia. London: Overseas Development Institute.

Sinclair-Maragh, G.M. (2019), Ecotourism in Protected Areas: A Sustainable Development Framework. In Environmental Impacts of Tourism in Developing Nations, Pg. 22-41. IGI Global.

Stronza, A., and Gordillo, J. (2008), Community views of ecotourism. Annals of Tourism Research. Volume 35 Number 2. Pg. 448-468.

Trofimov, V. and Soimu, O. (2011), Ecotourism Concept in the Light of Cultural Diversity and Regional Development. Agricultural Economics and Rural Development. Volume 8 Number 1. Pg.117-125.

UNEP. (2003), "Africa environment tracking: Issues & Developments", UNEP Programme.

UNWTO. (2008), Seminar on ecotourism & protected areas in Africa: Contributing to

community development & conservation.

Vishwanatha, S. and Chandrashekara, B. (2014), An analysis of socio-cultural impacts of ecotourism in Kodagu District. American Journal of

Research Communication. Volume 2 Number 7. Pg. 135- 147.

Wearing, S., and Neil, J. (2009), Ecotourism, potentials & possibilities, Woburn: Butterworth-Heinemann.

Weaver, D. B. (2001), Ecotourism. Milton, Queensland: John Wiley & Sons, Australia.

Appendix 1

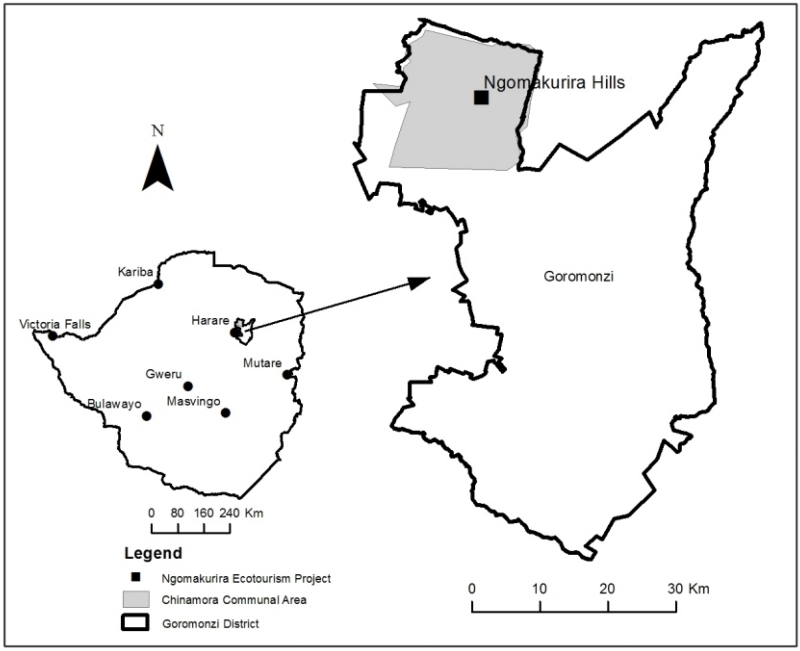

Figure 1: Location of Ngomakurira Hills Ecotourism Project

A review of performance management systems in higher education institutions across the globe

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Abstract

A concern has been raised that African countries have been copying and using tools that are developed in the West and these have not added value to concerned institutions in developing countries. As a result of this copy and paste tendency, Performance Management Systems (PMS) used in developing countries are obsolete to the extent that there is no accountability of staff with regards to their performance. This paper is based on a review of literature on Performance Management Systems in higher education institutions (HEIs). It is an extract from a project whose major objective was to develop a bespoke Performance Management System that can be used for quality assurance and its enhancement in Higher Education Institutions. The articles were identified through a systematic literature review by searching for key terms on the EBSCOhost data base using key words and backward snowballing. The findings are that performance management in higher education can be improved by taking the strengths of the current systems and adopt them to current conditions. Furthermore, the systems can be further improved with the aid of information and communication technology tools.

Keywords: Performance management systems, Higher education institutions

Introduction

The Organisation for Economic Corporation and Development (OECD) (2008) highlighted that higher education (HE) contributes to national development through four main pathways. These are: formation of human capital; building of knowledge bases; maintenance and dissemination of knowledge; and use of knowledge .The performance of a country's HE system is a development issue that needs considerable attention, all other sectors of development need high level manpower produced by higher education (Association of African Universities, 2017). It is well known that the level of development in a nation depends on its institutions of higher learning. However, the quality and accessibility of higher education has continued to fall short of stakeholders' expectations in many sub-Saharan countries (Materu, 2007; Mohamedbhai, 2008; Kasenene, 2010; Asamoah and Mackin, 2015). Usage of Performance Management Systems (PMS) in HE has been found to be one of the ways that can be used to improve the quality of service delivery.

The university like any organisation, must deal with uncertainty and change at an ever increasing pace. Therefore, HEIs must provide themselves with robust tools to monitor performance in a turbulent environment to remain competitive in the face of uncertainty in this age of cut throat competition and resources constrain.

This paper is a literature exploration on PMS in higher education institutions (HEIs) and has been necessitated by the slow uptake of PMS in African HEIs (Alboushra *et al.*, 2015). It is an introductory paper to a project whose major

objective is to develop a PMS that can be used for quality assurance and enhancement in HEIs. A concern has been raised by De Waal (2007) that African countries have been copying and using tools that are developed in the West and these have not been adding value to concerned institutions. As a result of this copy and paste tendencies, PMS used in developing countries are obsolete to the extent that there is no accountability of staff with regards to their performance. This makes it very difficult for the university to measure its overall performance in relation to its strategic objectives (Ngcamu, 2013).

Research problem

There is no proper performance management system in African HEIs (De Waal, 2007; Bunoti, 2010; Majoni, 2014). The absence and low uptake of PMS in African HEIs have a tendency of using obsolete systems in cases where they are used (De Waal, 2007; Curtright, 2010; Bunoti, 2010; Majoni, 2014). In instances where they are used, they are inappropriate as these were borrowed from the developed world without proper adoption and adaption to local environments. The lack of a proper PMS leads to other quality related challenges in institutions of higher learning.

Objectives of the Study

The major objective of the study is to explore the PMS used in HEIs. The strengths and weaknesses of these systems would be investigated in order to come up with a system that can be used for quality assurance and enhancement in HEIs.

Methodology

The standard procedure for performing a systematic literature review (Okoli & Schabram, 2010) was used. The search period was 2015 to 2020. EBSCOhost was used as research databases due its availability in University libraries. The database is also among the top ten research databases. The search was delineated to online full-text journal articles. Key performance management terms were assembled such as, balanced scorecard, results based management, lean six sigma, performance prism and performance pyramid. For performance appraisal, two search strings were used; these were "360 degrees feedback" and "higher education" as well as "supervisor-subordinate appraisal" and "higher education."

The Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) statement (Moher et al., 2009; Fobes *et al*., 2018) was used to determine articles for inclusion in the study. Due to the limited number of articles that meet the inclusion criteria in some instances, snowballing from reference lists of the identified articles was used to identify additional articles as guided by Wohlin (2014).

Findings and Discussion

Table 1: Definition of performance management

Table 1: Definition of performance management

Definition	Reference
▪ An interlocking set of policies and practices which have as their focus the enhancement of organisational objectives through the concentration of individual performance	Sallis,(2008)
▪ A continuous process of improving indivi dual, team and organisational performance	Bussim, (2012)
▪ A continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with strategic goals of the organisation	Aguinis, (2013)
▪ A systematic process for improving organizational performance by developing the performance of individuals and teams	Armstrong,(2014)

In as much as the definitions of PM vary, a common thread runs in all of them. The dimensions of this common thread can be summarized as:

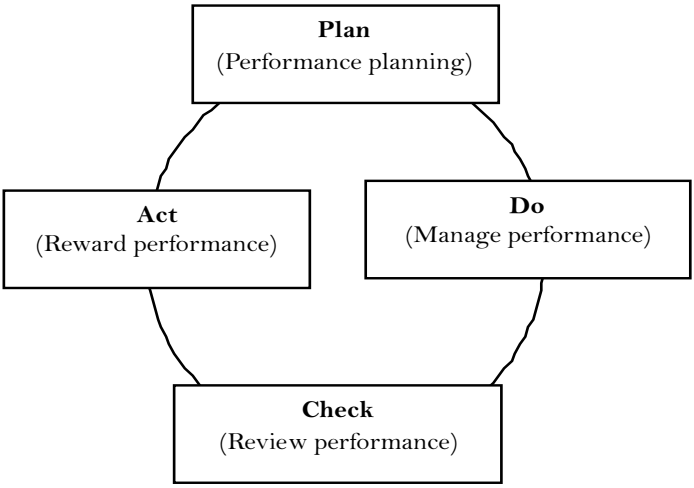
a) Focus on organizational goals

b) Alignment of individual to organizational goals. This is referred to as strategic alignment.

c) Achieving organizational goals through the work of individuals and teams described PMS as a strategic and integrated approach of conveying continued success to institutions by developing the people in a way that improves group and personal performance. According to model, PMS consists of four stages: performance planning, managing performance, reviewing performance and rewarding performance.

Spangenberg (1994) proposed four stages of PM that can be easily superimposed on Deming's quality cycle plan, do, check and act (PDCA) cycle. The utility of the PDCA cycle in quality management is well documented. A superimposed diagram of the PMS and PDCA cycles is shown in Figure 1.

Figure 1: Superimposing the PDCA and PMS cycles



Source: Authors

It can be seen that a PMS can drive both organizational performance and quality of the outputs in HE. It is commonplace that PMS adds value to organizational performance. From literature, the utility of a PMS can be summarized to be; creation of a shared vision among managers and employees, clarification of the roles of individuals, integrating them with

the organisation and driving of organizational performance. In essence, quality management and performance management are business practices that affect the performance of HEIs in a positive way if they are properly designed and implemented.

Philosophies that drive Performance Management in Higher Education

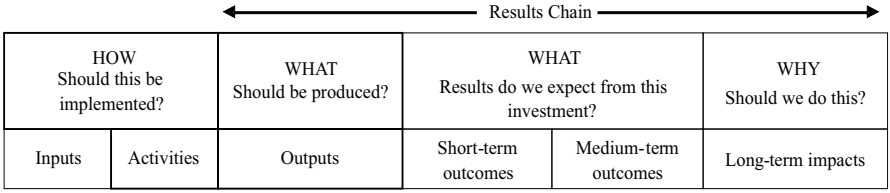
For a performance management system to succeed there is need for and underlying principle that drives the machinery in the institution. It is a philosophy that guides the human resources in every process in the performance management system.

Results Based Management

A query on the EBSCOhost data base for "Results Based Management" and "Higher education" yielded only four results. This is an indication that the area is under researched. Result Based Management (RBM) aims to improve performance by stating results at the beginning of the performance cycle (Canadian International Development Agency, 2003). The system ensures that inputs and processes contribute to the achievement of desired results (United Nations Developing Group, 2011). Writing on PMS in the Zimbabwean civil service Madhekeni (2012) and Zvavahera (2014) noted that RBM is one system that has a potential to improve service delivery in the public sector due to its results orientation. Hauge (2001) also reported that public institutions in Uganda improved their performance by implementing RBM. The philosophy is highly applicable in higher education particularly in the wake of increased demands from stakeholders.

Results are the outputs, outcomes or impacts (intended or unintended, positive and or negative) of a development intervention . Achieving the intended results is the primary focus of RBM. As such, planning starts with identifying intended results so that the organization is continuously directed towards attainment of such results. The RBM model is shown in Figure 2

Figure 2: Results Chain/Logic Model.



Source: Canadian International Development Agency (2003)

It can be seen in Figure 2 that the intended results determine the inputs required and the activities to be undertaken. HE has many processes which are teaching, learning, research and service that are amenable to the RBM chain. For example for teaching, the intended results can be improved student learning outcomes. The advantages and disadvantages of RBM are given in Table 2.

Table 2. Advantages and Disadvantages of RBM

	References
Advantages	
▪ Facilitates organisational learning and transparency by channelling performance information to decision makers through nested feedback loops from continuous performance monitoring, evaluation and audit activities	Canadian International Development Agency (2003)
▪ Lead to uniform reporting since these would be guided by the same structure	Madhekeni, (2012)
▪ Help policy makers track progress and demonstrate results leading to the improvement of quality and service delivery	Zvavahera, (2013)
Disadvantages	
▪ RBM is costly, resource constraints has hampered training initiatives for employee to become conversant with the concept	Kusek &Rist, (2004)
▪ Adopting, implementing and sustaining an RBM system is not easy due to its complexity	

In instances where RBM failed, it is because the system had not been tailor made to suit the needs and situations of specific organizations (OECD, 1997). The successful implementation of RBM requires a level of customisation to a specific organisation under consideration. Therefore, there is need to customize the RBM to HE if it is to be used successfully for the achievement of intended results. Thus Madhekeni (2012) noted that RBM remains a valid and indispensable tool for managing programmes and projects in government departments.

This philosophy is worth pursuing and is attractive to higher education because of its emphasis on the quality of outputs and outcomes.

Lean Six Sigma

An EBSCOhost query on "Lean Six Sigma" and "Higher Education" yielded fifty-eight results. According to Adna – Petruta and Roxan (2014) Sigma is used to represent the statistical term "standard deviation" which measures the deviation from the average in a particular business process. With more

deviations from the normal, come defective products and services that do not fulfil the customer need and wants (Adna – Petruta and Roxan, 2014). These defects end up costing the organisation in terms of money. In short Six Sigma aims for zero defects in the production of goods and services.

According to Montgomery (2017) the six sigma concept began in the manufacturing arena, and the idea that organisations can improve quality levels and work "defect-free is currently being incorporated by HEIs in the same way as other performance measurement tools. He noted that as six sigma permeates into today complex sophisticated higher education landscape, the methodology is "tweaked" to satisfy unique needs of individual schools. He noted that combining the lean flow methodology with six sigma methodologies allows the attainment of synergy that provides results much greater than if each of the approaches were implemented individually (Montgomery, 2017).

Thus for the lean six sigma approach to achieve intended objectives in higher education it has to be tailor made to suit individual HEIs. Comm and Mathaised (2005b) further suggested that one way of introducing lean practices at HEIs might be by outsourcing non-core activities. By so doing the lean methodology minimises and eliminates different forms of waste and non-value added activities (Liker, 2014). Svensson *et al.,* (2015) went on to note that improving higher education the LSS way can be done in the same way as any other industry including academic and non-academic processes. LSS can increase student satisfaction, provide HEIs with problem solving templates and changing the institution's culture and other benefits (Antony,

2014; Simons, 2013). Gross (2008) noted that initially, the most appropriate areas for applying LSS in a university may be in non-academic areas as these have characteristics similar to many business processes which have benefited from the methodology. Such processes include student admissions, financial services, library services, works and estates and catering services. Selection of the right project will create confidence in management and employees towards LSS initiative (Antony *et al*., 2012).

Furthermore, Antony *et al*., (2012) identified relevant tools and techniques that six sigma use to help in improving the quality of higher education. These are the cause and effect analysis, the Pareto analysis, define-measure-analyse-improve-control charts, control charts, root cause analysis and other such tools. For the implementation of a lean six sigma to be successful Antony (2014) identified five readiness factors that draws inspiration from that total quality management philosophy that need to be taken into consideration. These include leadership, vision, management commitment, resources, linking LSS to the university's strategy, customer focus and selection of the right people (Antony, 2014).

According to Mitra (2004) lean six sigma is used to archive quality improvement by reducing the defects in the products, services and process. This is archived through the (define-measure-analyse-improve-control) DMAIC process. According to Montgomery (2017), DMAIC entails definition of a problem and expected results and the measurement of success towards the solving of the identified problem. Measurement entails gathering quantitative and qualitative data to get a clearer view of the current state,

while analysis is about studying the information gathered in the measure phase, pin point threats and identifies improvements opportunities where non value addition tasks can be removed. Finally improvement and control entails implementation of recommended solutions and placing necessary controls to ensure improvements are sustained as well as promoting continuous improvement activities respectively. LSS also recognises the importance of the customer in quality management.

The usage of the Lean Six Sigma (LSS) is prevalent in the United States and Europe and some parts of Asia and Africa (Nadeau, 2016). Examples of institutions that use this approach are Oakland University, South Dakota State University, University of Central Oklohoma, Royal Institute of Technology, Cardiff University, Nottingham Business School, Portsmouth Business School ,Turku University of Applied Science, Tswane University of Technologyand Gitamu Visakhaptnam Shri Krishan Institute of Engineering and Technologyamong many (Nadeau, 2017; Antony, 2014).

Table 3: Advantages and Disadvantages of Lean Six Sigma

	References
Advantages	
▪ Projects follow a standard predefined structure, leading to consistent results.	Adina-Petruţa & Roxana, (2014) Simons,(2013)
▪ Help to extract information on the voice of the internal and external customer, their requirements are included in process design. ▪ Help establish measures, education tend to us e lagging indicators, LSS requires the usage of leading indicators.	Found & Harrison,(2012) Simons, (2013)
Disadvantages	
▪ Difficult to apply to HE due to the intangible nature of an educational product, diversity of departmental/individual goals and viewpoints. ▪ The application of LSS requires a prerequisite familiarity and acceptance of analysis tool.	Jenicke, Kumar, & Holmes, (2008), Atmaca & Girenes, (2013)

Performance Measurement Systems

Balanced Scorecard

The balanced scorecard (BSC) was introduced by Kaplan and Norton in the early nineties. The BSC has four perspectives. These are: the financial, internal processes, learning and growth, and the customer perspectives . According to these perspectives work in a cause-effect scenario. For example, good financial conditions enable the provision of good facilities and excellent resources. An adaptation of the BSC perspectives to a university context is shown in Table 4.

Table 4: Components of the Balanced Score Card in a university context

Perspective	Components in a university	References
Financial	Revenue, Fund raising, Investments, Research income	Farid, Nejati & Mirfakhreddini, (2008)
Customer	Students,Community, Industry/employer, Alumni, Parents	Ahmad & Soon, (2015), Binden, Mziu& Suhaimi, (2014)
Learning and growth	Research, Capacity development for staff, Learning organisation, Facility and infrastructural growth	Farid et al., (2008)
Internal processes	Research and innovation, Teaching and learning, Quality and currency of staff, Curriculum/program excellence and innovation, Efficiency and effectiveness of service	Farid et al., (2008)

According to a dashboard can be used to convert organisational objectives to key performance indicators (KPIs). The KPIs in higher education are academic parameters such as student enrolments and graduation rates, ethnicity, programme/degree completion rate and time to completion among other measures (Ewel, 1994 cited by Farid *et al*., 2008). The advantages and disadvantages of the BSC are shown in Table 5.

Table 5 : Advantages and disadvantages of the Balanced Score Card

	References
Advantages	
▪ Motivates employees toward accomplishment of institutional goals ▪ Aligns strategy at each unit in order to effectively and efficiently achieve objectives ▪ Facilitates communication, establishment of common goals, provides feedback and assesses employee performance relative to corporate strategy	Ahmad & Soon, (2015)
Disadvantages	
▪ Translation of the BSC to the academic world is not easy	Ahmad & Soon (2015)
▪ Particularly the development of the framework, implementation, training, design, development and controlling.	Deshpande,(2015) Wahba,(2016)

Implementation of the BSC in HEIs, serves as a driving force to move institutions towards desired goals. To ensure academic excellence in a time of increasing competition in the higher education sector Kiriri (2018) argued that universities must apply appropriate performance measurement systems that reflect and gives the opportunity to improve on its research and teaching quality as well as the quality of its facilities and staff. Such a system like the balanced scorecard could be used because it incorporates perspectives of all university stakeholders. Chen, Young and Shiau (2006) agreed that the usage of the BSC in HEI enables the institution to turn strategy into action.

The system is prevalent mainly in the United States and Europe. Asian and African HEIs are beginning to realize the usefulness of the system (Kassahun,

2010; . Examples of institutions that use the system include the University of Washington, Yale University, University of Toronto, University of Lisbon and University of Newcastle Sayed (2013) cited by Ahmad and Soon (2015). Examples in Asia and Africa include the Hasanudin University in Indonesia (Surdiman, 2012), the Arab Academy for Science, Technology and Maritime Transport in Egypt (Wahba, 2016), and the University of Kwa-Zulu Natal in South Africa .

Performance Prism

Smulowits (2015) noted that although the performance prism has been discussed widely in literature, there is a paucity of research about the performance prism in higher education.

The Performance Prism was developed by Neely, Adams and Kennerly in 2002. It has five facets the top and bottom stakeholder satisfaction and stakeholder contribution respectively. The other three are strategies, processes and capabilities (Neely *et al*., 2002). For the performance prism, wants and needs of stakeholders must be determined first before the identification of strategies that meets those wants and needs (Neely, Adams and Crowe, 2001).

The perspective to consider first when using the performance prism is stakeholder satisfaction. The perspective addresses the question who are the most influential stakeholders and what do they want and need (Neely and Adams 2002). The applicability of the performance prism to HEI emanates from the fact that it starts with stakeholder identification. In higher education stakeholders are the students, industry, the government and its agencies, accreditation and professional bodies among many. One can

only come up with right strategies after identifying the wants and needs of stakeholders. Strategy determination is the second perspective in performance prism. It addresses the question on the strategies that should be adopted by an organisation to ensure that the said wants and needs of stakeholders are satisfied (Cengic and Fazlie, 2008; Neely *et al*., 2002).

Determination of strategies is the second perspective in the performance prism. It answers the question, "what are the strategies that should be adopted by the organisation to ensure that the wants and needs of its stakeholders are satisfied?" (Neely *et al*., 2002). After the determination of strategies comes the processes and capabilities perspective which addresses the question on the processes that need to put in place to allow the execution of strategies and capabilities that are required to operate these processes, both now and in the future (Neely *et al.,* 2002).

Cengic and Fazlie (2008) explains the need to identify the most important processes depending on the core business of the organisation and focuses attention on them rather than simply measuring the functions of all processes. It is essential to ensure that processes and capabilities that matter are maintained in the organisation to establish a competitive edge over its rivals (Vansteenbrugge, 2014). Processes cannot function on their own, they need capabilities. They need people with certain skills, some policies and procedures about the way things are done, some physical infrastructure for it to happen and some technology to enable and enhance it (Vansteenbrugge, 2014). Capabilities can be defined as the combination of an organisation's people, practices, technology and infrastructure that collectively represent the organisation's ability to create value for its

stakeholders through a distinct part of its operations. Nankeivis and Compton (2006) observes that measurement will ensure that the critical capability components of the organisation that make it distinctive and also allow it to remain distinctive in the future are maintained.

The stakeholder contribution perspective answers the question on the part played by stakeholders if organisational capabilities are to be maintained and developed (Neely *et al*., 2002). According to Tangen (2004) the strength of the performance prism is that it first identifies the stakeholders and their needs and then identifies the most appropriate strategies to meet identified needs and wants. This is in line with any quality initiative which defines quality as meeting or exceeding customer expectation. In so doing, the framework ensures that the performance measures have a strong foundation. The performance prism also considers new stakeholders such as employees, suppliers, alliance partners and others who are usually neglected when formulating performance measures whose contribution is pertinent in the continual wellbeing of the company

One weakness is that although the performance prism extends beyond traditional performance measurement, it offers little about how the performance measures are going to be realised. In addition Striteska and Spickova (2012) noted another weakness in that the framework does not offer how these performance measures are to be implemented.

The Performance Pyramid

An EBSCOhost query on "Performance Pyramid" and "Higher Education" yielded only one result. These results indicate that the area is under-researched. The Performance pyramid was constructed by McNair *et al*., (1990) and was further developed by Lych and Cross (1992). The performance pyramid consist of a four level management control system with performance evaluation criteria in order to achieve organisational goals from top management, the performance process measures goals achieved in a bottom-up direction (Vu, 2021; Taouab and Issor, 2019; Tangen, 2004). It depicts a pyramid shaped performance measurement system that start with defining an overall cooperate vision at the first level which then translate into individual business objectives after having defined the company's strategy and vision (Albinaite and Narkuniene, 2018).

The second level business units set short term targets of cash flow and profitability and long term goals of growth and market position (Tangen, 2004). The business operation system bridges the gap between second level and day to day operational measures for example, satisfaction, flexibility and productivity (Vasikainen, 2014). At the base of the pyramid is a plan-do-check-act cycle with four key performance measures, quality delivery cycle time and waste such as number of accidents, percent rework and scrape (Vasikainen, 2014).

A performance pyramid establishes a strategic alignment between performance measures at different hierarchical levels within an organisation so that each function and department drives towards the same goals (Tangen,

2004; Gross and Lynch, 1992; Vansteenbrugge, 2014). The model is constructed in such a way that there is a strong link between the categories which leads to linkage between the different measure . The performance pyramid ensures an effective link between strategy and operations by translating strategic objectives from the top down on the left side based on customer priorities and measures from bottom up on the right side of the pyramid (Tangen, 2004). Objectives and measures become links between the company'sstrategy and its activities. In other words, objectives are translated downwards through the organisation while measures are translated upwards (Olve *et al.*, 1999).

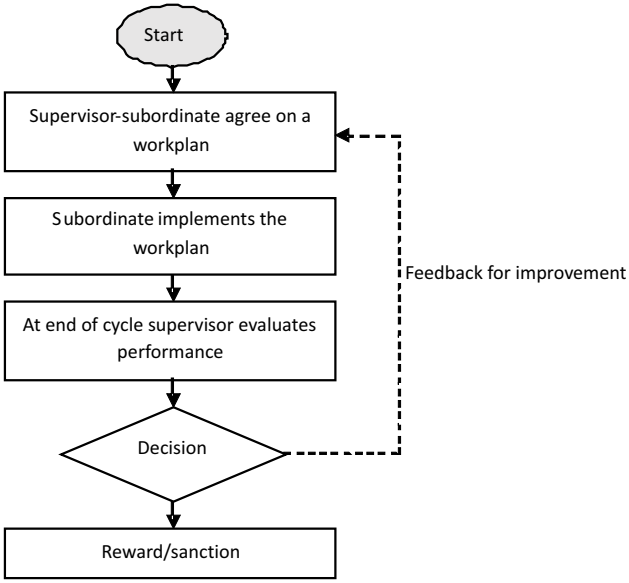
On the strengths of the performance pyramid Gholayini *et al*., (1997) observed that it attempts to integrate corporate objectives with operational performance indicators. It is further observed that it clarifies the objective of the organisation leading to better understanding of the different processes within an organisation (Vansteenbrugge, 2014). Other scholars further points out that the performance pyramid integrates corporate objectives and operational performance indicators (Striteska and Spickova, 2012; Taonab & Issor, 2019; Vu, 2021).

However, the framework has quite a rigid character which makes it redundant for many organisations; categories such as waste are more difficult to apply to service organisations (Vansteenbrugge, 2014). This observation is however refuted by Ignat (2021) who noted that the model is suitable for assessing both financial and non-financial factors in a manufacturing or service providing enterprise.

Performance Appraisal

Armstrong and Taylor (2020) defines performance appraisal as a formal assessment and rating of individuals by their managers usually during annual review meetings. noted that it entails the process of measuring, developing and enhancing the work performance of staff. Performance appraisal is a major part and a key component of a systematic process of performance management. explained that in a traditional performance appraisal process, supervisors and subordinates develop a work plan at the beginning of the performance cycle. The developed work plan becomes the basis of employee evaluation at the end of the performance year (Kakkar *et al.*, 2020). Wamimbi and Bisaso (2021) described performance appraisal as being at the centre of performance of all organisations particularly in this era of stiff competition where it is used as tool that seeks that seeks to improve the quality of service delivery. Performance appraisal assist in making decisions that leads to decisions such as promotion and compensation or even dismissal (Yahya, 2020). Figure 3 provides a general process flowchart for performance appraisal.

Figure 3: Flowchart of the performance appraisal



It is important to highlight that the performance appraisal process often includes a self-assessment . The utility of self-assessment is that it allows for self-reflection on part of the subordinates.

Performance Appraisal Techniques in HEIs

Performance appraisal is that component of the Performance Management System that deals with how performance evaluation is done.

Supervisor-Subordinate Appraisal

This traditional system is mainly used in African HEIs (Alboushra, *et al.,* 2015). Oshodi (2011) also noted that a number of Nigerian public HEIs continued to practice the traditional staff appraisal system which usually utilize a form of top down approach where staff are appraised by their supervisors. However, Fletcher and Williams (2016) noted that the biggest limitation of annual reviews is that it puts emphasis on financial rewards and punishments. They further noted that appraisals hold employees accountable for past behaviour at the expense of improving current performance and grooming talent for the future which is critical for the organisation's long term survival (Fletcher and Williams, 2016).

In the appraisal system, the supervisor monitors and review performance at set times in the performance cycle. Desmet and Gaganon (2018) advised against the idea of "reviewing performance at set times" in this time in age where rapid innovation is a source of competitive advantage. As technology is reshaping the competitive land scape Carter et al., (2011) noted that organisations would not necessarily want employees to keep doing the same thing due to technological advancement. Organisations must employ agile systems that allow employees to keep revisiting two basic questions: What am I doing that I should keep on doing? What am I doing that I should change? (Cappelli and Tavis, 2016).

360^0 Appraisal

The 360^0 appraisal is also known as the multi-source assessment and the 360^0 feedback. In higher education, the 360^0 appraisal include self-appraisal,

peer evaluation, evaluation by students and evaluation by the supervisor who is usually the head of department (Niyivuga *et al*., 2019). The strength of this method is that it draws feedback from a number of sources. Bailey (1997) posits that the success of the 360^0 appraisal depends on the way the feedback is perceived and processes as well as the willingness of the recipients of that feedback to engage in self-reflection. Becket and Brookes (2006) noted that student's feedback if driven by academic members of staff, it is most likely that it would be used for developmental purposes. Das and Panda (2015) indicated that , the method is particularly important for non- managers to help people to become more effective in their current roles and also to help them understand whose areas they should focus on if they want to move to managerial roles. Strengths of the 360^0 appraisals in that self-evaluation allow members to express their own views about their performance and reflect on the personal and institutional factors that have an impact on their performance. They further noted that peer evaluations by faculty members in the department with subject knowledge and pedagogical expertise will be in a position to guide and support others to improve their performance (Niyivugu *et al*., 2019). Staff would benefit more from the comments by the more experienced staff (Smuther, London and Reilly, 2005).

The University of Minnesota is an example of an institution that has used the system successfully in assessment of deans . The system has assisted the University in that it supports the broad goals of leadership excellence and managerial accountability and it also allows for efficient utilization of resources . In Africa and Asia, the use of 360 degree feedback has resulted in the improvement of quality in teaching at the University of Zambia's School

of Medicine as well as in some HEIs in Pakistan (Banda, 2012; ; Rasheed, Aslam, Youraf and Noor, 2011).

The Lean Six Sigma is one system that can be used in HE according to available literature. Simons (2013) recommended that improving the education system can be done in the same way as other industry. The system is recommended in higher education because it increases student satisfaction, providing institutions with problem solving templates, as well as changing the institution's culture and other benefits (Antony, 2014; Simons, 2013).

From available literature it appears that the most popular performance measurement system in higher education is the balanced scorecard. This is probably due to the adoption of business models in most universities. This Privatisation and commodification of higher education is a burgeoning phenomenon in higher education (Santioago *et al*., 2008). As such, the principles and practice of BSC find relevance and application in higher education. In the higher education sector, early adopters of the BSC have won prestigious national quality awards . This has been so because the BSC promotes a balanced performance leading to institutional overall performance improvement. The attractiveness of the BSC is further compounded by the fact that it incorporates perspectives of all university stakeholders (Kaplan and Norton, 2001).

The BSC is very suitable in HEIs in line with Kariri (2018) who noted that the tool has been tried and tested by various HEIs and held as one tool that if well implemented in HEIs. It ensures the fulfillment of the mission and vision as well as a learning model that supports continuous improvement and

environmental responsiveness (Kariri, 2018).

The prominence of the BSC as a performance measurement system in higher education is not to down play other performance measurement techniques. The strength of the performance prism starts with stakeholder identification, followed by establishing their wants and needs. Strategies to tackle these wants and needs are then tackled at the end according to Nelly *et al.*, (2002). Starting with stakeholder identification and establishing the wants and needs points towards the results orientation of the performance prism. This makes the performance prism attractive HE.

Results of the current study demonstrate that the performance pyramid is one technique that can be used in HEIs to measure performance. According to Vasikainen (2014), the base of the pyramid is the plan-do-check-act cycle which makes the model an effective tool for continuous quality improvement. The tool is very applicable to HEIs as it can be used to establish the much needed strategic alignment in the PMS.

Findings of this study indicate the need for argile PMS that are ICT based. Argile systems are recommended as traditional appraisal systems are punitive rather than developmental (Cappelli and Tavis, 2016). This is in line Desmet and Gagnon (2018) who are against reviewing performance at set periodic times because employees need to keep checking on any changes that might be required at any given time to keep up to date with the changes in the environment.

Finding from this literature review study demonstrate that the 360^0

appraisal is very prevalent in higher education. A study by Niyivuga *et al*., (2019) realised that student-staff evaluations and evaluations by HODs were the most applied in performance management in the Rwanda higher education system. The results were consistent with the conclusion by Chen and Hoshwer (2003) that in most universities student ratings are most influential. The 360^0 appraisal is recommended in HEI because students are an integral part of the learning process and as primary consumers; their objective views are likely to lead to continuous quality improvement initiatives (Niyivuga *et al*., 2019; Igbojekwe *et al*., 2015). Self-evaluation is important because it gives one a chance to reflect and self-introspect on one's performance. Peer evaluation is also useful if it is done by members that have subject knowledge and pedagogical expertise that are able to guide and support others in the teaching process.

Conclusion

The developing world has been facing the challenge of importing development models from the west and superimposing them on their own systems without taking into consideration local conditions. For this reason, most of these development programmes fail dismally.

In an era of university ranking, performance management has become a *sine qua non* of the pursuit of excellence. observed that PMS can be a good mechanism for quality assurance in education if implemented in the right manner and enabling environment. The conclusion from the study is that most institutions of higher education relied on the results based management system and the lean six sigma for performance management. Taking positives from the reviewed performance management systems and

adapting them to suit the conditions at a particular institution goes a long way in improving the quality of service delivery in institutions of higher learning.

Recommendations

Universities must ensure academic excellence in a time of increasing competition in the higher education sector. One of the ways to do this is the usage of appropriate PMS that reflect and give the opportunity to improve on its research and teaching quality and that of its facilities and staff. The literature exploration has discussed a number of performance measurement techniques and philosophies that drive PMS. Combining these systems by taking the strengths of each system and tapping on the power of communication and information technology to come up with bespoke PMS to address quality challenges that are bedevilling HEIs is recommended. Usage of appropriate PMS in HEIs is good practice that every institution must embrace if they want to make a meaningful contribution to the development of a nation

REFERENCES

Adina-Petruţa, P., & Roxana, S. (2014). Integrating Six Sigma with Quality Management Systems for the Development and Continuous Improvement of Higher Education Institutions. *Procedia - Social and Behavioral Sciences*, *143*, 643–648. https://doi.org/10.1016/j.sbspro.2014.07.456

Aguinis, H. (2013). *Performance Management* (Third). Boston: Pearson.

Akinyele, S. T. (2010). Performance appraisal systems in private Universities in Nigeria : A Study of Crawford University, Igbesa- Nigeria. *Educational Research*, *1*(8), 293–303.

Alboushra, M. A., Shahbudin, A. S., & Abdalla, Y. A. (2015). UnderstandingChallenges of Performance Measurement in a Public University : Evidence from Sudan. *Asian Social Science*, *11*(15), 10–2 https://doi.org/10.5539/ass.v11n15p10

Aldaweesh, M., Al-Karaghouli and Gallear, D., (2013). The Effective Implementation of Total Quality Management and Leadership in Saudi Universities: A Review and Framework to Enhancing H.E. Strategy, European, Mediterranean & Middle Eastern Conference on Information Systems, October 17-18 2013, Windsor, United Kingdom

Al-Hosaini, F.F. & Sofian, S. (2015). A Review of Balanced Scorecard Framework in Higher Education Institution (HEIs) Fahmi. *International Review of Management and Marketing*, *5*(1), 26–35.

Antony, J. (2014). Readiness factors for the Lean Six Sigma journey in the higher education sector. *International Journal of Productivity and Performance Management*, *63*(2), 257–264. https://doi.org/10.1108/IJPPM-04-2013-0077

Armstrong, M. (2014). Armstrong's handbook of human resource management practice.
Handbook of human resource management practice. New Delhi: Sage.

Armstrong, M. and Tylor, S., (2020). Handbook of human resource management practice.New Delhi: Sage

Asamoah and Mackin (2015), Breaking the fetters of higher Education in Sub Sahara Africa, international journal of Educational Administration and Policy Studies Vol 7(1) pp 6-16

Association of African Universities (2017), Giving your University a Strategic Focus, A Practical Guide to Institutional Strategic Planning, Association of African Universities.

Atmaca, E., & Girenes, S. S. (2013). Lean Six Sigma methodology and

application. *Quality and Quantity*, *47*(4), 2107–2127. https://doi.org/10.1007/s11135-011-9645-4

Barnes, G. R. (2007). A Balance Scorecard for Higher Education Institutions: Moving Towards Business Performance Management. In *AAIR Forum 2007, Sydney, Australia*.

Bester, A. (2016). Results-Based Management in the United Nations Development System: Progress and Challenges. *United Nations*, (July).

Biggs, J. (2003), Aligning teaching for constructing learning. Higher Education Academy: Available from: https://www.heacademy.ac.uk/aligning-teaching -constructing-learning

Binden, W., Mziu, H., & Suhaimi, M. A. (2014). Employing the Balanced Scorecard (BSC) to Measure Performance in Higher Education – Malaysia. *International Journal of Information and Communication Technology Research*, *4*(1), 38–44.

Carter, B., Danford, A., Howcroft, F. D., Richardson, H., Smith, A & Taylor, P (2011). All they lack is a chain: Lean and the new performance management in the Bristish civil service. *New Tecnology, Work & Employment 20:2*

Canadian International Development Agency (2003). *Results-Based Management: Towards A Common Understanding Among Development Cooperation Agencies*. Ottawa: RBMG @ istar.ca.

Cappelli, P. and Tavis, A. (2016), The Performance management revolution, Harvard Business Review October 2016 Issue

Cengic, M., & Farlic, D (2008). The Balanced Scorecard VS Performance Prism, 12th international Research/Expert Confrerence, "Trends in the Development of information technology, Istanbul, Turkey, 26-30 August, 2008.

Chubb, C. Reilly. P & Brown, D. (2011). *Performance Management Literature Review*. Brighton: Institute of Employment Studies..

Comm, C.L. & Mathaised, D.F.X. (2005). A case study in applying lean lean sustainability concept to universities. International Journal of Sustainalibity in Higher Education. Vol. 6 (2), 134-146.

Coste, A. L. & Tudor, A. T. (2015) Performance Management in Higher Education. A Literature Review, Practical Application of Science, Vol. 111, Iss. 2(8)

Dalton, M. (1996). Multirater feedback and conditions for change. *Consulting*
Das, U. K., & Panda, J. (2015). A Study on 360-Degree Feedback In Educational.University With Reference To Bhubaneswar, Odisha, India. *International Journal of Science and Research*, *4*(4), 1632-1634

Desmet and Gagnon (2018) organising for the age of urgency, Mckinsey Quartely, Jan 2018

Deshpande, B. (2015). Application of Balanced Score Card in Higher Education with special emphasis in a Business School. In *International Conference on Technology and Business Management* (pp. 201–205).

Edwards, C. . (1995). 360 Degree Feedback. *Management Services*, *39*, 1995. https://doi.org/10.1108/jeit.1999.00323iab.007

Edwards, M. R., & Ewen, A. J. (1996). 360-degree feedback: Royal fail or holy grail? *The Career Development International*, *1*(3), 28–31. https://doi.org/10.1108/13620439610118537

Emery, C. R., Kramer, T. R., & Tian, R. G. (2003). Return to academic standards: a critique of student evaluations of teaching effectiveness. *Quality Assurance in Education*, *11*(1), 37–46. https://doi.org/10.1108/09684880310462074

Farid, D., Nejati., M. & Mirfakhredini, H.\. (2008). Balanced Scorecard

Application in universities and Higher Education Institutes: Implimentation Guide in an Iranian context. *Annals of University of Bucharest, Economic and Administrative Series*, *2*(2), 31–45.

Fobes, C.A., Deshpande,S. Sorio-VAlela., F., Kutikova, L. Duff, S., Gaum-Berthhold, I., Hagstrom, E. (2018). A systematic literature review comparing methods of the measurement of patient persistence and adherence. Curr. Med.Res. Opin. 34(9), 1613-1625

Found, P., & Harrison, R. (2012). Understanding the lean voice of the customer. *International Journal of Lean Six Sigma*, *3*(3), 251–267. https://doi.org/10.1108/20401461211282736

Fletcher, C & W. Richard (2016) Improving Performance and Developing the Individual 5th Ed. e-books, London

Ghalayani, A. M., Noble, J. S. & Crowe, J.J. (1997). An Intrergrated Dynamic Performance Measurement System for Improving ManufacturingCompetitiveness, International Jssournal of Production Economics

Guilbault Igbojekwe, Polycarp A. & Ugo-Okoro, C. P. (2015). Performance Evaluation of , M. (2016). Students as customers in higher education: reframing the debate.
Hassel, H. & Lourey, J. (2005). The Dea(r)th of Student Responsibility Academic Staff in Universities and Colleges In Nigeria : The Missing Criteria . *International Journal of Education and Research*, *3*(3), 627–640.

Ignat, G. (2021). Studies regarding the analysis of the financial profitability rate based on the performance pyramid ar a eine company in the Republic of Modova. *Conference on promotion of Social and economic values in the context of European Intergration*.

Jenicke, L. O., Kumar, A., & Holmes, M. C. (2008). A framework for applying six sigma improvement methodology in an academic environment. *The TQM Journal*, *20*(5), 453–462. https://doi.org/10.1108/17542730810898421

Kanji, G.K. & Moura E. P. (2002). Kanji's Business Score Card, Total Quality Management, 13:1 pp 13-21

Kanji, G. K. (2001) Forces of Excellence in Kanji's Business Excellence Model, Total Quality Management 12:2 pp 259-927.

Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard - Measures That Drive Performance. *Harvard Business Review*, (January-February), 71–79.

Karathanos, D. & Karathanos, P. (2005). Applying the Balanced Scorecard to Education. *Journal of Education for Business*, (March-April), 222–230.

Kasenene, E. S. (2010) Improving the effectiveness of public and private education in Sub-Sahara Africa: The case study of Uganda. NHCE, Kampala Kassahun, T. (2010). Rethinking institutional excellence in Ethiopia: adapting and adopting the balanced scorecard (BSC) model. *Journal of Business and Administrative Studies,* Vol. 2 (1), 22-53

Kiriri, P.N. (2018) Management of Performance in Higher Education Institutions: the Application of the Balanced Scorecard (BSC). *European Journal of Education,* Vol. 1, Iss. 3, 168-180.

Liker, J. (2004). The Toyota Way: Fourteen Management Principles From the World s Greatest Manufacturer. McGraw-Hill. https://doi.org/10.1016/j.technovation.2008.06.003

Machingambi, S., Maphosa, C., Ndofirepi, A., Mutekwe, E., Wadesango, N., & (2013). *Perceived Challenges of Implementing the Performance Management System in Zimbabwe. J Soc Sci, 35(3), 263–271.*

Madhekeni, A. (2012). Implementing Results-Based Management Systems in Zimbabwe : Context and Implications for the Public Sector. *International Journal of Humanities and Social Science*, *2*(8), 122–129.

Mapesela, M.L.E & Strydom, F. (2005). Performance management of

academic staff in South African Higher Education: a Developmental Research Project. Conference on *Trends in the management of human resources in higher education* (pp. 1–9).

Maringe. F., (2010). The meaning od Globalisation and Intrernalisation of Higher Education, Theoretical, Strategic and Management Perspectives, London pp 17-34

Materu, P. (2007), Higher Education Quality Assurance in Sub-Saharan Africa, Status, Challenges, Opportunities and promising practices. World Bank Working paper No. 124, the World Bank, Washington DC

Meek, V., & Kearney, M. (2009). Higher Education , Research and Innovation : Changing Dynamics Report on the UNESCO Forum on Higher Education , Research and Knowledge. (V. L. Meek & M. Kearney, Eds.). International Centre for Higher Education Research Kassel (INCHER-Kassel). Retrieved from http://www.uni kassel.de/incher/v_pub/UNESCO_RR_09.pd

Michael, A. & Baron, A. (2002). Strategic HRM: The Key to Improve Business Performance, Development Practice, London: CIPD Publishing.

Mohhamedbhai, G. (2008), The Effects of massification on Education on Higher Education in Africa, Association of African universities

Moler. D., Liberati. A., Tetzlaff, J. et al., (2009) Preferred reporting for systematic reviews and meta-analyses: The PRISMA Statement. Br. Med.J.339, b235

Montgomery, D. (2017). Lean Six Sigma in Higher Education. Quality and Reliability Engineering international 33, 935-936 DOI: 10:1002/qre.2194

Nadeau, S. (2017) Laen, Six Sigma and Lean Six Sigma in Higher Education: A Reviw of Experiences around the world, American Journal of Indistrial and Business Management, 2017, 7, pp 591-603

Nadeau, S. (2016). 360 Degrees Performance Appraisal. *Intrenational Journal of Reseach in Management & Technology*, *6*(1), 45–51.

Nankervis, A. R., & Compton. R.L,. (2006). Performance Management Theory and Practice. *Asia, Pacific Journal of Human Resource, Vol. 44.*, 67-88 DO-10.1177/103411106061509

Narkunienė, J., & Ulbinaitė, A. (2018). Comparative analysis of company performance evaluation methods. *Entrepreneurship and sustainability issues*, *6*(1), 125-138.

Neely, A., Platts, K., & Gregory, M. (2005). Performance measurement system design : A literature review and research agenda Performance measurement system design A literature review and research agenda. *International Journal of Operations & Production Management*, *25*(12), 1228–1263. https://doi.org/10.1108/01443570510633639

Neely, A., Adams, C., & Kennerley (2002), The Performance Prism: The Scorecard for measuaring Business Sucsssess, Pearson Education.

Neely, A., Adams, C., & Crowe, P. (2001) The Performance Prism in Practice, Measuaring Business Excellence, Vol. 5. Iss.2 pp 6-13.

Neely, A., & Adams, C. (2002) 'Prism Reform', Financial Management.

Ngcamu, B. S. (2013) The Empirical Analysis of Performance Management System: A Case Study of s University in South Africa, Journal of Economics and Behavioral Studies, Vol. 5, No. 5, pp 316-324.

Nurse, L. (2005). Performance appraisal , employee development and organizational justice : exploring the linkages Performance appraisal , employee development and organizational justice : exploring the linkages. *The International Journal of Human Resource Management*, *16*(7), 1176–1194. https://doi.org/10.1080/09585190500144012
OECD Annual Report. (2008).

Okoli, C. & Schabram, K. (2015). A guide to conducting a systematic

literature review of Information Systems research. Communications of the Association for Information System. 37 (43) 879-910, http://aisnet.org/cais/vol37/155/43

Oshodi, J. E. (2011). Should Academic Institutions In Nigeria Use The 360-Degree Feedback System For Employee Appraisal ? *European Journal of Business and Management*, *3*(5), 69–73.

Pepper, M. P. J., & Spedding, T. A. (2010). The evolution of lean Six Sigma. *International Journal of Quality & Reliability Management*, *27*(2), 138–155. https://doi.org/10.1108/02656711011014276

Pollack, D. M., & Pollack, L. J. (1996). Using 360 feedback in performance apprasial. *Public Personnel Management*.

Powel,S. (2004). The Challenge of Peformance Measurement, Management Decision, Vol. 42, iss. 8, pp 1017-1023

Rasheed, M.I., Aslam, H., D., Yousaf, S. & Noor, A. (2011). A Critical analysis of performance appraisal system for teachers in public sector universities of Pakistan: A case study of the Islamia University of Bahawalpur (IUB). *African Journal of Business Management* Vol. 5 (9), 3735-3744

Rist, J. Z. & Kusek, R. (2004). *Based Monitoring Evaluation*. Washington DC: World Bank.

Sallis, E. (2008). Total Quality Management in Education. *Zanco Journal , the Scientific Journal of Salahaddin University*, (36), 177. Retrieved from http://s3.amazonaws.com/academia.edu.documents/33235910/Total_quality_Managment_in_Education.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1470151101&Signature=n7uNX5f0lqx3f%2Bg4C6UNgPu%2Fbb4%3D&response-content-disposition=inline%3Bfilename%3DTotal_Qu

Santiago, P. Tremblay, K., Basri, E. & Arnal, E. (2008a). *Tertiary Education for the Knowledge Society*, Volume 1. Paris: OECD, Executive summary, 13-22

Siddiqui, S.T. (2017). Impact of 360-Degree Feedback on Employee and Organisation Growth: with reference to Higher Education Institutions of Pakistan. *International Journal of Advanced REsearch (IJAR)*, *5*(4), 27–32. https://doi.org/10.21474/IJAR01/3778

Simons, N. (2013). The Business Case for Lean Six Sigma in Higher Education. *ASQ Higher Education Briefigher Education Brief*, *6*(3), 1–6.

Smither, J. W., London, M., & Reilly, R. R. (2005). Does performance improve following multisource feedback? a theoretical model, meta-analysis, and review of empirical findings. *Personnel Psychology*, *58*(1), 33–66. https://doi.org/10.1111/j.1744-6570.2005.514_1.x

Smulowitz (2015). Evidence for the Performance Prism in Higher Education, Measuaring Performance Excellence, Vol. 19, Iss. 1 pp 70-80

Spangenberg, H. H. (1994). performance management-problems and possible solutions. *Journal of Industrial Psychology*, *20*(4), 1–6.

Sudirman, I. (2012). Implementing Balanced Scorecard in Higher Education Management. *International Journal of Business and Social Science*, *3*(18), 199–204.

Sumlin, R. (2011). Performance Managemet: Impacts and Trends, 1–7.
Svensson, C., Antony, J., Ba-Essa, M., Bakhsh, M., & Albliwi, S. (2015). A Lean Six Sigma program in higher education. *International Journal of Quality & Reliability Management*, *32*(9), 951–969. https://doi.org/10.1108/IJQRM-09-2014-0141

Striteska, M. and Spikkova (2012). Review and comparison of performance measurement systems. Journal of Organsational Management Studies, Article ID 11490 DOI. 10.5171/2012.114900

Taouab, O., & Issor, Z. (2019). Firm Performance: Definition and Measurement Models. *European Scientific Journal, ESJ*, *15*(1), 93. https://doi.org/10.19044/esj.2019.v15n1p93

Tangen, S. (2004). Performance Measurement from Philosophy to Practice, International Journal of Productivity & Performance Managemet, Vol. 53, Iss. 8, pp 726-737

Türk, K., & Killumets, K. (2014). Performance Management of Academic Staff on the example of the Faculties of Economics in University of Tartu and in Tallinn University of Technology. In *Discussions on Estonian Economic Policy: EU Member States After the Economic Crisis*. Retrieved from http:dx.doi.org/10.2139

University of Minnesota (2017). Reviewing and Evaluating Deans _ UMN Policy.

Vanheva, M. and Lynch, K (2015) Academic freedom amd the commercialisation of universities: a critical analysis, Ethics in Science and Environmental Politics, Vol. 15 pp 6-20

Van der Heijden, B. I. J. M., & Nijhof, A. H. J. (2004). The value of subjectivity.

The challenges of adopting afforestation as an alternative and sustainable land use for economic development

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ABSTRACT

Afforestation is an important aspect of silviculturewhereas, globally its broad adoption as an alternative land use option for economic development is still a dream away. Many countries across the globehave `bad land' and `underutilised land' which could be considered for afforestation as one land use option with great economic potential. Despite the growing significance of afforestation in the development discourse world-wide, its uptake by farmers as an economic activity of tremendous ecosystem value and services remains a peripheral consideration. Hence based on a critical qualitative content analysis of literature reviewed for a Doctor of Philosophy thesis, this paper explores the challenges behind the dispirited adoption of afforestation globally, as an alternative land use option for economic development. Results of the content analysis point to the economic value of afforestation not being fully exploited due to the farmers' ignorance of the benefits of afforestation, anachronistic cultural attitudes, institutional and capacity challenges, lack of education and training, aversion to long term investment, ignorance of existence of funding partners in afforestation, lack of adequate extension

services, insecure land tenure arrangements for forest landand wildlife menace. Out of these challenges, a close analysis point to primarily three challenges being of critical importance to deal with in order for humanity to trigger a world-wide adoption of afforestation as an alternative land use for economic development. These are security of tenure on forest land, access to extension services and access to capital.

Key words: Afforestation; sustainable land use, ecosystem and economic development.

INTRODUCTION

Many countries across the globe have actively sought to promote afforestation as an alternative land use for economic development through state policy and support (Ryan, 2016; Lovell et al., 2017; Minang et al., 2018; Dupraz et al., 2019). However, the fly in the ointment has been the successive failure of these initiatives to achieve set policy targets (Eurostat, 2013; Ryan, 2016). Past and present institutions of management have failed to provide lasting solutions in the management of afforestation as an alternative land use for economic development (Gwaze & Marunda, 2014; Nyikadzino, 2016; Matsvange et al., 2016; Matsvange et al., 2016). However, despite the continued failure of many of the afforestation initiatives (Eurostat, 2013; Ryan, 2016; Dupraz et al., 2019), it is noteworthy that the world at large still regards afforestation as a viable land use option for economic development. To date, a plethora of studies on afforestation have been done (Ryan, 2016; Lovell et al., 2017; Tian et al., Sohngen et al., 2018; Dupraz et al., 2019),. However, none of the studies zeroed in on establishing the challenges of adopting afforestation as an alternative land use for economic

development.

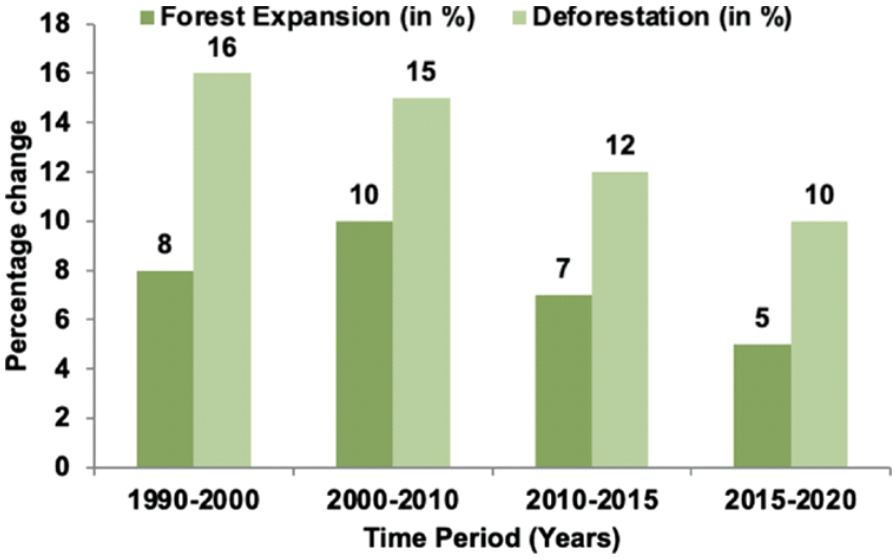
In order to have an appreciation of the need to isolate challenges of adopting afforestation as an alternative land use for the purpose of charting a way forward around them, we need to take a brief look at the state of forest cover in the six (6) geographical regions of the World.

Region	Total forest cover (in MHa)			Change (in MHa)
	1990	2000	2010	
Africa	749	709	674	−75
Asia	576	570	593	17
Europe	989	998	1005	16
North and Central America	708	705	705	−3
Oceania	199	198	191	−8
South America	946	904	864	−82
World	4168	4085	4033	−135

Source: http://www.earth-policy.org/indicators/C56/forests_2012 (Accessed 19.03.2015).

The table above indicates that forest cover has been declining in many regions in a 20 year period of 1990-2020. Out of the 6 regions, only Asia and Europe experienced an increase in forest cover. The rest of the regions were in a loss bracket. Noteworthy is that South America led in loss of forest cover, followed by Africa as a region. Cumulatively 135 million hactares were lost across the world in that 20 year period. This gloomy picture will continue unless the forest cover lost is replaced through afforestation or reforestation

initiatives. Fig.2 tells a story of forest expansion being pitted against deforestation. In that narrative, forest expansion is outpaced by de-forestation activities globally. Except for the period of 2000-2010, the remaining three periods (1990-2000; 2010-2015 & 2015-2020) lose to deforestation by almost 50% with 2010-2015 even registering loss of more than 50%. The picture of sustained loss of forest cover to de-forestation points to humankind marching gradually towards desertification if an appropriate intervention such as afforestation or re-forestation is not undertaken.

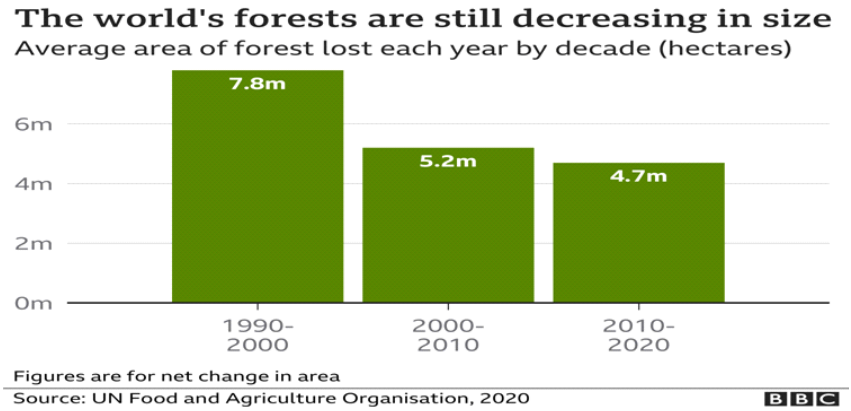


Source: UN Food and Agriculture Organisation 2020.

The results of the three decade scan presented below indicate a precipitous downward course of forest area lost from 1990 to 2020.In sum, in as far as area under forest is concerned the world continues to live in a deficit. This

scenario calls for a world-wide adoption of afforestation as a land use option to ensure humanity's sustainable access to forest-based ecosystem services. Nevertheless, unless challenges to adoption of afforestation as land use option are isolated it will be very difficult for humanity to stem the tide of calamitous de-forestation.

Fig. 3: Average area of forest lost each year by decade



BACKGROUND TO THE STUDY

Forests have been important to most human societies since time immemorial. They contribute to thelivelihoods of many of the 1.2 billion people living in extreme poverty (Bala et al., 2007). Forests provide products of both social and economic value (see FAO, 2015). Forests provide global food security and resources, food, fodder, fuel and medicine. Forests have always been an indispensable asset to mostglobal societies since time immemorial (Ryan, 2016; Lovell et al., 2017; Tian, Sohngen, Baker, Ohrel, & Fawcett., 2018; Minang et al., 2018; Dupraz et al., 2019). However, the

economic value of supporting and regulating these services provided by forests is not well-captured in the market and therefore always undervalued. However, despite these potential benefits, the expose on the use of afforestation as an alternative land use for economic development has remained on the periphery of studies (Kanowski, 2010), However, despite this global hype, current afforestation management frameworks seem to have failed to achieve set targets (see Ryan, 2016; Dupraz et al., 2019).

Afforestation programmes have been initiated in several regions as alternative land use for economic development. However, the success of existing institutions of management frameworks in afforestation have been widely questioned(see Ryan, 2016; Lovell et al., 2017; Tian, Sohngen, Baker, Ohrel, & Fawcett., 2018; Dupraz et al., 2019). In most of the regions, current frameworks for afforestation management seem to have failed as output has fallen well short of policy targets (see Ryan, 2016; Dupraz et al., 2019).

Insights from extant literature highlight that afforestation is increasingly valued for its potential to enhance ecosystem services and is being actively promoted in many countries through state policy and support (Kanowski, 2010). Similar to many countries, Zimbabwe has sought to increase forest cover for some time (Nyikadzino, 2016; CIFOR, 2014; Gwaze & Marunda, 2014). However, the economic incentivisation has mostly been absent in most of these initiatives. Such a scenario poses a challenge for land use allocation and modelling land use change. In the past, however, trial and error or rough rules of the thumb were adequate means of determining which land to use and how (FAO, 2015).

In the context of overall forest cover, the conversion of land from agriculture to forest is unusual in the global context (Ryan, 2016). Despite the lure of

financial incentivisation from afforestation (see Hull et al., 2016; Minang et al., 2018), a lot of land globally remains either idle or underutilised.

In Zimbabwe, many afforestation programmes initiated to address the problem of agriculturally unproductive land have stumbled along and eventually faded away (CIFOR, 2014; Gwaze & Marunda, 2014; Marufu, 2014; Nyikadzino, 2016). Generally, the decline in afforestation has consequences for downstream industries such as timber processing (Wilson, 2016; Ryan, 2016). Though pockets of research are beginning to emerge, little has been done to interrogate the existing afforestation management frameworks and develop a new model for institutionalisation and management of afforestation as an alternative land use for economic development. Globally, to date, a few studies on afforestation initiatives have been done (see McKenney et al. 2006; Upadhyay et al. 2006; Green, 2009; Dhubain, 2010; Upton, 2015). Nevertheless, the poor uptake and failure of afforestation projects to live up to expectation as a viable land use option in many parts of the globe calls for a causal analysis.

PROBLEM STATEMENT

Despite the growing significance of afforestation in the sustainable development discourse (Luedeling, 2016; Ryan, 2016; Lovell et al., 2017; Dupraz et al., 2019), many afforestation initiatives in the World are failing to convince farmers to adopt afforestation as an alternative land use to agricultural production. As a result, afforestation has failed to proffer anticipated gains (see Wilson, 2016; Dupraz, 2019) with low uptake of afforestation as an alternative land use for economic development (see Wilson, 2016; Ryan, 2016). There is a critical dearth of literature focusing

specifically on issues of poor performance and poor uptake of afforestation as alternative land use globally.

RESEARCH OBJECTIVE

This paper seeks to establish from literature the challenges of adopting afforestation as an alternative and sustainable land use option for economic development.

METHODOLOGY

As a doctoral studies-based literature review paper, the authors adopted qualitative critical `content analysis' research technique to unravel the challenges of adopting afforestation as an alternative and sustainable land use option for economic development.According to Utt and Short (2018) critical content analysis is an explicit method for the study of text that also offers flexibility in theoretical approach and textual selection.Bengtsson (2016) illuminates another angle of content analysis by arguing that its purpose is to organize and elicit meaning from the data collected and to draw realistic conclusions from it.

A Google Scholar search was conducted for articles that addressed the phenomenon under interrogation. In order to get relevant articles on the internet, the researcher used the following study focus related search terms: `afforestation', `afforestation challenges', `afforestation' and `sustainable land use', `challenges in afforestation initiatives' among a host varied but similar terms. Both classical and contemporary literature was made use of and a total of 30 articles were reviewed. This number is commensurate with content analysis (see Nueundorf, 2016; Kripperndorff, 2018). The

researcher used themes as units of analysis and the results are based on this.

LITERATURE REVIEW

As a point of departure it is imperative that we capture how the phenomenon of afforestation is conceptualised in literature. According to FAO (2010) afforestation is the act of establishing forests through planting or deliberate seeding on land that is not classified as forest. Another view is from Pearson, Walker & Brown, (2006) who view afforestation as the replanting of trees on areas that had been without forest for at least 50 years.It is also seen as a conversion of abandoned and degraded agricultural lands into forests (Pires & Gonçalves [ed] 2019).The common motif in the above definitions of afforestation is the element of land not having been with any forest or trees on it for a very considerable period. Nevertheless, to state that the land must not have been with a forest `for at least 50 years' is practically controversial since it depends on good record keeping of the vegetation map by all planning authorities.

Globally, there is general consensus that institutions of afforestation in many countries particularly in developing countries have failed to measure up to set policy targets (Luedeling, 2016; Ryan, 2016; Lovell et al., 2017; Dupraz et al., 2019). Similar to many countries, Zimbabwe has sought to increase forest cover too for some time but in vain (Nyikadzino, 2016; CIFOR, 2014; Gwaze & Marunda, 2014).

Existentialism and land use change

Decision-making on whatever land use change to adopt in any spatial setting is an existential issue. It indeed falls within the realm of the political economy

of any land jurisdiction. The survival instinct whether weak or strong is behind all the choices humanity makes on land use change hence unlessone understands the real drivers of land use change it would be difficult to isolate some of the critical challenges to adoption of afforestation as an alternative land use mode. A large proportion of literature from developing countries deals with the problem of de-forestation (Namaalwa et al. 2007; Sankhayan et al. 2003) but research on afforestation as a sustainable alternative land use has been scarce. However, of late there has been an increase in the volume of literature tangentially touching on afforestation such as non-timber value of forests such as biodiversity management (Tikkanen et al. 2012), biomass production for renewable energy (Lecoq et al. 2011), continuous cover forestry (Assmuth & Tahvonen 2015) agroforestry (Graves et al. 2007) and climate change mitigation (Pihlainen et al. 2015).

However, land use change from agriculture to forestry has received scant attention (Diaz-Balteiro & Romero 2003; McKenney et al. 2006; Upadhyay et al. 2006). Using a Binary Logistic Regression Model (BLRM) to analyze the driving factors of land-use spatio-temporal change in a large artificial forest area in the Ximeng County, Yunnan province, in Southwest China; Zhao X, Pu J, Wang X, Chen J, Yang E and Gu Z (2018) isolated factors to include land-use policies (protection of basic farm lands and natural reserves), topography (elevation and slope), accessibility (distance to the human settlements) and potential productivity (fertility and irrigation). Focusing on Chile, Braun (2022) observes that the establishment of the plantation industry in this country originally served environmental protection goals, but these quickly became secondary, and economic interests dominated the agenda.

Considering the increasing market demand for wood products, the economic motive behind reforestation activities will continue to play a central role in the future. Seemingly, economic rationality continues to be the dominant driver of land use changes globally.

Afforestation and economic development

Forests have been important to most human societies since time immemorial contributing to thelivelihoods of many of the 1.2 billion people living in extreme poverty (Bala et al., 2007). They provide products of both social and economic value (see FAO, 2015). Agriculture is the main economic activity (Conniff et al., 2012), but the need for energy is also growing rapidly to satisfy the population's economic development needs.Forests provide global food security and resources, food, fodder, fuel and medicine. However, the economic value of supporting and regulating these services provided by forests is not well-captured in the market and therefore always undervalued.Existing studies fail to tackle head on, the issue of afforestation as alternative land use despite these potential economic benefits. A lot of people in the rural areas in Africa are benefiting from afforestation thereby leading to economic growth (FAO 2015).

In large areas of developing countries the loss of trees is causing erosion and degradation of the soil, posing severe problems for economic development. By translating the ecological benefits of afforestation into economic terms, the author demonstrates how investments that benefit the environment often benefit the economy as well. Both the traditional work of the forestry services and tree plantings by farmers are needed, says the author, if

deforestation is to be halted and reversed (Anderson 2015). With special reference to Africa, he discusses the underlying reasons for deforestation, suggests policy changes to promote the planting and care of trees, and identifies issues for social and scientific research. Afforestation and reforestation along with agroforestry projects which globally constitute part of various voluntary and mandatory carbon-offset trading structures (Miles & Sonwa, 2015) A case study of the arid zone of northern Nigeria illustrates the benefits that could be brought about by establishing windbreaks and encouraging farmers to plant trees. Besides preventing soil erosion, improving soil fertility, and thus increasing crop production, trees provide fruit, livestock fodder, and much-needed fuel wood and building materials.(World Bank 2014). According to Ochola (2017) in his book `Managing natural resources' afforestation is important in managing ecosystem as well as biodiversity.Afforestation also helps in the increase of food production. Along with it creating a new forest solves the problem of grazing by providing the fodder facility to the cattle (World Bank 2016).

Protective functions of forest resources

Forests have protective functions to the environment such as water catchment protection; climate change mitigation through carbon sequestration; generating clean air; reduction of soil erosion and the risk of landslides, floods and droughts, and prevent desertification and salinization (TPF, 2018b; FAO, 2018). In some African countries, some forests preserve natural heritage and they should be maintained (FSO 2017) .Their unsustainable exploitation however jeopardizes them of delivering on this protective role. This leads to negative environmental impacts such as loss of

habitats and biodiversity; less watershed protection (leading to increased soil erosion, siltation of rivers, and the disruption of hydrological systems), reduced availability of important forest products and services and reduction in carbon sinks (Government of Zimbabwe, 2014).Forests are important as they preserve the ecosystem as well as minimizing soil erosion as well as holding wet soils for farming (Chademayo 2010). The role of wetlands has come to be acknowledged in the removal of carbon dioxide, and wetland ecosystems provide an optimum natural mechanism for the sequestration and long-term storage of carbon dioxide (Mitsch et al., 2012). Due to afforestation-reforestation activities (erosion control, range rehabilitation, private afforestation, artificial regeneration) in Turkey, approximately 6.69%of its territory was afforested-reforested between 1946 and 2018 (GDFSTAT, 2018).

In afforestation studies, the selection of species for the local climatic conditions and determination of appropriate afforestation techniques (Çalışkan & Boydak, 2017; Reisman-Bermanet al., 2019; Sabır et al., 2020), as well as the identification of afforestation areas (Sevillano et al., 2018; Varolet al., 2019; West et al., 2020), play an important role in achieving the long-term targets. Harvested wood products, which are an out-put of forest assets, contribute to reducing the amount of carbon in the atmosphere by storing it (Donlan et al.,2012; Jasinevičius et al., 2018; Ji et al., 2016; Tonn &Marland, 2007). While the evaluation of both forest assets and their outputs in the international arena continues, the Paris conference was held in 2015 in response to international activities and achieved the highest recorded number of participating nations. As a result of this conference, the Paris

Agreement was ratified (UN, 2015). The fifth article of the Paris Agreement emphasizes supporting policies that develop and designate forests as carbon storages and sinks (UN, 2015). As in the UNFCCC and Kyoto Protocols, the Paris Agreement addressed and emphasized deforestation and forest destruction (UN, 2015).

As shown from the statistic, trees can help combat climate change because trees absorb carbon dioxide. On average a single tree can absorb 48 pounds of carbon dioxide per year[3]. As a result, planting more trees can restore the natural balance of carbon in the atmosphere[4], but only if we plant the right trees. As well as this, farmlands are often created from clearing forests. Therefore, clear-cutting forests creates more run-off and soil erosion[5]. In other words, this degrades the land, which makes it hard for the land to restore itself on its own. This is why replanting trees is vital (Deziel, 2018, Gellert, 2017, Bastin et al 2019, Buis2019).

Socio-economic functions

Forests and trees have important multiple functions and provide a wide range of forest goods and products that include fodder, medicines, timber, construction materials, foods and firewood for energy. In Zimbabwe, 65 percent of households use wood as a main source of energy for cooking (Labour Force Survey, 2014). At its peak, in Zimbabwe the forestry sector directly employed 14 445 people and over 40 000 indirectly in the downstream industries and contributed 3% to the Gross Domestic Product (GDP) (FAO, 1999).

One forest management issue is how to create links between human well-being and ecological sustainability(Colfer and Byron 2001) Forest products are not only earmarked for the local market but are exported to the region

and generate the much needed foreign currency in view of the liquidity crunch the country is going through. In 2016 wood and articles of wood, wood charcoal exported by Zimbabwe (Harmonised Systems Code 44) raked in $23. 64 million in export revenue with Zambia, Botswana, South Africa and Mozambique constituting 99.5% of the market share. Thus, from such statistics, one begins to see the potential of afforestation as an alternative land use option for economic development.

Rural communities have adopted alternative livelihood and income generating activities through the sale of forest and non-forest products such as firewood trade, wild fruits to middlemen who resell them in the urban areas; honey production and caterpillar (i.e. Mopani worms) harvesting (Human Development Report, 2017). Another benefit Zimbabwe is enjoying from its forests is nature based tourism. The sector is currently on a growth path and is expected to boost the tourism induced economic growth. Afforestation also helps to develop and restore long lost ecosystem areas. They also help to increase species biodiversity within those regions. Governments and organizations like *Environment buddy* are using afforestation to covert semi-arid or arid regions into productive regions which not only fights global warming and climate change but does it in a much more aesthetic manner (Soomro 2015).

RESULTS AND DISCUSSION

The study isolated a number of challenges that are faced in the adoption of afforestation as an alternative and sustainable land use option for economic development. Specifically, the following themes were isolated through

critical content analysis that is, ignorance of the benefits of afforestation, anachronistic cultural attitudes, institutional and capacity challenges, lack of education and training, afforestation taking too long before giving returns, lack of capital and ignorance of existence of funding partners in afforestation, lack of adequate extension services for afforestation, insecure land tenure arrangements for forest land and wildlife menace.

Ignorance of the benefits of afforestation

One of the major challenges faced in the promotion of afforestation as an alternative and sustainable land use option for economic development in Zimbabwe is inadequate knowledge of the potential economic gains that may accrue from afforestation initiatives. Malone (2008) dissects this complexity by listing common themes that impact levels of afforestation. This stems from the fact that most countrieslack a `farm forestry' tradition within agriculture. Further to, this translates into a lack of economic knowledge in relation to the returns from afforestation and a lack of management expertise in relation to appropriate management (silviculture) of forests (see Ryan, 2008; 2016).

These barriers are further compounded by evidence to indicate that where opportunities afforded by forestry development exist, these are very often overlooked or dismissed by farmers due to attitudinal factors such as emotional attachment to the land or negative attitudes around the perception of failure in farming (Malone 2008). Forestry has traditionally not been seen as an integral part of traditional agriculture and most farmers consider forestry only as an alternative land-use for their worst land (Ní

Dhubháin & Gardiner 1994). However, despite the poor uptake of afforestation as an alternative land use due to farmer ignorance afforestation has been found to be economically beneficial globally.

Anachronistic cultural attitudes

Evidence from the literature attribute some cases of poor uptake of afforestation as alternative land use to out-dated cultural values. Green (2009) opines that negative cultural attitudes towards forestry have also been widely reported in some countries. In a study conducted in Finland, Selby and Petajisto (1995) noted that there was a perception that converting land to forestry can sever the dynamic historical process involved in the creation of agricultural landscapes and thereby have a negative effect on local communities. Similarly, in the UK, Watkins et al. (1996) found that most farmers did not want woodland on their farmland, as they see their land as being exclusively a preserve for agricultural production. Forestry has traditionally not been seen as an integral part of traditional agriculture and most farmers consider forestry only as an alternative land-use for their worst land (Ní Dhubháin & Gardiner 1994).

In another study of six Latin American countries, that is, Argentina, Colombia, El Salvador, Honduras, Nicaragua and Peru, designed to assess the current status of forest tenure reforms, noted a historical and current bias towards promoting agriculture and cattle raising activities, leaving the sustainable use and conservation of forest as a secondary priority (see Warnholtz, Gerardo, Fernandez, Smyle and Springer, 2017). Noteworthy is that in the same study the authors observed that agricultural policies in the six

countries continue to promote changes in land use from forests to agricultural or pasture, giving titles to individual landowners who can prove that they are and have been cultivating the land for crops for a long time. This scenario is obviously attitude based and clinging on historical circumstances. Green (2009), Dhubain (2010), and Upton (2015) share this concern by hypothesisingthat there maybeglobal commonalities in relation to stakeholder attitudes around the adoption or non-adoption of afforestation.

Institutional and capacity challenges

Institutional approaches to regulation of forestry suffer from conflicting interests with other regulations (see UN, 2008; Chimhou et al., 2010; Chigumira et al., 2019).According to Chigumira et al. (2019)in the case of Zimbabwe,there are conflicting legal frameworks that discriminate against afforestation setting itself up as a strong and viable land use option.A close analysis of literature highlighted a number of anomalies in the national legislation that afforestation in Zimbabwe is grappling with which include among others the Mines and Minerals Act vs. Forest Act where the former confers land rights to the miner over the forester, Land Resettlement Act vs. Forest Act where land for afforestation is being converted into agricultural land (see Government of Zimbabwe, 2016, *Timber Producers' Federation* [TPF], 2018, Chigumira, 2019). This disharmony between policies has weakened the institutionalisation and management of afforestation as a viable land use option.

Though Zimbabwe is a signatory to numerous international and regional agreements and protocols on the environment (Government of Zimbabwe, 2016; Forestry Commission, 2018), weaknesses of the Forestry Commission,

a body mandated with implementing the Forestry Act has negatively impacted on afforestation initiatives. Loss of experienced and competent staff to greener pastures (Chimhou et al., 2010; Chigumira et al., 2019) has led to a widening skills gap and loss in institutional memory (UN, 2008; Timber Producers Federation, 2018; FAO, 2015).Evidence suggest that institutionalisation of afforestation has not been effective as publicly owned forest area declined from 13,852,000 ha in 1990 to 9,868,000ha in 2015 (Chigumira et al., 2019) whilst privately owned forestdeclined from 8, 312,000 ha in 1990 to 5,756, 000ha in 2015 (FAO, 2015). Thus, it is inevitable to conclude that institutions in charge of afforestation have not been effective. Nevertheless, the issue of institutions failing in their mandate thereby jeopardising afforestation initiatives as alternative land use is not exclusive to Zimbabwe. According to Harwell (2010) failure to reform forest governance *institutions* has meant the continued destruction of both forests and forest livelihoods. In a study of areas in conflict in Africa, Harwell (*Ibid*) argues that forests suffer when management and law enforcement institutions are themselves destroyed by conflict.

Lack of education and training

The generality of studies on afforestation challenges highlight poor education and training as one of the hindrances to the uptake of afforestation as an alternative and sustainable land use.Research findings identified education and training as another strategy and mechanism for developing best practices inafforestation. Education and training are used synonymously for the enlightenment of individuals about what should be known with regards to afforestation related issues. Most scholars in

literature frameworks (see Lubowski, Plantinga, & Stavins, 2006; Nielsen, Plantinga, & Alig, 2014; Tian, Sohngen, Baker, Ohrel, & Fawcett, 2018) regard education and training as influential in facilitating effective afforestationstrategies. They used terms such as `knowledge acquisition', `equipping with skills', `enlightening and provision with relevant information', `teaching', `learning', `programs' and `schooling' in most of their write up revealing underscoring the significance of education and training to uptake of afforestation as alternative land use.Ryan, O'Donoghue & Phillips (2016) argue that as the farm afforestation decision essentially involves an inter-temporal land use change, farmers need comprehensive information on forest market returns under different environmental conditions and forest management regimes.

However, some education and training models offered elsewhere may not be compatible with the expectations of all cultures. Fishbein and Ajzen (1967)'s theory of reasoned action finds relevance here. Reasoning helps to determine a course of action based on the expected outcomes. The theory offers insights on the importance of considering the extent to which a model can or cannot be applicable to a certain context. In sum, designing education and training that encourages uptake of afforestation as an alternative land use should be based on a befitting rationale and curriculum.

Aversion to long term investment

Historically, reforestation has been a strong long-term investment for landowners. Many landowners regularly invest in other long-term investments such as individual retirement accounts (IRAs), stocks, and

bonds but forego the likely chance to earn high returns from timber production (NC State Extension, 2022).Depending on the environmental conditions, an afforestation project takes an average of 7-10 years before reaching maturity to offer meaningful returns to the farmer. Sustainable afforestation therefore implies a typical long-term investment in a forestry project. FAO (2007) highlighted that forestry projects require high rates of financing at the beginning, forests take some time to deliver revenues and benefits. Hence investors face high initial costs and delayed returns, which demands the availability of initial investment capital and the ability to wait for revenues (FAO, 2007). Such huge financial injections needed at the initial stages of afforestation projects act as hindrances, and further the uncertainty surrounding most farms discourage afforesters and potential afforestors from investing in afforestation.

Lack of capital and ignorance of existence of funding partners in afforestation

The problems identified include among others, financialin-capacitationas most afforestors and potential afforestors are suffering from inadequatefinancial muscle to undertakeafforestation initiatives. Fao (2007) highlighted that forestry projects require high rates of financing at the beginning, forests take some time to deliver revenues and benefits. Hence investors face high initial costs and delayed returns, which demands the availability of initial investment capital and the ability to wait for revenues (FAO, 2007). Financial challenges have meant that responsible authorities lack the finances to hire or train experts in the field of afforestation, provide funding to afforestors. However, evidence from

studies show that there are now organizations that partner afforestors and provide all funding for a certain percentage to be paid during harvesting. However, the challenge has been that afforestors lack of information on existence of organizations to partner with in afforestation.

Lack of adequate extension services for afforestation

In broad sense extension is an education process that informs, convinces and links people. It facilitates flows of information between farmers and other resource users, administration managers and leaders (Ahmed Mohammed, 2001, Ageed, 2002).One of the challenges that has been common and resulted in the failure of most afforestation initiatives has been the inadequacy of extension services for afforestation.In a study on role of forestry extension in promoting afforestation in Khartoum State, Mohammed (2001) found that 82% of his respondents stated that there were no extension visits to farmers.

The extension personnel focussed on agricultural issues on the expense of forest trees. In another study conducted in Limpopo Province (South Africa) by Maponya, Venter, Du Plooy, Backeberg, Mpandeli & Nesamvuni, (2019) results also indicated that less than 45% of farmers received extension services, mainly through formal extension service. Bukomeko (2012) had similar findings of inadequate forestry extension services in lira district of Uganda. According to FAO (2007), the planting of trees is not fundamentally a forestry issue, it is a farm system and social issue and therefore there is a need for an `extension approach' which treats trees as one of many potential productive activities that must be incorporated into the farm system.

Insecure land-tenure arrangements for forest land

According to Schlager and Ostrom (1992) in Larson (2012) with regard to forests, and particularly collective forests and resources, the term tenure rights refers to a bundle of rights ranging from access and use rights to management, exclusion and alienation. The problem of land ownership is one of the most serious problems in the history of forest lands (Mahommed, 2001). Secure tenure rights are a critical foundation for local economic development. Although promising progress has been made by many developing countries, particularly in Latin America, to introduce legal frameworks and targeted policies to transfer or devolve forest rights to local people, in many cases, these reforms remain partial and far from materializing (Warnholtz et al, 2017).Institutional investment in forestry and afforestation has been most active in countries where there are straightforward and secure legal rights to land and timber such as USA, Australia, New Zealand and a few others (Binkley, Stewart & Power, 2020). Secure land tenure is quite necessary especially for attracting individuals in partnership with institutions or individuals and institutions separately, to take up afforestation as an alternative land use. Hence, a secure tenure is absolutely necessarygiven that investment in afforestation is long term in nature.

Wildlife Menace

Baboons and to a lesser extent monkeys, have wreaked havoc to the afforestation growth particularly in timber plantations (FAO, 2015). The former destroy trees through bark stripping, ring barking, uprooting planted seedlings and damaging tree tips (*Timber Producers' Federation* [TPF],

2018b). Bark stripping often leads to growth retardation; mortality and tree deformation leading to yield reduction and if left without control this damage can to a great extent negatively impact on the viability of commercial timber (TPF, 2018b). In the plantations, emerging pests affecting eucalyptus trees include the bronze bug *(Thaumastocorisperigrinus),* Blue gum chalcid *(Leptocubeinvasa)* and Red gum lerp *(Glycospisbrimblecombey)* (TPF, 2018b).

CONCLUSION

Content analysis of literature on `adoption of afforestation as an alternative land use' yielded a variety of insightful challenges. However, a close analysis of the spectrum of challenges zero in on three (3) that are critical to optimizing uptake of afforestation. These are, in order of importance, security of land tenure or land rights, access to extension services and access to investment capital. Dealing with these three challenges is pivotal to meeting policy targets for adoption of afforestation as an alternative land use for economic development. The challenge of security of tenure comes first in consideration because nobody would want to put his or her hard won money where tenure is not guaranteed. Hence, the issue of security of tenure on potential afforestation land should be addressed first before extension officers sell the idea of afforestation to interested institutions or individual farmers. Once the challenge of land tenure is dealt with then next to be addressed should be the issue of access to forestry extension services. This should come in form of an omnibus of services to afforestation farmers addressing issues of access to capital and technical knowledge. In sum, extension officers should educate farmers on the value-chain of the forestry

industry. The last critical challenge that must be addressed is capitalization of afforestation project. Without capital, afforestation will not take off because the various inputs required for the project to succeed need money. Through extension services farmers should be educated on available modes of funding. Seemingly, if the current zeal for extension services in agricultural production is matched in afforestation then the adoption of afforestation as an alternative land use for both the so called `bad land' and `underutilized land' would proliferate across the globe.

REFERENCE

Assmuth, A. & Tahvonen, O. (2015). Continuous cover forestry vs. clearcuts with optimal carbon storage. Paper presented at BioEcon 2015, Cambridge, England,

Ayana, A.N.; Vandenabeele, N.; &Arts, B. (2015). Performance of participatory forest management in Ethiopia:institutional arrangement versus local practices. Crit. Policy Stud., 11, 19–38.

Bjork Fredrik (2004). 'Institutional theory: A new perspective for research into IS/IT security in organizations'. In International Conference on System Sciences. Hawaii. Available at: http://csdl2.computer.org/comp/proceedings/hicss/2004/2056/07/205670186b.pdf

Bryman, A. (2008). Social Research Methods Third Ed. *Oxford University Press*.

Bryman, A., & Bell, E. (2017). Business Research Methodology. In *Research Methodology*. https://doi.org/10.1021/ja100922h

Cohen, L., Manion, L., & Morrison, K. (2011). Surveys, longitudinal, cross-sectional and trend studies. *Research Methods in Education, 7th edition. Abingdon: Routledge*, 261-264.

Costanza R. (2011). Changing the Way We View Humanity and the Rest of

Nature Solutions for a Sustainable and Desirable Future 2(6):1.

Cross, R. & Baird, L. (2000). 'Technology is not enough: Improving performance by building organizational memory'. Sloan Management Review, 41 (3), 69-78.

Crossan, M. & Bedrow, I. (2003). 'Organizational learning and strategic renewal'. Strategic Management Journal, 24, 1087-1105.

Crossan, M., Lane, H. W., & White, R. E. (1999). 'An organizational learning framework: from intuition to institution.' Academic Management Review, 24, 522-537.

Crossan, M.M., Lane, H.W., White, R.E. & Djurfeldt, L. (1995). 'Organizational learning: dimensions for a theory'. The International Journal of Organizational Analysis, 3(4), 337-360.

DiMaggio, Paul J., and Walter W. Powell.(1983). "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields," American Sociological Review 48:147-60.

Duesberg, S., Ní Dhubháin, A. & O'Connor D. (2014). Assessing policy tools for encouraging farm afforestation in Ireland. Land Use Policy 38,194-203.

Duguma, L.A,Atela, J; Minang, P.A; Ayana, A.N; Gizachew, B;&Nzy, J.M. (2019). Deforestation and Forest Degradation asan Environmental Behavior: Unpacking RealitiesShaping Community Actions, Land

FAO (Food and Agriculture Organization. (2015).The State of World's Land and Water Resources for Food and Agriculture. Managing Systems at Risk. FAO, Rome.

Forestry Commission. 1996. Zimbabwe land and vegetation cover area estimates. VegRIS Project. Harare. Frost, P.G.H, 1996. The ecology of miombo woodlands. In: Campbell, B. (ed.) The miombo in transition. Woodlands and welfare in Africa. CIFOR, Bogor, Indonesia.

Garay, L., & Font, X. (2012). Doing good to do well? Corporate social responsibility reasons, practices and impacts in small and medium accommodation enterprises. *International Journal of Hospitality Management*, *31*(2), 329–337.

https://doi.org/10.1016/j.ijhm.2011.04.013

Greene, W. H. (2003). Econometric Analysis, Prentice Hall, New Jersey

Hoskins Marilyn (1982). Social Forestry in West Africa: Myths and Realities" in American Association for the Advancement of Sdem:e Annual Meeting,AAAs, Washington DC.

Hull, R.B.; Kimmel, C.; &Robertson, D. (2016). Innovating solutions to deforestation: cross-sector collaboration in theAmazon. J. Entrepreneurship Organ. Manag. , 5, 172.

Ismail, M. (2009). Corporate Social Responsibility and its role in community development: An International persepective. *Journal of International Social Research*, *2*(9).

Kafley, N.P. (2011). Hermeneutic Phenomenological Research method simplified. Bodhi: An Iterdisciplinary Journal, Vol. 5 pg 181-200

Krejcie, R. V, & Morgan, D. W. (1970). <159. 1970 Krejcie & Morgan.pdf>. *Educational and Psychological Measurement*.

Mackenzie, N. & Knipe, S. (2006). Research Dialemas: Paradigms, Methods and Methodology. Issues in Educational Research, Vol. 16 (2) pg 193-205

Malone, J. (2008). Factors affecting afforestation in Ireland in recent years. Report for the Minister of state with responsibility for forestry. Available athttp://www.ifa.ie/linkClick.aspx?fileticket=N5243ioVRio%3D&tabid=615

Maree, J. G. (2012). Career adapt-abilities scale—South African form: Psychometric properties and construct validity. *Journal of Vocational Behavior, 80*(3), 730-733.

MET. 1998. Zimbabwe biodiversity strategy and action plan. Status of biodiversity, Unmet needs, strategies and actions. Harare, Republic of Zimbabwe.

Millington, A., and Townsend, J. (eds.) 1989. Biomass assessment. Woody biomass in the SADC region. Earthscan Publications Ltd, London. UK.

Minang, P.A. (2018). Values, Incentives and Ecosystem Services in Environmentalism. In Rethinking Environmentalism:Linking Justice, Sustainability, and Diversity; Strüngmann Forum Reports; Lele, S., Brondizio, E.S., Byrne, J.,Mace, G.M., Martinez-Alier, J., Eds.; MIT Press: Cambridge, MA, USA, 2018; Volume 23

Muir K (1989) "'The Potential Role of Indigenous Resources in the Economic Development of Arid Environments in Sub-Saharan Africa" in Society and Natural ResotIl'a!S V012:3 (f<Xthcoming). (See also Dept of Agricultural Economics, University of Zimbabwe, WOfting Paper 9188).

Nastasi, B. K., Hitchcock, J. H., & Brown, L. M. (2010). An inclusive framework for conceptualizing mixed methods design typologies: Moving toward fully integrated synergistic research models. *Handbook of mixed methods in social & behavioral research*, 305-338.

Ní Dhubháin, Á Maguire, K., &Farrelly, N., (2010). The harvesting behaviour of Irish forest owners. Forest Policy and Economics 12: 513–517.

Nkonya E., N. Gerber, P. Baumgartner, J. von Braun, A. De Pinto, V. Graw, E. Kato, J. Kloos, &T. Walter. (2011a). The Economics of Land Degradation.Toward an Integrated Global Assessment.Development Economics and Policy Series #6. Internationaler Verlag der Wissenschaften, Frankfurt

O Leary, T.N., McCormack, A.G. & Clinch, J.P. (2000). Afforestation in Ireland: regional differences in attitude. Land Use Policy 17, 39-48

Oberg, H., & Bell, A. (2012). *Exploring phenomenology for researching lived experience in Technology Enhanced Learning.* Paper presented at the The Eighth International Conference on Networked Learning.

Raosoft. (2018). Raosoft sample size calculator.

Reiners, G.M. (2012). Understanding the difference between Husserl's (Descriptive) and Heidegger's (Interpretive) Phenomenological Research. Journal of Nursing Care, Vol. 1 (5) pg 1-3

Ryan, M. & O'Donoghue, C. (2016). Heterogeneous Economic and Behavioural Drivers of the Farm Afforestation Decision. Conference paper presented at 18th BIOECON conference. Kings College, Cambridge.

Saunders, M., Lewis, P., & Thornhill, A. (2016). Formulating the research design. *Research Methods for Business Students*. https://doi.org/10.1007/978-1-60327-198-1

Scott, W. R. (2001). Institutions and Organizations: Foundations for organizational science. (2nd Ed.) Thousand Oaks, Ca: Sage.

Scott, W. Richard. (2004). "Institutional theory." in Encyclopedia of Social Theory, George Ritzer, ed. Thousand Oaks, CA: Sage. Pp. 408-14

Sedgwick, P. (2013). Convenience sampling. *BMJ*. https://doi.org/10.1136/bmj.f6304

Segura Warnholtz, Gerardo, with Mercedes Fernández, James Smyle and Jenny Springer. 2017. Securing Forest Tenure Rights for Rural Development: Lessons from Six Countries in Latin America. PROFOR, Washington DC.

Shumba E.(2001). Paper prepared for an international workshop on "Integration of Biodiversity in National Forestry Planning Programme" held in CIFOR Headquarters, Bogor, Indonesia on 13-16 August 2001.

Shumba, E. M. and Marongwe, D. 2000. The Convention on Biological Diversity: an overview and lessons learnt from the Zimbabwean experience. International Forestry Review 2(2).

Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). The sample size debate: response to Norman Blaikie. *International Journal of Social Research Methodology*. https://doi.org/10.1080/13645579.2018.1454642

Gargoo (2001). Alternate Land Use Based Farming systems in Rainfed AgricultureFormer PC (AICRPDA), Central Research Institute for Dryland Agriculture, Hyderabad – 500 059

Tahvonen, O., Pihlainen, S., & Niinimäki, S. (2013). On the economics of optimal timber production in boreal Scots pine stands. Can. J. For. Res. 43(8), 719-730.

Utt, J., & Short, K. (2018). Critical Content Analysis: A Flexible Method for Thinking with Theory. *Understanding and Dismantling Privilege*, *8*(2), 1 - 7.

White. 1993. The vegetation of Africa. UNESCO. Whitlow, T. R. 1988. Land degradation in Zimbabwe. A geographical study. Geography Department, University of Zimbabwe.

Buis, A (2019). *Examining the viability of planting trees to help mitigate climate change*, NASA.

Deziel, C (2018). *Environmental Problems Caused by Deforestation of Tropical Rain Forests,* Sciencing.

Gellert, A (2017). *How does deforestation affect the weather?* Sciencing.

Whitmer, P (2019). Negative effects of clear-cutting. Sciencing.

Bastin, J-F et al (2019). *The global tree restoration potential*, Science. Vol 365, issue 6448.

Radhika, D et al (2019) *Second Bonn Challenge progress report : application of the Barometer in 2018*, IUCN

.

Lewis, S.L et al (2019). *Restoring natural forests is the best way to remove atmospheric carbon*, nature 568. 25-28.

Angel, P et al (2017). *The Appalachian regional reforestation initiative*.

Buis, A (2019). *Examining the viability of planting trees to help mitigate climate change*, NASA

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Packaging natural springs into community hubs for wellness and spa tourism: a case of Makonde district in Zimbabwe

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ABSTRACT
Natural springs in Makonde district are generally remotely located, with poor infrastructure and undervalued as assets to Wellness and Spa tourism development in Zimbabwe. The strategies for packaging these natural springs into community hubs for Wellness and Spa tourism has remained a gap to be exploited for development. Therefore, this study explored strategies that could be adopted to package the natural springs to optimise their appeal for Wellness and Spa tourism. The research was carried out in the Makonde district of Mashonaland West province in Zimbabwe. The study adopted an exploratory case study design. It involved four (4) sites including one hundred and fifty (150) respondents purposively and conveniently selected from the members of the host communities, traditional demand leaders, academics and officers from the tourism industry. Data was collected using in-depth interviews, focus group discussions, accidental observations and it was thematically analysed. Findings unveiled strategies that could be adopted to increase the demand for Wellness and Spa tourism included infrastructure development, research and innovation, product and site marketing, community socialisation and involvement. The study concluded that the

proposed strategies have the potential to transform natural springs in Makonde district into community hubs for Wellness and Spa tourism. Therefore, there is need to develop a model for packaging the product so as to increase the demand for Wellness and Spa activities for tourism.

INTRODUCTION AND BACKGROUND

Natural springs are unique water bodies that have stimulated interest in diverse tourism disciplines. These natural resources have also contributed to the development of different communities including the evolution of different traditions and cultures across nations. Wellness and Spa tourism is one discipline that was born from the exploitation of springs and spring water. Guzman et al., (2011) also noted that the increase of tourists looking for new experiences from such sites, presented opportunities that required new actors to help develop natural springs into centres for Wellness and Spa tourism. However, it has taken long for countries like Zimbabwe to develop some of its communities through packaging such resources into centres for tourism. Thus, the purpose of the research was to assess strategies that could be adopted to package natural springs into community hubs for Wellness and Spa tourism in Zimbabwe.

*For centuries, natural springs have been viewed as cultural icons in Greece and Rome among an array of countries across the globe (*Smith & Puczko, 2009).*Greeks were amongst the first to identify the paybacks of natural springs from as early as the 5th and 6th century BC (Smith & Puczko, ibid). These benefits included how spring water cured diseases and other disorders. On the other hand, Romans built bath tubs from natural springs which later* developed into prominent places for recreation that have attracted many tourists to this day. These *Roman bath tubs that came into existence more*

*than 20 centuries ago received a facelift that gave them the state of the art status with diverse tourism offerings (*Erfurt-Cooper, 2009). *As it is, most of the natural springs are still used by people for their health and Wellness benefits (Smith and Puczko, 2015) and this has raised Spa tourism to greater heights. Natural springs have also contributed to the evolution and growth of different traditions and cultures in diverse communities across nations. According to Rono (2015) sacred natural sites unveil reciprocity between the environment and tradition*. As such, n*atural springs are continuing to receive some divine connotations according them some sacred status in most countries across the globe.* These natural resources are also viewed as habitats for deities and as cradles of healing through water and plants or as places to connect with the divine (Graburn, 2016).

Thus, they are perceived symbolic and iconic. Che Le et al., (2011) also observed some uniqueness in natural springs that are bordered by natural vegetation or forest reserves with scenic and quiet environment that habitats an assortment of species. Che Le et al., are of the view that such sites are preferred by tourists. The team posits that some nations have converted natural springs of similar characteristics into recreational parks providing an exclusive atmosphere, a gap in development that is experienced by Zimbabwe. However, Madzikatire (2018) observed that a lot of people have little or no information about such resources and yet they are significant to propelling economic and social development.

Another observation made by LaMoreaux & Tanner (2001) also posit that Romans designed and transformed their natural springs to serve as centres for injured troopers in addition to their amusement needs. Similarly, the

Greeks associated spring healing to divine interventions which resulted in worshipping spring water as deities. Thus, they built sanctuaries which signified such deities. Both hot and cold spring water served a multitude of purposes. Guzman et al. (2011) posit that the beginning of the 21st century presented a significant growth trajectory of tourists that visited destinations with natural springs for varying reasons. However, hot and mineral springs popularly known as Spas, have attracted a significant attention among wellness seekers across the globe therefore, generating trillions of United States dollars for the tourism industry (Wellness Summit Global Spa International, 2013). A study conducted by *Ogunberu in 2011,* also indicates that Wellness and Spa tourism *is a fast growing phenomenon across nations. This study recognised the view that this form of tourism serves as bedrock for a variety of recreational offerings around the world.* Table1 below shows how most natural springs are classified and defined.

Table : Classification and definition of natural springs

Classification Category	Definition
Geothermal Spring	Are hot and extreme hot water bodies which are heated naturally while circulating through underground voids and pore spaces.
Natural Hot Spring	It is t he generic term for geothermal springs with temperatures varying from the normal body temperature to above which generally recommended as pleasant bathing temperature and used for medicinal purposes and bathing. The water is naturally discharging from the subsurface.
Thermal Spring	The water body which usually discharges warm and hot water which is generally above 25 ^{0}C.The water may be artificially heated and used for medicinal purposes & bathing in man-made Spas.
Mineral Spring	It is a water body that discharges either cold, warm, hot, extremely hot or artificially heated water which can be used for medicinal purposes and bathing
Artesian Spring	Comprise of n aturally discharging water from the subsurface which will be warm to hot ranging from25^{0} to 100^{0}Cand used for medicinal purposes.
Saline Spring	A water body consisting of various temperatures with very high mineral salt content . It is in the form of seawater or with characteristics of seawater when used in man -made Spas. It is used for medicinal purposes and curative bathing.
Geyser	Extremely hot spring -water reaches a b oiling point and above used as a visual tourist attraction in geo tourism.
Submarine Hot Spring	Submarine vents are known as black smokers that emit extreme hot water enriched with mineral and metallic trace elements with the same characteristics as mineral hot springs.

Source: Erfurt-Cooper and Cooper (2009)

While natural springs are low hanging opportunities for Wellness and Spa tourism development, the absence of strategies for packaging of such resources into community centres for tourism has been a limitation to Spa

tourism development in Zimbabwe. This observation concurs with a study by Boekstein in 2011, which notes that Zimbabwe has a multitude of natural springs yet it has the least developed springs. Meanwhile, natural springs have remained a cornerstone for Health and Wellness related activities around the globe from time immemorial (Ramos & Untong, 2016). Another study by Madzikatire in 2018, revealed that the exploitation of natural springs contributes to individuals' psychosocial and economic development. Moyo and Tichaawa (2017) are of the view that if any form of tourism has to be sustainable in any given society, it requires communities to be empowered so that they participate in related activities. Therefore, failure to identify effective strategies for packaging the available natural springs into community hubs for wellness and Spa tourism will leave host communities in the country economically strained and underdeveloped despite having these income generating resources at their disposal.

Thus, the main objective of this study was to assess strategies that could be adopted to package natural springs into community hubs for Wellness and Spa tourism in Zimbabwe. In order to achieve the intended outcome, researchers commenced the study by establishing the state of natural springs in the Makonde district of Mashonaland West province. The team then explored activities that could be included for the development Spa tourism within host communities. Finally, the researcher assessed strategies that could be adopted to package natural springs into community hubs for Wellness and Spa tourism. The next section below gives an overview of how the research was carried out.

METHODOLOGY

The study adopted a qualitative stance. This is because in qualitative studies, researchers collect data from the respondents within their natural setting so as to derive meaning from how they view their surroundings. Such a methodological approach, allows researchers to gather rich case materials helps to view the life world using the respondents' lens.

Research design

This qualitative study was interpretive in nature where an exploratory case study design was employed to assess strategies to package natural springs into community hubs for Wellness and Spa tourism. Having learnt that Zimbabwe has a host of underexplored and underexploited natural springs, the researchers purposively sampled a total of one hundred and fifty (150) respondents. The sample was determined by the level of data saturation. Three (3) communities with natural springs were involved to obtain quality data than the quantity of the units involved (Wahyuni, 2012 and Yuksel &Yildirim, 2015). The use of more than one community was meant to allow transferability of the initiative to other districts that share similar characteristics with sampled sites.

Ethical considerations and gaining access

Procedures for gaining access were adhered to while ethical issues to do with data collection were followed. The researchers made sure that they kept the respondents' names anonymous. Consent was also sought from the respondents before engaging them in interviews and in focus group discussions. Researchers got clearance to proceed with the study from Chinhoyi University of Technology. *Caution was taken to avoid violating the rights of the respondents. In addition, all respondents were not forced to take part in the study. Permission to gain access into communities was sought from the village leaders, headmen and chiefs. Permission to carry out the study was also sought from authorities in the Makonde District* through the District Administrators Office. *The researchers made sure that they did not force respondents to take part in the study.*Respondents were fully assured that the information that they provided remained strictly private and confidential.

Sampling

The study adopted non probability sampling techniques. Purposive sampling was used to select the study sites within Makonde district. The same sampling strategy was also used to select respondents for in-depth interviews while participants for focus groups were conveniently sampled. The criteria for sampling were based on the demographic and behavioural characteristics of the respondents and participants. The sampling design used managed to identify four (4) study sites, one hundred and thirty (130) respondents from the host communities and twenty (20) key informant who were believed to give expert opinions on the strategies that could be adopted for packaging the available natural spring into community hubs for Wellness and Spa tourism.

Data collection

Initial observations were conducted to establish the state of the natural springs. Notes on issues of interest were captured. These included the nature, the size and the location and its accessibility. Researchers employed accidental observations to capture the potential for developing the springs' surroundings into a tourism centre or attraction within the district.. In-depth interviews were conducted with members from the host communities, academics from Chinhoyi University of Technology and officers from the tourism industry. The interviews lasted between a minimum of one (1) hour to a maximum of two and a half (2 ½) hours with twenty (20) key informants. The interview guide used comprised open ended questions. Data from the interview sessions were audio recorded and transcribed.

Data were also collected through eight (8) focus group discussions with one hundred and thirty (130) host community members at Dichwe (Village 2), Kaswa and Inyati farms in the same district*. The researchers took advantage of the community gatherings and meetings as means to conduct the focus group discussions. The total number of groups engaged was determined by data saturation level. The demographic profile of the focus group discussion participants is indicated in Table 3.*

Respondents' Profile

The majority, seventy-seven percent (77%) were female and eighty-seven (87%) of these respondents depended on subsistence farming. Traditional leaders constituted two percent (2%), academics eight percent (8%) while officers from the tourism industry (EMA, ZTA, ZIMParks and the Zimbabwe Culture and Arts Council for Mashonaland West province) three percent (3%). About twenty percent (20%) were aged between twenty and twenty-nine years, forty-five percent (45%) were between thirty and forty years while the rest were aged fifty years and above.

Four (4) weeks were utilised for data collection. Each group comprised fifteen (15) to eighteen (18) units per session However, the variations in the number of participants was due to the number of people who had attended a gathering at any given time. Three focus group sessions were organised. Each session was allocated a maximum duration of three and half ($3^{1}/_{2}$) hours. The triangulation of data collection methods, study sites and respondents strengthened the validity and the reliability of the findings.

Data collected were transcribed and cleaned before the analysis. Data files were managed and also coded with the help of NVivo 12 Pro which is a computer assisted qualitative data analysis software. The analysis was augmented by qualitative data analysis tips from Braun and Clarke (2014). Themes derived from the analysis were categorised into major and sub themes.

RESULTS AND DISCUSSION

The study sought to assess strategies that could be adopted to package natural springs into community hubs for Wellness and Spa tourism in Makonde. Before presenting actual findings on the strategies it is imperative to shed light on the state of natural springs first.

The state of natural springs in Makonde District

Observations about the state of the natural springs in Makonde were categorised into a sub theme that focused on the included location and nature of the natural springs in Makonde district.

A pristine state

Initial observations revealed that natural springs in Makonde district are still in their natural state with very limited interference from human activities. The springs are remotely located and are situated in places that are not easily accessible. However, the resources are within a walking distance from the places of residence. When asked why the springs are secluded, the majority of the respondents indicated that these springs are still revered. An interesting responses was given by one of the elders who said,

> *It is by God's design that the springs are located where they are and they are habited by our ancestral spirits. This is also the reason why we have our homestead away from them so that we do not contaminate them. They are a heritage from our ancestors and we have to keep them safe from destruction.*

The views of the majority of the host community members are in line with Graburn (2016)'s observations that such places are viewed as dwelling places for ancestral spirits who have the divine power to heal through spring water and plants. Indeed natural springs were and are still regarded as homes for deities and are believed to link people in the host communities with their ancestors. While the springs are viewed as remotely located, they served as an attraction to some of the members from host communities who were seen in the vicinity. However, the majority of the respondents who took part in the focus group discussions were concerned about the state of the springs in the district. The respondents said that it is difficult for outsiders to appreciate the springs or visit them if their communities remain in the state in which they are. They indicated that visitors expect certain things in order to make them enjoy their visits in the area and to the springs.

Another observation revealed that all the springs that were involved in this study were in areas that are generally underdeveloped with a poor infrastructure. While the springs were accessible through the use of dust roads, findings revealed that there were a myriad of other challenges to get to the spring without getting lost. There were poor road networks, unreliable means of transport and no signage to the springs. The highlighted concerns were also cited by most respondents during the interview and group discussion sessions. These findings support the observations by

Boekstein (2011) who concluded that Zimbabwe has the least developed springs in Africa. Thus, these findings support the researchers' assumptions that there is a gap in development in communities that house natural springs in the country.

Observations indicated that about all of the springs sampled for the study were in their natural state and not tempered with in terms of site face uplifting. However, web like patterns of foot paths showing movements to or from the water source were noted. The springs discharged water from underground. Observations revealed that the discharged water collected in naturally formed pools while the excess flowed adrift watering the vegetation around. It was also noted that the springs were surrounded by shrubs, bushes, trees and grasses of different types. An elder who was found at one of the springs said that a forest with indigenous fruit trees that grew around the spring was called 'Gute'. The respondent said that the name is given to fruit forests found where there is a sacred water body at its heart.

The majority of the respondents who were interviewed revealed that the available springs discharged cold water while a few produced warm to hot water. They were of the view that most of the cold springs are still vibrant and still perceived sacred.

One of the female host community members at Dichwe said,

> *It is taboo to say negative things while you are around the spring. We treat them with respect and they are sacred. There are some elders that perform certain rituals in times of need at the spring and as instructed by traditional leaders and spirit mediums. This is done if there is a problem affecting the whole community.*

These findings are synchronous with Graburn,(2016) who observed

that natural sites are given divine status. Thus, natural springs are also valued as cultural icons by residents in Makonde an observation that was also made by Smith & Puczko,(2009) concerning the natural springs in Greece.

Activities for Wellness and Spa tourism development

The study established an assortment of activities around the natural springs that could be used as stimulants for Wellness and Spa tourism. Some of the activities were cited by respondents during the focus group discussions and interviews while others were noted by the researchers during the site observations. The following sub themes were derived from the cited and observed activities: leisure and religious activities.

Leisure activities

Findings revealed that people visited the spring sites to while up time during weekend and holidays. The majority of the respondents indicated that the vegetation around the springs presented scenic views that provided convenient backgrounds for photo shooting. However, the community elders lamented that it was taboo to engage in sexual activities at the site. Some respondents cited bird and butterfly watching as activities that drew people to the springs. A few of the respondents interviewed revealed that there are some rare species that are found at such places that include fish, frogs, crabs, birds, butterflies and small wild animals. A young lady from Kaswa said,

> *Zimbabwe is blessed to have such resources. Visiting them freshens up your mind because there is a lot to see and the water from the spring can keep you entertained. The water from the springs is actually a precious gift that can serve a myriad of purposes. As for me, I use the bushes surrounding our spring as a hide-out and I enjoy that because I*

will only have birds singing into my ears.

These findings reveal that the springs are also used as recreational facilities. Researchers also spotted some people by the springs. Some young men were sited under trees watching their cattle grazing while others were just loitering.

A fisherman that participated in one of the focus group discussions said,

> *We also receive people that visit only to fish from one of the pools near Mutemarongo springs. Mutemarongo was adopted as an iconic name for our chiefs and traditional leaders...Those who visit for herb searching end up fishing because there are fish worms around. Others also swim in the pool. Some fish for enjoyment but others do it to feed their families. Some of us wish to have gardens nearby with a much tighter security or something like a fence.*

This is an indication that natural springs provide visitors with varied experiences which present opportunities that require new actors to help develop them into centres for wellness and Spa tourism as noted by Guzman et al. in 2011.In addition, the researchers observed that the springs were surrounded by a thicket of flora of different heights which host community members viewed as giving the area a being conducive environment for recreation. Che Le et al. (2011) also noted that such fauna and flora gave natural springs some unique characteristics that are instrumental in stimulating tourism. Thus, the flora around the springs in Makonde district provided an aesthetic environment also conducive for Wellness activities.

The majority of the respondents from the tourism industry that were interviewed also revealed that an assortment of activities can be included if this form of tourism was to be a niche for host communities, the tourism

industry and the country at large. One of the interesting responses that was given by a tourism guru was that the packaging of natural springs would only work when all the surroundings were taken into consideration. The officer said that the utilisation of the physical features such as mountains and kopjes surrounding some of the host communities and spring sites would offer opportunities for rock climbing, hiking, animal and scenery viewing. Another ZIMParks officer said that the surroundings could be transformed into Eco parks, while another officer from ZTA indicated that a centre to provide visitors with information about the springs will go a long way to market such places. These findings support the views by Che Le et al., who observed that some nations have converted natural springs of similar characteristics into recreational parks providing an exclusive atmosphere favoured by tourists.

An academic from Chinhoyi University of technology also suggested that the ponds can be utilised for fish and crocodile farming, gardening projects for flowers and herbs around the spring. However, the traditional leaders were of the view that all these projects were only going to succeed if the help of their ancestors who needed to be consulted and involved in the entire process. The traditional leaders' views revealed that they also worshipped springs as deities as did the Greeks and Romans as indicated in Guzman et al, (2011)

Religious Activities

The majority of respondents interviewed from the host communities viewed the natural springs as sacred and survived with the help of traditional ceremonies conducted by traditional leaders. Some revealed that traditional elders gathered at the springs for certain rituals while others indicated that

only the esteemed traditional elders had the authority to perform rituals at the springs when the community was in crisis or when something good had happened. The findings revealed that most of the traditional ceremonies were accompanied by traditional dances and songs. These findings are in tandem with Guzman et al, (2011) that some nations built sanctuaries for the deities.

Other religious activities mentioned by the respondents from all the host communities included herb searching around the springs by members of the community. One elderly woman said that oral tradition has it that springs are surrounded by plants that take care of different ailments. Her views were also supported by a traditional elder from Inyati farm who revealed that most plants that grow near the springs actually constitute herb gardens. Other respondents were of the view that forest trees around the springs produced healthy indigenous fruits that are usually gathered by women and children. One of the councillors who was also an elder in Ditchwe said that people come from different places to gather fruits but those that cut down trees are arrested.

Another interesting religious activity gleaned from the study was curative bathing. The majority of the respondents indicated that spring water has been used by people to heal different diseases. Some members of the Apostolic church that participated in the study revealed that they collected the water from the springs and used it for healing and for solving different problems faced by people. Other members revealed that young boys and girls swim in the pools which keep their bodies strong.

The interviewed tourism officials and academics also revealed that the water served different purposes that help to improve skin condition and also treat

certain disorders when taken. However, one academic said that most people do not know how to use the water for such therapies. An official from the tourism industry also said that there was need to test the water to determine its quality in order to safely package it. These findings reveal that springs in the district can be packaged for Wellness and Spa tourism. *Thus activities identified in the district indicate potential for embracing it and lifting it to greater heights. The section below discusses the proposed strategies for packaging natural spring into community hubs for Wellness and Spa tourism.*

PROPOSED STRATEGIES

After establishing the state of the natural springs and exploring the activities that were viewed as stimulants for Wellness and Spa tourism, the study assessed strategies that could be adopted to increase the demand for Wellness and Spa activities leading to the transformation of Makonde into a hub for Wellness and Spa tourism.

Responses from the academics, traditional leaders and officers from the tourism industry who were interviewed on the basis of their expertise, identified *community involvement; infrastructure development; site marketing; product awareness and innovation as strategies that could help to package natural springs into community hubs for Wellness and Spa tourism.*

Community socialisation and involvement

About all members of the host communities that participated in the study were of the opinion that the packaging of natural springs into community hubs for Wellness and Spa tourism was possible only when affected stakeholders are consulted and involved in decisions made at different level.

This view was explicitly expressed by one of the traditional leaders who said,

> *To be honest with you, if the custodians of the tradition are left out, nothing good will come out of it. All residents in the concerned wards, their village leaders and headmen including spirit mediums and other elders should be consulted before embarking on any projects. I believe they can help with one or two sensible ideas. Projects have failed to kick-off or grow due to leaving out people who are affected positively or negatively by any projects. I think we all know what is good for us.*

Academics and tourism officers that participated in the study concurred that stakeholder consultation and involvement was key if packaging of natural springs into community hubs for Wellness tourism was to succeed. Moyo and Tichaawa (2017) posit that communities should be involved and participate at all the critical stages of tourism including planning and decision making, implementation as well as benefits sharing. These finding concur with the Freeman's (1984) Stakeholder Theory, which posits that all stakeholders should be regarded important and that their consent should be sought if any project should succeed.

Infrastructure development

Through observations and discussions, researchers established a great potential for harnessing the existing activities at the natural springs for Wellness and Spa tourism if the infrastructure was improved. Observations by the researchers revealed that the existing natural springs were not easily accessible. Poor communication networks were identified as an impediment to packaging natural springs into community hubs for Wellness and Spa tourism. While a few of the respondents indicated that there was need to protect the springs, most of them had the view that the environment is very important since it prescribes the what, where and how of the infrastructure. According to

respondents, infrastructure development requires the consideration of certain environmental dynamics which include the natural, the built and the business environment. These views were captured in an excerpt from a tourism academic who said,

> *Good roads and communication lines are important for tourism development. Tourists visiting these natural springs require accommodation and food outlets. They also need internet facilities which mean that digitalization should also be considered. Meanwhile, such improvements may also lead to the destruction of flora and fauna and land degradation if caution is not taken during the construction.*

Different views were also obtained from other respondents. About forty percent (40%) of the members from the host communities were concerned about the preservation of the traditional state of the natural springs including keeping them in their sacred state. Another respondents from Tourism who supported infrastructure development at and around natural springs said,

> *I want to believe that infrastructure development is important in transforming natural springs into community hubs for Wellness and Spa tourism. However, there is need for a buy in from the residents. If host communities are consulted, they suggest brilliant projects. I see these natural springs transforming into recreation and amusement parks, traditional food production entities, therapeutic service providers as well as wellness facilities. Such infrastructure development can help the tourism industry to generate revenue from the increased volumes of visitors.*

From these responses, it can be argued that infrastructure development can help in packaging natural springs into community hubs for Wellness and Spa tourism in Zimbabwe. Indeed, the state of the natural springs in Makonde is an indication that a lot has to be done in terms of developing the Wellness and Spa tourism in Zimbabwe. This observation supports what Boekstein (2011) noted when he said there are very few springs that are well

developed specifically in Zimbabwe.

Education and Training

Responses revealed that there were few individuals who are knowledgeable about Wellness and Spa tourism in Zimbabwe. As such, about all the respondents indicated that education and training was necessary if packaging natural springs into community hubs for Wellness and spa tourism was to be a success story for Makonde. Some respondents from the host communities indicated that they lacked expertise in starting projects let alone how to market their springs and related offerings. Others were of the view that education and training would equip them with the essential knowledge to receive tourists and guide them accordingly. Therefore, they suggested that awareness campaigns and workshops would improve their skills.

On the contrary, some academics argued that awareness campaigns are short lived and rather demanding. A female academic with a similar view said,

> *Schooling is a better option than awareness campaigns. There should be programmes that are tailor-made to assist host communities appreciate this form of tourism so that they could run their own projects using the resources that are available in their communities.*

From the respondents' views, education was critically important for transfer. The responses suggest that knowledge and skills impartation is instrumental in coming up with strategies for packaging natural springs into

centres for developing Wellness and Spa tourism. The responses provided suggest that the knowledge and skills impartation are instrumental in optimising Wellness and Spa tourism. The findings support the observations by Madzikatire (2018) that a lot of people have little or no information about such resources and yet they hold the keys for propelling economic and social development.

Responses from in-depth interviews, focus group discussions and observations indicate that some natural springs in Makonde district have the potential to be transformed into community hubs for Wellness and Spa tourism if effective strategies are identified. While infrastructural challenges and other related problems were noted, a community such as Dichwe in ward 2 was identified as having better opportunities to be used as a starting point for such an initiative.

CONCLUSION

The study established strategies that could adopted to package natural springs into community hubs for Wellness and Spa tourism. From the existing state of the natural springs, the activities identified and the strategies proposed, it can be concluded that Makonde district's natural springs have a potential to be packaged in a manner that increases the demand for Wellness and Spa tourism, which could also help to transform host communities into hubs for Wellness and Spa tourism. However, it is recommended that there is need to develop a model for packaging the product as well as to test it for feasibility.

REFERENCE

Boekstein, M. (2011). Revitalising the healing tradition-health tourism potential of thermal springs in Western Cape. Cape Pennisula

University of Technology.

Boekstein, M. S., & Spencer, J. (2013). International trends in health tourism: Implications for thermal spring tourism in the Western Cape Province of South Africa: tourism and hospitality. African Journal for Physical Health Education, Recreation and Dance, 19(2), 287-298.

Boekstein, M. (2014). Healing waters: balneological classification of thermal springs in South Africa: tourism. African Journal for Physical Health Education, Recreation and Dance, 20(Issue-21), 557-568.

Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? International journal of qualitative studies on health and well-being, 9.

Che Leh, F., Nayan, N. & Baharom, A.A. (2011). Hot springs for health tourism destination in Perak, Malaysia. Elixir Tour. Management.

Erfurt-Cooper, P., & Cooper, M. (2009). Health and wellness tourism: Spas and hot springs: Channel View Publications.

Global Spa and Wellness Summit International, (2013).https://www.globalwellnesssummit.com/industry-resource/research/

Graburn, N (2016). The Past and the Present in Japan: Nostalgia and Neo-Traditionalism in Contemporary Japanese Domestic Tourism. In R. Butler and D. Pearce, Change in Tourism: People, Places and Processes (pp. 47-70), Routledge, London.

Guzman, L.T., Sanchez, S. and Pavon, V. (2011). Community-based tourism in developing countries: A case study. Journal of tourism. (69-84).

LaMoreaux, P.E and Tanner, J.T. (2001) Eds. Springs and Bottled waters of the World: Ancient History, Source, Occurrence, Quality and Use. New York,

Springer-Verlag ISBN 10:9783540618416

Kazandzhieva, V. (2014, October). Trends in the development of spa and wellness tourism. In International Tourism Forum "Spa and Wine (pp. 1-8).

Koncul, N. (2012). Wellness: A new mode of tourism. Economic research-Ekonomska istraživanja, 25(2), 525-534.

Madzikatire, E. (2018). The contribution of the Spa technology consumption to one's psychosocial and economic development in Zimbabwe. Doctor of Philosophy-Thesis. Chinhoyi University of Technology.

Moyo, S. & Tichaawa, T., M. (2017). Community involvement and participation in tourism development: a Zimbabwe African Journal of Hospitality, Tourism and Leisure, 6(1):1-15.

Ogunberu, A. F. (2011). Socio-economic impact of tourism development in Nigeria: Case study of tourist attractions along the coastline of Lagos.(Degree- thesis Central Ostrobothnia University of Applied Sciences) Lagos, Nigeria.

Okech, R. N. (2014). Promoting the spa tourism industry: Focus on coastal resorts in Kenya. Athens Journal of Tourism.(pp.67-77).

Ramos, V., & Untong, A. (2016). Spa tourism Encyclopedia of Tourism (pp. 886-888): Springer

Rono,C., F. (2015). Influence of Participatory Development on Sustainability of Spring Protection Projects In Bomet Central Sub-County,Kenya. Masters thesis, University of Nairobi.

Smith, M. K., & Puczko, L. (2015). Health and Wellness Tourism: Oxford: Butterworth Heinemann.

Silverman, D. (2011). *Interpreting qualitative data: A guide to the principles of*

qualitative research: SAGE Publications Limited.

Thammajinda, R. (2013). Community participation and social capital in tourism planning and management in a Thai context (Doctoral dissertation, Lincoln University).

Yuksel, P. & Yildirim, S. (2015) Theoretical Frameworks, Methods and Procedures for Conducting Phenomenological Studies in Educational Setting, Turkish Online Journal of Qualitative Inquiry 6 (1) pg 1-20.

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Conference fees

- **International delegates fee.....$200**
- **Local delegates fee.....$100**
- **Postgraduate students with proof of registration.....$50**
- **Undergraduate students with proof of registration.....$50**
- **Corporates per individual.....$100**

N.B: The conference fee covers conference pack, teas and lunches during conference days.

PLEASE note that the conference fee does not cover accommodation, dinner and transport.

CHINHOYI UNIVERSITY OF TECHNOLOGY

INTERNATIONAL CONFERENCE CALL

CUTINNOVATE2023
(CUT_2023)

CONFERENCE THEME:

Enhancing Growth through Innovation and Industrialisation for Sustainable Development

INTRODUCTION

The fifth Chinhoyi University of Technology International Conference on Growth, Innovation, Industrialisation and Sustainable Development comes at the most opportune moment as it coincides with the University's 20th Anniversary. The theme also resonates with the Government's new thrust on education focusing on the heritage based Education 5.0 premised on teaching, research, community engagement, innovation and industrialisation.

The conference is a premier event earmarked to rally illustious and emerging academics from diverse disciplines to spotlight innovation and sustainable development in the context of the heritage based Education 5.0 trajectory. Building on the success of the four previous conferences, this conference provides an international platform for academics, researchers, policy-makers, captains of industry and students to seamlessly share experiences and expertise on the overarching multi-displinary conference theme and sub-themes detailed below.

Conference Call for Papers

The aim of the conference is to reflect on how the University can facilitate growth through innovation and industrialisation for sustainable national development. Presenters can share local, regional, continental and global experiences that resonate with the theme and sub-themes.

CONFERENCE THEMES AND SUBTHEMES

CUTINNOVATE2023 invites scholars, researchers, policy-makers, industrialists and other key stakeholders to submit abstracts under the thematic areas given below.

1. Sustainable food systems, Indigenous Knowledge Systems, innovation and industrialisation
   - Value creation through culture and heritage
   - Food security, SDGs and industrialisation
   - Livestock Production Value Chains
   - Climate smart cities and rural areas
   - Lifelong Learning and development.
2. Creative Design Practices
   - Design led innovations
   - Visual Communication with impact
   - Commoditisation of Visual Artefacts
   - Language, communication and New Media
   - Heritage Based Design ad innovation
   - Innovation through circularity
3. Entrepreneurship, Industrialisation and Business Development
   - Corporate Reporting and Accountability
   - Corporate governance
   - Venture creation models and rancing
   - Sustainable supply chain management
   - Innovation in production and services in the Tourism and Hospitality industry
4. Engineering a Sustainable future through creativity, innovation and industrialisation
   - ICT Innovation Pathways
   - Internet of things
   - Data Analytics
   - Telecommunications and cybersecurity
   - Robotics, Articial Intelligence and Nanotechnologies
   - Sustainable energy sources, assets and utilities
5. Sustainable materials and Circular Production Systems
   - Construction materials
   - Renewable energy materials
   - Biodegradable polymers
   - Nanomaterials and devices
   - Enhancing rural and urban development through technology and innovation.
6. Human and Animal Health, Ethno-medicines and Drug Discovery
   - Standardisation for Ethno-medicines in Africa
   - Immunisation and vaccine development
   - Computational methods in health research
   - Genomics and precision medicine
   - Improved livestock health and production
7. Biodiversity Conservation, Climate Change and Sustainable Development
   - Aquaculture Value Chains
   - Wildlife Trade and illegal harvesting
   - Wildlife Economy Enterprise Development
   - Community based Natural Resources Management
   - Climate change, Green Economy, Agro-ecological innovations and the Biodiversity Conservation

PROPOSED TIMELINES

Activity	Timeline	Responsible Person (Email Contact)	Contact Persons
First Call for Abstract Submission	23 September 2022	LRIC Editor-in-Chiefs- CUT Journals	Prof. O.L. Kupika Prof R. Musundire Prof. P.W. Mamimine
Second call for submission of Abstracts and Special Business Symposium concepts	21 October 2022	LRIC Editor-in-Chiefs- CUT Journals	Prof. O.L. Kupika Prof R. Musundire Prof. P.W Mamimine Dr N. Marima
Third and nal call for submission of abstracts and special business symposium concept	18 November 2022	LRIC Editor-in-Chiefs- CUT Journals	Prof. O.L. Kupika Prof R. Musundire Prof. P.W Mamimine Dr N. Marima
Deadline for review of abstracts and special business symposium concepts	2 December 2022	LRIC Editor-in-Chiefs- CUT Journals	Prof. O.L. Kupika Prof R. Musundire Prof. P.W Mamimine Dr N. Marima
Final Programme	16 December 2022	LRIC	Prof. O.L. Kupika Dr G. Sonpo Prof R. Musundire Prof. P.W Mamimine
Conference Dates	12 -17 February 2023	LRIC All Subcommittees	LOC President LOC Vice-President All Sub Committee Chairpersons

● Exhibitions

Exhibitions within the connes of the above themes and sub-themes are welcome.

● SPECIAL BUSINESS SYMPOSIUM

Three special business symposiums in animal genetics and breeding, feed formulation and material sciences will be planned as side events in order to attract investments and partnerships.