

Internationalizing Malawian Higher Education: towards more beneficial academic mobility.

Lazarus Obed Livingstone Banda (✉ lazaruslivingstonebanda@gmail.com)

Beijing Institute of Technology <https://orcid.org/0000-0002-3436-6137>

Jin Liu

Beijing Institute of Technology

George N. Chidimba Munthali

Yangtze University

Zhou Hui Wen

Beijing Institute of Technology

Colleen Mbughi

University of Malawi

Helex Kayembe

Jiangnan University

Jane Thokozani Banda

: Government of Malawi

Peter Ngulube

Malawi University of Science and Technology

Wegayehu Enbeyle

Mizan-Tepi University

Research Article

Keywords: internationalization, higher education, international and inter-institutional collaboration, academic mobility, Malawi

Posted Date: November 18th, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-1053906/v1>

License:  This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

Abstract

Aim: This study investigated the intentions, opportunities, and barriers to engaging in a meaningful internationalization of higher education in Malawi.

Methods: This was cross-sectional research that was done between June and October 2021. Using a purposive (judgmental) sampling, we recruited 212 respondents from various institutions of higher education in Malawi. Multilinear regression analysis was used to analyze the factors with the P-value set at 0.05 level of statistical significance.

Results: The results indicated that the majority of the respondents were males (63.7%) who fell into 30 years age bracket. Further, the results from the multilinear regression analysis indicate that Institutional collaboration ($\beta=0.326$, $p=0.000$, $CI=0.27-0.383$), clear Policy on Mobility ($\beta=0.146$, $p=0.004$, $CI=0.047-0.246$), experience ($\beta=0.083$, $p=0.117$, $CI=-0.021-0.186$), academic rank ($\beta=0.114$, $p=0.000$, $CI=0.069-0.159$) were positively statistically significant variables, whereas on the other hand, Occupation ($\beta=-0.131$, $p=0.002$, $CI=-0.213-0.49$), academic qualification ($\beta=-0.106$, $p=0.013$, $CI=-0.19-0.023$ and mobilityImportance ($\beta=-0.116$, $p=0.022$, $CI=-0.215-0.017$) were negatively significant variables respectively.

Conclusion and Recommendations: institutions need to invest in international and inter-institutional collaboration, clarify policy direction regarding academic mobility, keep track and linkages with mobile faculty, create a conducive social and formal institutional culture that attracts back mobile faculty, and reduce staff turnover.

Introduction

The number of mobile students has been increasing drastically. Increasingly more students want to study outside their home countries at universities that rank highly (Robert Morse and Juan Vega-Rodriguez, 2020). Therefore, it is very important to make institutions visible across the region and beyond. Higher education is undergoing tremendous changes in response to the national global dynamism (Hazelkorn et al., 2014). The way institutions carry out and comprehend, interpret, and respond to ranking differs with differing institutions (Hazelkorn et al., 2014). While some universities rank higher each time, and others get introduced to the ladder, others are ousted.

While developed countries compete to develop as many world-class universities and those in developing countries build research-intensive institutions (Dembereldorj, 2018), it is not clear whether Malawian universities as a system among the newly developing economies feel that ranking matters (Dembereldorj, 2018). It has not made it into either the top 1000 global QS World University Rankings (2021) or Africa's top 53 non-academic universities ranking by UniRank (2020) for the past five years.

There is a general outcry as to whether it is worth funding institutions whose academic products cannot address the desires of their society including in Malawi. Other criteria for registering such visibility are institutional research and publication productivity (Smyth and Mishra, 2014), institutional linkages, quality and quantity of publications, and citation rate (The_World_University_Rankings, 2021; Times Higher Education, 2021).

Academic mobility and academic inbreeding impact scientific publication productivity in many ways (Smyth and Mishra, 2014). Researchers like Fernandez et al. found that academic mobility enhances social capital (Alipova, 2017). It is a vehicle for knowledge circulation (Bäker, 2015). Internationalization through academic mobility provides an opportunity for broadening faculty perspective (Alipova, 2017), better networking, and research collaboration which may impact publishing productivity (Fernández-Zubieta et al., 2015). Institutional collaboration enhances scientific research quality (Rogers and Brittle, 2014; Lathabai et al., 2021) and publication productivity (Smyth and Mishra, 2014; Horta and Yudkevich, 2016).

On a non-academic UniRank league table, the University of Malawi is ranked the 171st (Top 200 Universities in Africa | 2021 African University Ranking (4icu.org)) out of the top 200 African universities in 2021. UniRank produces a rank of top 200 universities in Africa based on “valid, unbiased and non-influenceable web metrics provided by independent web intelligence sources rather than data submitted by the Universities themselves” (Top 200 Universities in Africa | 2021 African University Ranking (4icu.org)).

Regardless of the stages of development to improve their higher education systems, there is a need to increase the institutions' internationalization. Strategies for this include academic mobility, employment of international teachers, and internationalizing curricula while achieving quality learning experiences are some of the critical priorities of Higher Education Institutions (HEIs) (Huang et al., 2019; O'Brien et al., 2019). Investing in quantitative and qualitative development of higher education includes investing in knowledge, skills, and abilities necessary to create greater productivity and highly add value, and of which the human capital is the crucial factor (Damoska Sekuloska, 2014). Many HEIs invest in academic mobility to increase competitive advantage in the higher education system (Damoska Sekuloska, 2014; Sekuloska, 2014; Tanhueco-Nepomuceno, 2019). There is an increase in the global mobility of students attending higher education (Hepple et al., 2017). Academic mobility may take the form of long-term or short-term mobility programs, which, among others, benefit the participants on cultural exchange and professional development (Hepple et al., 2017).

Various HEIs develop academic mobility programs to improve their systems in different forms (Hepple et al., 2017; Arunasalam and Burton, 2018; O'Brien et al., 2019; Tanhueco-Nepomuceno, 2019). For example, domestic students have mixed with international students in a classroom setting, where among others, they reported that they benefited in developing awareness, connecting, and sharing cultural knowledge (O'Brien, Tuohy et al. 2019). In other institutions, academic mobility involves having faculty from abroad to teach students in their home country, which has both positive and negative impacts on both students and faculty (Arunasalam and Burton, 2018; Huang et al., 2019). Some institutions embrace international exchange programs for students and faculty, which influences their literature and functional value in terms of having a contextual value of studying abroad (Gallarza et al., 2017) and promoting cultural self-awareness and professional development (Hepple et al., 2017). Nonetheless, it remains a challenge for the institutions dominated by these inbreds to harness new experiences from abroad.

Despite the global competition on achieving quality higher education, the higher education sector in lower-income countries, such as Malawi, is still struggling to achieve quality (Scientific-Methodological and 2020). Many talented students in these countries are pulled by higher-income countries to acquire higher quality education abroad, thereby maintaining the brain drain from the low-income countries (Campbell 2017). There is an outcry about delayed completion of programs and persistent dropout rates. Therefore, it is necessary to consider academic mobility to improve higher education (Arunasalam and Burton, 2018). However, as noted by other institutions, this approach has positive and negative impacts on mobile individuals and the host and home institutions (Gallarza et al., 2017; Hepple et al., 2017). Hence, we are raising these questions:

If Malawian Higher Education System is to improve quality by considering students and faculty mobility, what could be the opportunities and the setbacks?

Are there significant relationship independent factors with the Quality of Higher Education in Malawi?

In the end, we will aim at achieve and give recommendations about the Quality of Higher Education in Malawi based on the study's findings.

Methodology

Study Setting and Design

The authors conducted this study in Malawi, a country located in the southern part of Africa bordering Tanzania, Mozambique, and Zambia (Millington and Jepson, 2008; Munthali and Xuelian, 2020). Malawi is one of the developing countries in Africa where the majority of its citizen depend on agriculture (Xuelian, 2020) and education to enhance a better life within a society. Education has been at the heart of the policymakers with help from other local and international organizations (GoM, 2013). After the National Council for Higher Education (NCHE) accreditation, public and private learning institutions operate in Malawi. This overall body accredits and supervises the higher education quality, which has helped promote the quality of education in Malawi. This study focused on institutions of higher learning education in Malawi.

Figure 1: Showing the Study Area of Malawi

Source: Authors, 2021

Study Design

The study design for this study was a cross-sectional survey conducted using a population-based representative sample. Variables are collected for several sample units at the same points in time (one time shoot), just the data collected from the respondents directly at a particular time.

Sampling And Population

Public higher education system in Malawi is still far from massification. As such, it enrolls meagre numbers of applicants. In all the institutions sampled, established posts are always higher than filled posts, rendering the institutions heavily understaffed, thereby relying of adjunct faculty.

It was against this reality that purposive (judgmental) sampling was performed for this study. It was a non-probability sampling method. The commonest uses of purposive sampling is in studies based on very small numbers of areas or sites. Researchers employ this technique when the elements selected for the sample are chosen from the total population by the researcher's judgment. Researchers often believe that they can obtain a representative sample (n=212) by using sound judgment. The approach has the advantage of saving time and money, without significantly compromising result generalizability. In some way, 212 of the population of interest without sampling at random.

Ministry officials and human resources from various higher learning education institutions. Stratification aimed at data collection triangulation to get a richer understanding of the study targets. The population was stratified as students, faculty, and academic leadership. The students' strata were undergraduates, masters, and PhDs. Faculty comprised two strata: deans and heads.

Development of an instrument

The instrument had two parts. The first part captured the social demographic characteristics of the respondents, whereas the second part captured the measurement of assessed variables.

Source of Data

We used primary data by designing a questionnaire form. Primary data refers to the data when researcher collects data directly from his observations and experience(Elman et al., 2016)

Validation and Pretesting

The researchers pretested the instrument through a pilot study with 15 Masters and 15 Ph.D. students in Malawi. They further sent the instrument to five individuals for expert advice on the instrument. They calculated the Alpha Cronbach for internal instrument consistency.

Study Variables

The variables considered in this study were based on earlier studies at the global and national levels. As discussed in the literature review, socio-economic, demographic, and related characteristics are essential for our work.

Table 1: Variables Definitions

Source: Authors 2021

Response Variable/Dependable variable

The dependent variable for this study was the Quality of Higher Education (QOH). QOH is a complex concept, relative and contextual, which must be understood within the interplay among culture, politics, and economics (Gayef and Hurdag, 2014; Haseenav et al., 2015). It embodies national and global relevance of curricula and the related academic and administrative processes, staff development strategies, qualification of faculty, and the processes leading to the training of the same, the physical, social (Kercher, 2018) and academic environment, and abilities, skills, attitudes, and knowledge the students can demonstrate on successfully going through an academic program (Benson, 1977). Quality of education has various indicators, including levels of flexibility and ability to embrace change in light of scientific research, the composition of faculty, students, time of graduation, retention rates, quality of student support systems, external examiners' reports, infrastructure, extra-curricula activities, graduate employability, quality and quantity of publication, indexing, and citation rates, and ranking (Haseenav et al., 2015).

Data Analysis

Data were analyzed using SPSS version 26; descriptive data were presented; after that, we ran a multilinear regression model with a statistical P-value at 0.5 level of statistical significance.

Statistical Model

Multiple linear regression required that the dependent variable be continuous and the independent variable is discrete, continuous, and categorical.

Multiple Linear regression model (LR)

$$Y = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k + \epsilon$$

Where;

Y is response variable

β_0 is constant parameter

β_1, \dots, β_k , are unknown parameters. $i = 1, 2 \dots k$

X_1, X_2, \dots, X_k , were explanatory variables

ϵ is the error term

Assumption of Multiple linear regression model

1. Multiple regression models should be linear. The parameter should enter the model in linear form (Linearity)
2. Errors have a normal distribution with mean vector zero (Normality)
3. The variance of the errors at each fixed value of the independent variables is constant that is δ^2 (Homoskedasticity)
4. There is no correlation between successive error terms. That is $\text{corr}(\epsilon_i, \epsilon_j) = 0$ (non-autocorrelation). Autocorrelation occurs when the residuals are not independent of each other.
5. There must not be significant relation between the independent variables. In other words, X is a $n \times k$ matrix of full rank (no Multicollinearity). It occurs when several independent variables correlate at high levels with each other.

Ethical Consideration

Participants were informed in advance that the study participation was voluntary, and they could withdraw at any time without any problem and that their confidentiality would be kept.

Beijing Institute of Technology issued a letter of introduction and a covering letter of identification and clearance to conduct this research. Since data were from the public academic institutions in Malawi, this study was approved by the Ministry of Education with reference number **EDU/HE/21/95** dated 11 May 2021.

The study followed the procedures under the Helsinki Declaration of conducting a study involving human beings.

2. Results

2.1. Social-Demographic Characteristics

The study assesses the demographic characteristics of respondents—the demographic makeup on improving higher education through faculty mobility- opportunities and challenges. Data were collected on gender, age group, occupation, academic qualification, academic rank, and the number of expatriates. A total number of 212 participated in the survey representing.

Table 2 presents the respondents' social-demographic characteristics. The study results show that most respondents were males, representing 63.7% (n = 135) while the females were 36.3% (n = 77). The majority fell within the age bracket of 30 years, representing 42.5% (n = 90), followed by those within 31-40 years, representing 33% (n = 70), while those above 40 years old, representing 24.5 % (n=52). Furthermore, on the occupation, the results reveal that the majority were students, representing 48.6% (n= 103), followed by officers, representing 25.5% (n = 54), lecturers representing 24.5% (n= 52) and alumni representing 1.4 % (n=3). On academic qualification, the results reveal that the majority of the respondents had been studying towards BA, representing 37.3 % (n=79), followed by MD representing 35.8% (n = 76), BD representing 17.9 % (n = 38), and those with Ph.D. representing 9 % (n=19). On academic rank, the results demonstrated that the majority were lecturers representing 35.8 % (n=76), followed by students representing 34.4 % (n=73), Dir. Prof. Mg. etc representing 20.8 % (n=44), high school teachers representing 8 % (n=17) and senior lecturer representing 0.9 % (n=2). In terms of experience, the results reveal that the majority of the respondents were not yet employed, representing 39.6% (n=84), followed by five years plus representing 37.3 % (n=79) and those less than five years representing 23.1 % (n=49). Lastly, on the number of expatriates, the result reveals that the majority of respondents were less than five, representing 45.8% (n=97), followed by those above five representing 39.2% (n=83), and those above ten representing 15.1% (n=32).

Table 2: Descriptive Characteristics of the Respondents (N=212)

Source: Authors 2021

F-test also revealed that this proportion of variance is statistically significant. The overall model is statistically significant for the data. All the assumption of regression analysis was satisfied. Due to formal tests and diagnostic plots, normality, constant variance, absence of Multicollinearity, linearity, and absence of autocorrelation were satisfied.

The results in Table 3 revealed that the model is adequate (good fitted the data), implies that 49% of the variability in the Quality of Higher Education are explained by the variability of the independent variables in the estimated regression and while 51% explained by other non-explained factors out of our determined independent variable in the study. From Table 3. Durbin Watson test revealed the absence of autocorrelation for the assumption of multiple linear regressions. Errors must be uncorrelated.

Furthermore, the results from the multilinear regression analysis indicates that Institutional collaboration ($\beta=0.326$, $p=0.000$, $CI=0.27-0.383$), clear Policy on Mobility ($\beta=0.146$, $p=0.0004$, $CI=0.047-0.246$), experience ($\beta=0.083$, $p=0.117$, $CI=-0.021-0.186$), academic rank ($\beta=0.114$, $p=0.000$, $CI=0.069-0.159$) were positively statistically significant variables, whereas on the other hand, Occupation ($\beta=-0.131$, $p=0.002$, $CI=-0.213-0.49$), academic qualification ($\beta=-0.106$, $p=0.013$, $CI=-0.19-0.023$) and mobilityImportance ($\beta=-0.116$, $p=0.022$, $CI=-0.215-0.017$) were negatively significant variables respectively.

Table 3: Factors determining/affecting the Quality of Higher Education in Malawi using a Multilinear regression analysis

Table 4: Statement of Hypothesis Results, N/A note statistically significant, + positive statistically significant, - negative statistically significant.

Source: Authors computed data 2021

Discussion

The current study investigated the intentions, opportunities, and barriers to engaging in a meaningful internationalization of higher education in Malawi, which included study, institutional collaboration, international visibility through ranking, abroad experiences, enrollment in foreign universities, student and faculty exchange programs, and the enrichment of curriculum with foreign languages and subject matter through international and area studies programs. Many of these actions, of course, continue and have accelerated. Several new methods and techniques have also emerged (Maringe and Foskett, 2012). These include increasing student and teacher mobility, international curriculum content integration, growth of inter-institutional collaborations and partnerships (Lathabai et al., 2021), and trans-border educational services such as the construction of branch campuses and distance and online learning (Kreber, 2009; Pandey et al., 2021).

Precisely, respondents' demographic characteristics, intentions, and sociodemographic variables on improving higher education through faculty mobility, opportunities, and challenges were measured. Our population characteristics indicate that most of the participants were students (48.6%) with more males (63.7%) studying towards their first degree (37.3%); hence their work experience characteristics showed that most of these students (39.3%) were not yet employee. This characteristic has an important bearing on the data.

We can confidently postulate that students as the main clients in education could make good evaluators of the goods and services offered by education. Therefore, their opinions in this study were of paramount importance. There were more males among the participants (63.7%), indicating that there are still imbalances in the education system despite affirmative action policies regulating admission. We attributed the disparities to the fact that it is a long way from basic education to higher education for girls with social vulnerabilities. Nonetheless, the disparity seems to be narrowing.

The findings suggest academic qualification is significantly correlated with improving the quality of higher education in Malawi. On this variable, most respondents (35.8%) were studying towards a first degree.

Being students, they that well qualified academic members of staff should take them through their course work. Students feel confident if they know that some authority is responsible for their academics. They will, therefore, prefer to be handled by a highly qualified member of faculty because they believe that such individuals have the expertise in their discipline to take them through research guidance (Khozaei et al., 2015). Scholars postulate that many students will not perform well when their teachers or professors do not possess adequate expertise, knowledge, skills, and attitudes (Khozaei et al., 2015; Singh, 2020). This qualification encompasses formal certification and credentials, and all psycho-social and linguistic aspects (Gobel et al., 2013; Sidhu et al., 2014) that enhance effectiveness and efficiency since student success is a result of the quality of the process of teaching and learning (Revisi and Lamas, 2015). Scholars such as (Wen et al., 2018) cite inadequate language proficiency, inadequate student-faculty interface on campus, and snags in sociocultural adjustment as impediments to quality education. Research posits that a feeling of relatedness with the faculty makes students develop healthy study habits coordinators, which ultimately positively impacts academic achievement (Haahr, 2005).

The study found that academic rank ($p=0.000$) significantly impacts the quality of education in Malawi. Most respondents on this variable were faculty members (35.8%), followed by students (34.4%). All factors held equal, faculty and students are better placed to comment on the importance of higher education institution's ranking. Students think that an institution ranking high is more credible than those off the rank. Such institutions give them a sense of assurance for future academic and career prospects.

Similarly, faculty associated with high-ranking institutions are more likely to engage in inter-institutional collaboration and international scientific joint projects. Institutions with high academic rankings will attract more international students (Dembereldorj, 2018). Such institutions are likely to realize more revenue for funding academic programs and research. Such investments bolster the quality of curriculum innovation, implementation, and delivery of quality services. Our result agrees with what is in extant literature. Much as it is complicated to define clearly how institutional rankings affect higher education (Hazelkorn et al., 2014), institutional ranking impacts the quality of higher education in various ways (Dembereldorj, 2018). Scholars found that academic ranking serves in a way as a reliable source of information for decision making both by prospective students and institutional management for marketing purposes, benchmarking, decision making, choice of host international institution (Dembereldorj, 2018), and for filling relevant operations gaps (Hazelkorn et al., 2014).

Cross-border comparisons and competition is inevitable and will only keep intensifying. (Hazelkorn et al., 2014) such that opting out of the race is only anti-global and not in line with the expected internationalization of higher education (Dembereldorj, 2018). As such, institutional sustainability will be possible through joining the healthy competition and improving institutional research capacity in today's knowledge-driven economy (Dembereldorj, 2018). Although there are lots of criticisms against the criteria used in national, regional, and global rankings (Dembereldorj, 2018), the process remains an indispensable tool for maintaining standards in higher education (Hazelkorn, 2013; Hazelkorn et al., 2014), holding institutions accountable to the society (Hazelkorn et al., 2014), and helping institutions judiciously, guardedly and tactically underpin institutional development.

Besides, the study revealed that a clear policy on mobility has a significant positive impact ($p=0.004$) on university education quality. A clear policy on academic mobility would significantly impact the quality of higher education in Malawi. The institutional operational policy sets a general blueprint and framework that directs employees towards desired outcomes and rational decision-making as it enables planning in advance and related resource mobilization for quality service delivery (Haseenav et al., 2015). Organizational management theories advocate timely and relevant

communication for the success of the organization. Leadership and management should formally communicate the goals of the organization.

This is the shared view about the direction the institution is supposed to take. Therefore, the clear policy provides this direction as enshrined in the institutional strategic plan, stipulating the intended goals. Shared policy formulation and dissemination facilitate implementation by faculty to attain the institutional goals with excellence (Huo et al., 2018; Bao et al., 2020; Peter and Pandey, 2020). Written policies save much institutional prime time, preventing confusion, legal confusion, role conflict, and other chaotic operations because they indicate universities' best practices and enable institutional process reuse (Altbach et al., 2007). Besides impacting ethical conduct, the policy ensures guidance, consistency, accountability, clarify, and efficiency. This finding is consistent with extant researches of Spencer et al. (Spencer-Oatey and Dauber, 2019). The irrefutable evidence of the positive impact of a clear academic mobility policy is manifest in the outcomes of the Bologna Process (Maynard and Parfyonova, 2013).

Institutional collaboration was reported to impact higher education quality positively significantly ($p=0.000$). This is because institutional collaboration enhances synergies in pedagogy, curriculum, scientific research, and policy development among the collaborators. This explains why institutions with strong ties with others have higher academic output and quality programs than those excluded from the network fabric (Betru and Hamdar, 1997). Our findings correspond well with international practices such as those between Mexico and the United States of America signed during President Obama's time to enhance the quality of education between the two countries while enhancing stronger bilateral political ties (Baker et al., 2014). Our results are consistent with volumes of literature on expected outcomes of institutional collaboration (Deng et al., 2019). Nonetheless, some literature also reveals a critical negative impact of institutional collaboration due to implementation flaws in the program (Mihut et al., 2016).

Academic mobility significantly negatively impacted the quality of education. The more students and teachers get involved in international mobility, the more they are involved in permanent migration resulting in brain drain. As a developing country, Malawi loses a lot of its brains to the developed countries, where pull factors for highly skilled and highly qualified human resources are prevalent (Mazzarol and Soutar, 2002; Yu et al., 2021). Such creates inconsistency between the production of rare talents and profitability from the same. There is an incredible mismatch between the demands for such skilled and highly qualified rare talents needed to improve university education and their availability for improving university education standards. These findings concur with preceding studies which reveal adverse effects of permanent human resource migration from developing to developed countries (Odhiambo, 2012; Docquier, 2014; Artuc et al., 2015; Cañibano and Woolley, 2015; Hussain, 2015; Muthanna et al., 2017). Similar studies indicate that if academia migrates permanently and does not remit anything to their country, the practice adversely impacts their families and the nation's education system (Djajić and Vinogradova, 2015). Temporary migration enormously positively impacts home institutions (Bertoli and Marchetta, 2015).

A competing branch of the literature reveals that permanent migration per se does not impact the home institutions negatively unless the home institutions do not maintain linkages and collaboration with the mobile academia. When the migrant academia joins faculty in their destination, it can present an excellent opportunity for research collaboration. This is in line with extant literature (Yan et al., 2015). If home institutions and the host institutions engage in institutional linkages and enhance collaboration, this migration would significantly benefit the donating institution (Choi et al., 2016). Besides, if the migrant faculty remits to the home country, such funds may bolster research activities in the donor institution (Licuanan et al., 2015).

On the other hand, the study's findings revealed that occupation ($p= 0.023$) and academic qualification ($p=0.027$) present significant setbacks on faculty mobility in HEIs. The higher the qualification, the lower the impact they have on the learning of the students. This result agrees with the expectations from the extant plethora of literature. For instance,

some scholars report that overqualified faculty performs better at managerial positions than at handling coursework. Inopportunately, since formal and bureaucratic organizational structure follows the pyramidal shape, the university setup will not accommodate all highly qualified faculty in leadership positions.

Consequently, perceived over qualified faculty feel less satisfied with their job (Erdogan and Bauer, 2009). Those overqualified feel frustrated when they perceive that what they get is lower than what they deserve, be it in monetary rewards or responsibilities entrusted to them. Therefore, the institutions need to constantly assure the highly qualified faculty that they value them a lot. Any befitting incentives should be given to them, following institutional incentivization policy (Deardorff, 2016).

Literature posits that employees who feel overqualified for their job or doing a job that even less qualified colleagues are also doing feel less satisfied with their job, have less organizational commitment levels, and tend to be associated highly with job turnover (Culbertson et al., 2011). Much as discipline experts are advantageous to students as they can easily guide the students (Gube et al., 2017) through a milliard of relevant research literature instrumental for successful completion of a program (Gube et al., 2017; Gao, 2019), well-qualified faculty renowned academicians are more involved in research and international consultancy work, making them less available for the student's research supervision and coursework than the lower qualified faculty. Many studies justify this finding (Khozaei et al., 2015; W. Kramer, 2020). This makes faculty-student contact less effective. This is also evident in the delayed completion of students pursuing graduate and postgraduate programs conspicuously evident in the Malawian higher education system. Literature attests that 45-50% of graduate students complete their course work yet fail to graduate due to supervision-related challenges (Gao, 2019). This is consistent with the previous research that emphasizes a time-based conflict when employees over-prioritize one role over another (Culbertson et al., 2011). Notwithstanding this, underqualified faculty may also be deleterious to student progress as they lack the skills and competence to correctly direct their students to appropriate literature that can help the students comfortably handle their research (Gao, 2019; Singh, 2020).

Furthermore, highly skilled human resources and rare talents quickly drain their home institutions for greener pastures. This makes the home institution lose out through brain migration. Such mobility negatively impacts the continuity of learning.

Conclusion And Recommendations

This study explores and establishes some of the key determinants that bolster and encumber the quality of higher education in Malawi. Referring to our data analysis, there is strong proof to propose that the qualities of higher education in Malawi are statistically significant and positively influenced by clear policy mobility (such as the institutional operation policy), institutional collaboration, and academic rank. Besides that, our study has revealed that academic qualification is significantly related to enhancing higher education quality in Malawi. On the other hand, the study results have established that the quality of higher education in Malawi is statistically significant and negatively impacted by Occupation, academic qualification, and mobility importance.

Our study recommends that in Malawi, higher education institutions need to regain the lost glory and bounce to the regional, continental, and global university rankings. They need to realize that the nation will keep lagging regional ranks unless they work as a single unified system. The national competition will be necessary only if it aims at benchmarking and not at outdoing each other. Since each institution has unique discipline-based strengths, the entire national higher education system needs to upgrade collaborative efforts in the related research activities.

The universities and colleges need to develop a clear academic mobility policy and disseminate it among faculty to guide and inform institutional decision-making. Faculty need to balance attention to their mandates such as research, teaching, training, and outreach not to compromise student academic performance. They need to make their vision clear

and strategies set to register their availability and presence on the regional scene. Secondly, they need to prioritize institutional linkages and collaboration, capacity building, skills, and professionalism within the country and the region to improve research output and quality.

The government should consider policy development that enhances collaboration between home institutions and the migrant faculty. Besides, the government and the academic institutions need to synergize in making the mobile faculty too long to return home.

The renowned countrywide institutions should gear up to help the relatively higher education institutions play a commendable role in improving education. Due to high staff turnover, Institutions should fix a transparent staff financial incentive scheme policy and promote a salary increment policy. Besides that, we believe that good planning and an effective supportive culture will help to improve the quality of higher education in Malawi. Institutions should work on peer coaching. Using peer coaching with international students can reduce cross-cultural communication issues and solve the problem of loneliness in the work environment.

Declarations

Acknowledgment

The authors sincerely thank the Ministry of Education for granting permission to collect data from higher education institutions in Malawi. Much more, the role played by relevant institutional leadership in facilitating timely, and coordinated data collection cannot be ignored.

Funding

This study did not receive funding from any institutions.

Credit Authors contribution

All authors made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data, drafted the article or revised it critically for important intellectual content; agreed to submit to the current journal, and gave final approval of the version to be published.

Declaration

We declare that this work is original and is not a copy of any other intellectual property. Researchers had no conflict of interest in this study.

References

- Alipova, O. (2017). Academic inbreeding and publication activities of Russian faculty Andrey Lovakov In press Tertiary Education and Management. doi:10.1080/13583883.2017.1395905.
- Altbach, P., education, J. K. studies in international, and 2007, undefined (2007). The internationalization of higher education: Motivations and realities. *journals.sagepub.com* 11, 290–305. doi:10.1177/1028315307303542.
- Artuc, E., Docquier, F., Özden, Ç., and Parsons, C. (2015). A Global Assessment of Human Capital Mobility: The Role of Non-OECD Destinations. *World Dev.* 65, 6–26. doi:10.1016/j.worlddev.2014.04.004.

- Arunasalam, N. D., and Burton, R. (2018). Investigating Malaysian Nurses' perspectives of intercultural teaching in transnational higher education learning environments. *Nurse Educ. Today* 69, 165–171. doi:10.1016/J.NEDT.2018.07.011.
- Bäker, A. (2015). Non-tenured post-doctoral researchers' job mobility and research output: An analysis of the role of research discipline, department size, and coauthors. *Res. Policy* 44, 634–650. doi:10.1016/j.respol.2014.12.012.
- Baker, J. A., Vassar, D., and Barrett, B. (2014). US-MEXICO ACADEMIC MOBILITY: TRENDS, CHALLENGES, AND OPPORTUNITIES.
- Bao, L., Deng, W., Huang, B., Gao, H., Liu, J., Ren, L., et al. (2020). The pathogenicity of SARS-CoV-2 in hACE2 transgenic mice. *Nature* 583, 830–833. doi:10.1038/s41586-020-2312-y.
- Benson, R. E. (1977). Defining Equality in Education. *Educ. Stud.* 8, 105–112. doi:10.1207/s15326993es0802_3.
- Bertoli, S., and Marchetta, F. (2015). Bringing It All Back Home - Return Migration and Fertility Choices. *World Dev.* 65, 27–40. doi:10.1016/j.worlddev.2013.08.006.
- Betru, T., and Hamdar, B. (1997). Pergamon. 17, 303–311.
- Cañibano, C., and Woolley, R. (2015). Towards a socio-economics of the brain drain and distributed human capital. *Int. Migr.* 53, 115–130. doi:10.1111/imig.12020.
- Choi, W. S., Kang, C. I., Kim, Y., Choi, J. P., Joh, J. S., Shin, H. S., et al. (2016). Clinical presentation and outcomes of middle east respiratory syndrome in the Republic of Korea. *Infect. Chemother.* 48, 118–126. doi:10.3947/ic.2016.48.2.118.
- Culbertson, S. S., Mills, M. J., and Huffman, A. H. (2011). Implications of Overqualification for Work–Family Conflict: Bringing Too Much to the Table? *Ind. Organ. Psychol.* 4, 252–255. doi:10.1111/J.1754-9434.2011.01337.X.
- Damoska Sekuloska, J. (2014). 182 19th International Scientific Conference; Economics and Management. *Procedia-Social Behav. Sci.* 156. doi:10.1016/j.sbspro.2014.11.182.
- Deardorff, D. K. (2016). Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization: <http://dx.doi.org/10.1177/1028315306287002> 10, 241–266. doi:10.1177/1028315306287002.
- Dembereldorj, Z. (2018). Review on the impact of world higher education rankings: Institutional competitive competence and institutional competence. *Int. J. High. Educ.* 7, 25–35. doi:10.5430/ijhe.v7n3p25.
- Deng, J., Wang, X., Zeng, L., Zou, X., and Huang, X. (2019). Dynamics of global institutional collaboration in insect taxonomy reveal imbalance of taxonomic effort. *Insect Conserv. Divers.* 12, 18–28. doi:10.1111/icad.12298.
- Djajić, S., and Vinogradova, A. (2015). Overshooting the savings target: Temporary migration, investment in housing and development. *World Dev.* 65, 110–121. doi:10.1016/j.worlddev.2014.01.015.
- Docquier, F. (2014). The brain drain from developing countries. *IZA World Labor*, 1–10. doi:10.15185/izawol.31.
- Elman, C., Gerring, J., and Mahoney, J. (2016). Case Study Research. *Sociol. Methods Res.* 45, 375–391. doi:10.1177/0049124116644273.

- Erdogan, B., and Bauer, T. N. (2009). Perceived Overqualification and Its Outcomes: The Moderating Role of Empowerment. doi:10.1037/a0013528.
- Fernández-Zubieta, A., Geuna, A., and Lawson, C. (2015). *What Do We Know of the Mobility of Research Scientists and Impact on Scientific Production*. Elsevier doi:10.1016/b978-0-12-801396-0.00001-6.
- Gallarza, M. G., Šerić, M., and Cuadrado, M. (2017). Trading off benefits and costs in higher education: A qualitative research with international incoming students. *Int. J. Manag. Educ.* 15, 456–469. doi:10.1016/J.IJME.2017.08.001.
- Gao, Y. (2019). Experiences of Chinese international doctoral students in Canada who withdrew: a narrative inquiry. *Int. J. Dr. Stud.* 14, 260–275.
- Gayef, A., and Hurdag, C. (2014). Quality assurance and the Bologna process in higher education. *J. Int. Sci. Publ.* 12, 949–956.
- Gobel, P., Thang, S. M., Sidhu, G. K., Oon, S. I., and Chan, Y. F. (2013). Attributions to success and failure in English language learning: A comparative study of urban and rural undergraduates in Malaysia. *Asian Soc. Sci.* 9, 53–62. doi:10.5539/ass.v9n2p53.
- GoM (2013). Government of the Republic of Malawi Education Policy. 1–24.
- Gube, J., Getenet, S., Satariyan, A., and Muhammad, Y. (2017). TOWards “operating within” the field: DOctoral students’ views of supervisors’ discipline expertise. *Int. J. Dr. Stud.* 12, 1–16. doi:10.28945/3641.
- Haahr, J. H. (2005). Explaining Student Performance Evidence from the international PISA , TIMSS and PIRLS surveys Explaining Student Performance Evidence from the international PISA , TIMSS and PIRLS surveys.
- Haseenav, A., College, M. E. S. A., and Vemablur, P. (2015). Aspects of quality in education for the improvement of educational scenario. 6, 100–106.
- Hazelkorn, E. (2013). ARROW @ TU Dublin How Rankings are Reshaping Higher Education. 0–8.
- Hazelkorn, E., Loukkola, T., and Zhang, T. (2014). *Rankings in Institutional Strategies and Processes: Impact or Illusion?*. Available at: http://arrow.dit.ie/cserrep%0Ahttp://www.eua.be/Libraries/Publications_homepage_list/EUA_RISP_Publication.sflb.ashx.
- Hepple, E., Alford, J., Henderson, D., Tangen, D., Hurwood, M., Alwi, A., et al. (2017). Developing intercultural learning in Australian pre-service teachers through participating in a short term mobility program in Malaysia. *Teach. Teach. Educ.* 66, 273–281. doi:10.1016/j.tate.2017.04.014.
- Horta, H., and Yudkevich, M. (2016). The role of academic inbreeding in developing higher education systems: Challenges and possible solutions. *Technol. Forecast. Soc. Change* 113, 363–372. doi:10.1016/j.techfore.2015.06.039.
- Huang, F., Daizen, T., and Kim, Y. (2019). Challenges facing international faculty at Japanese universities: Main findings from the 2017 national survey. *Int. J. Educ. Dev.* 71, 102103. doi:10.1016/J.IJEDUDEV.2019.102103.
- Huo, X., Cui, L. biao, Chen, C., Wang, D., Qi, X., Zhou, M. hao, et al. (2018). Severe human infection with a novel avian-origin influenza A(H7N4) virus. *Sci. Bull.* 63, 1043–1050. doi:10.1016/j.scib.2018.07.003.
- Hussain, S. M. (2015). Reversing the Brain Drain: Is it Beneficial? *World Dev.* 67, 310–322. doi:10.1016/j.worlddev.2014.10.023.

- Kercher, J. (2018). Academic success and dropout among international students in Germany and other major host countries. *DAAD Focus*, 1–23.
- Khozaei, F., Naidu, S., Khozaei, Z., and Salleh, N. A. (2015). An exploratory study of factors that affect the research progress of international PhD students from the middle east. *Educ. Train.* 57, 448–460. doi:10.1108/ET-09-2013-0115.
- Kreber, C. (2009). Different perspectives on internationalization in higher education. *New Dir. Teach. Learn.*, 1–14. doi:10.1002/TL.348.
- Lathabai, H. H., Nandy, A., and Singh, V. K. (2021). Expertise-based institutional collaboration recommendation in different thematic areas. *CEUR Workshop Proc.* 2847, 45–52.
- Licuanan, V., Omar Mahmoud, T., and Steinmayr, A. (2015). The Drivers of diaspora donations for development: Evidence from the philippines. *World Dev.* 65, 94–109. doi:10.1016/j.worlddev.2014.05.010.
- Maringe, F., and Foskett, N. (2012). *Globalization and internationalization in higher education: Theoretical, strategic and management perspectives.*
- Maynard, D. C., and Parfyonova, N. M. (2013). Perceived overqualification and withdrawal behaviours: Examining the roles of job attitudes and work values. 2440, 435–455. doi:10.1111/joop.12006.
- Mazzarol, T., and Soutar, G. N. (2002). “Push-pull” factors influencing international student destination choice. *Int. J. Educ. Manag.* 16, 82–90. doi:10.1108/09513540210418403.
- Mihut, G., de Gayardon, A., and Rudt, Y. (2016). “The long-term mobility of international faculty: A literature review,” in *International Faculty in Higher Education: Comparative Perspectives on Recruitment, Integration, and Impact* doi:10.4324/9781315543437.
- Millington, A., and Jepson, W. (2008). Land change science in the tropics: Changing agricultural landscapes. *Land-Change Sci. Trop. Chang. Agric. Landscapes*, 1–273. doi:10.1007/978-0-387-78864-7.
- Munthali, G. N. C., and Xuelian, W. (2020). Covid-19 outbreak on Malawi perspective. *Electron. J. Gen. Med.* 17, 1–3. doi:10.29333/ejgm/7871.
- Muthanna, A., Guoyuan, S., and Sang, G. (2017). Conflict at higher education institutions: factors and solutions for Yemen Compare: A Journal of Comparative and International Education Conflict at higher education institutions: factors and solutions for Yemen Conflict at higher education institutions: . *Compare*. doi:10.1080/03057925.2017.1298434.
- O'Brien, B., Tuohy, D., Fahy, A., and Markey, K. (2019). Home students' experiences of intercultural learning: A qualitative descriptive design. *Nurse Educ. Today* 74, 25–30. doi:10.1016/J.NEDT.2018.12.005.
- Odhambo, G. (2012). Brain Drain in Higher Education: Lost Hope or Opportunity? *Bulg. Comp. Educ. Soc.*, 265–270. Available at: <https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED567064&site=ehost-live>.
- Pandey, D., Gul, R., Canete, J. J. O., Rocha, I. A. N. C. N., Gowwrii, G., Pandey, B. K., et al. (2021). MENTAL STRESS IN ONLINE LEARNING DURING THE PANDEMIC: AN ASSESSMENT OF LEARNERS ' PERCEPTION. 6, 37–49.
- Peter, S. D. N., and Pandey, D. (2020). CURRENT ADVANCEMENTS ON THE EFFICACY OF CONVALESCENT PLASMA AS A POTENTIAL PROMISING TREATMENT FOR COVID-19. *Asian J. Adv. Med. Sci.* 2, 7–12.
- Revisi, C. D. E., and Lamas, A. (2015). School Performance. 3.

Rogers, M., and Brittle, K. (2014). The Benefits of Cross- Institutional Collaboration What is Collaboration ?

Sample Size Calculator (2020).

Scientific-Methodological, F. S.-M. E., and 2020, undefined Internationalization of higher education: definition and description. *uzjournals.edu.uz* 2020, 47.

Sekuloska, J. D. (2014). Higher Education and Training as Crucial Pillars in Creating the Competitiveness of Nation. *Procedia - Soc. Behav. Sci.* 156, 241–246. doi:10.1016/j.sbspro.2014.11.182.

Sidhu, G. K., Kaur, S., Fook, C. Y., and Yunus, F. W. (2014). Postgraduate Supervision: Comparing Student Perspectives from Malaysia and the United Kingdom. *Procedia - Soc. Behav. Sci.* 123, 151–159. doi:10.1016/j.sbspro.2014.01.1409.

Singh, J. K. N. (2020). Academic failure: Unspoken experiences by international postgraduate students in a Malaysian university. *IAFOR J. Educ.* 8, 79–94. doi:10.22492/ije.8.4.05.

Smyth, R., and Mishra, V. (2014). Academic inbreeding and research productivity and impact in Australian law schools. *Scientometrics* 98, 583–618. doi:10.1007/s11192-013-1052-2.

Spencer-Oatey, H., and Dauber, D. (2019). Internationalisation and student diversity: how far are the opportunity benefits being perceived and exploited? *High. Educ.* 78. doi:10.1007/s10734-019-00386-4.

Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *SSRN Electron. J.* doi:10.2139/ssrn.3205035.

Tanhueco-Nepomuceno, L. (2019). Internationalization among selected HEIs in the ASEAN region: Basis for a proposed framework for an internationalized campus. *Int. J. Educ. Dev.* 65, 152–171. doi:10.1016/J.IJEDUDEV.2018.07.003.

The_World_University_Rankings (2021). World University Rankings January to March 2021 data collection. 1–42.

Times Higher Education (2021). THE World University Rankings 2021: methodology | Times Higher Education (THE). *Times High. Educ.*, 1–16. Available at: <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2021-methodology>.

W. Kramer, M. (2020). Addressing Doctoral Student “Failure”: Catching Lost Souls. *World J. Educ. Humanit.* 2, p97. doi:10.22158/wjeh.v2n3p97.

Wen, W., Hu, D., and Hao, J. (2018). International students’ experiences in China: Does the planned reverse mobility work? *Int. J. Educ. Dev.* 61, 204–212. doi:10.1016/j.ijedudev.2017.03.004.

Xuelian, W. (2020). The Future of Tobacco Industry Amidst of COVID-19 -A Case of Malawi Producing Country. *Biomed. J. Sci. Tech. Res.* 27, 21104–21109. doi:10.26717/BJSTR.2020.27.004566.

Yan, G., Yue, Y., and Niu, M. (2015). An empirical study of faculty mobility in China. *High. Educ.* 69. doi:10.1007/s10734-014-9789-y.

Yu, S., Munthali, G. N. C., Xuelian, W., and Kudzala, J. F. (2021). Effects of Government Actions on Safety and Security Perceptions of International Students during COVID-19 Pandemic in China. *Asian J. Med. Heal.*, 70–82. doi:10.9734/ajmah/2021/v19i430323.

Tables

Table 1 Variables Definitions

	Variable Name	Variable Definition
1	Gender	1=Male, 0 Female
2	Age-Group	1=Below 30, 2=31-40,3=Above 41
3	Nature	1=Student,2=Officer,3=Lecturer, 4=Alumni
4	Qualification	1=Studying towards first Degree (If undergraduate 1), 2=BD,3=MD,4=PhD
5	Academic rank	1=Student, 2= high school teacher, 3=Lecturer,4=Senior Lecturer 5=others (Ass.Prof,Prof,Direct,etc)
6	Experience	1=Not Yet Employed, 2=Less than 5years, 3=Above 5 years
7	Experience No=	1=Less than 5, 2=Above 5 less 10, 3=above 10
8	Likert Scale	1=SD,2=D,3=N,4=A,5=SA

Table 2 Descriptive Characteristics of the Respondents (N=212)

<i>Variable</i>	<i>Category</i>	<i>F</i>	<i>%</i>
Gender	Female	77	36.3
	Male	135	63.7
Age-Group	Below 30	90	42.5
	31-40	70	33
	41 +	52	24.5
Occupation	Student	103	48.6
	Officer	54	25.5
	Lecturer	52	24.5
	Alumni	3	1.4
Academic qualification	Studying towards BA	79	37.3
	BD	38	17.9
	MD	76	35.8
	PhD	19	9
Academic rank	Student	73	34.4
	High School teacher	17	8
	Lecturer	76	35.8
	S. Lecturer	2	0.9
	Other (Dir. Prof.Mg etc.)	44	20.8
Experience	Not yet employed	84	39.6
	Less than 5	49	23.1
	5+	79	37.3
Expatriates-No	Less than 5	97	45.8
	Above 5 below 10	83	39.2
	10+	32	15.1

Table 3 Factors determining/affecting the Quality of Higher Education in Malawi using a Multilinear regression analysis

Model 1				
Variables	<i>B</i>	P-Values	95.0% CI	
(Constant)	6.497	0.000	[6.298-6.696]	
Gender	0.014	0.803	[-0.1-0.128]	
Age-Group	-0.047	0.423	[-0.162-0.068]	
Occupation	-0.131	0.002***	[-0.213-0.049]	
Academic qualification	-0.106	0.013**	[-0.19-0.023]	
Academic rank	0.114	0.000***	[0.069-0.159]	
Experience	0.083	0.117*	[-0.021-0.186]	
ClearPolicyonMobility	0.146	0.004***	[0.047-0.246]	
MobilityImportance	-0.116	0.022**	[-0.215-0.017]	
InstitutionalCollaboration	0.326	0.000***	[0.27-0.383]	
Number of Observation	212			
R-Squared	0.168	49.4		
F-Value	6.898***	43.288***		
DF	[6,205]	[3,202]		
Durbin Watson	1.683			

Note: *, **, *** statistical significance at 10%, 5% and 1% respectively. a Dependent Variable: improve HE Quality

Table 4 Statement of Hypothesis Results, N/A note statistically significant, + positive statistically significant, - negative statistically significant.

Variables	Results	Accept/Reject
Respondents' gender	N/A	Reject
Age-Group	N/A	Reject
Occupation	-	Accept
Academic qualification	-	Accept
Academic rank	+	Accept
Experience	N/A	Reject
ClearPolicyonMobility	+	Accept
MobilityImportance	-	Accept
InstitutionalCollaboration	+	Accept

Figures

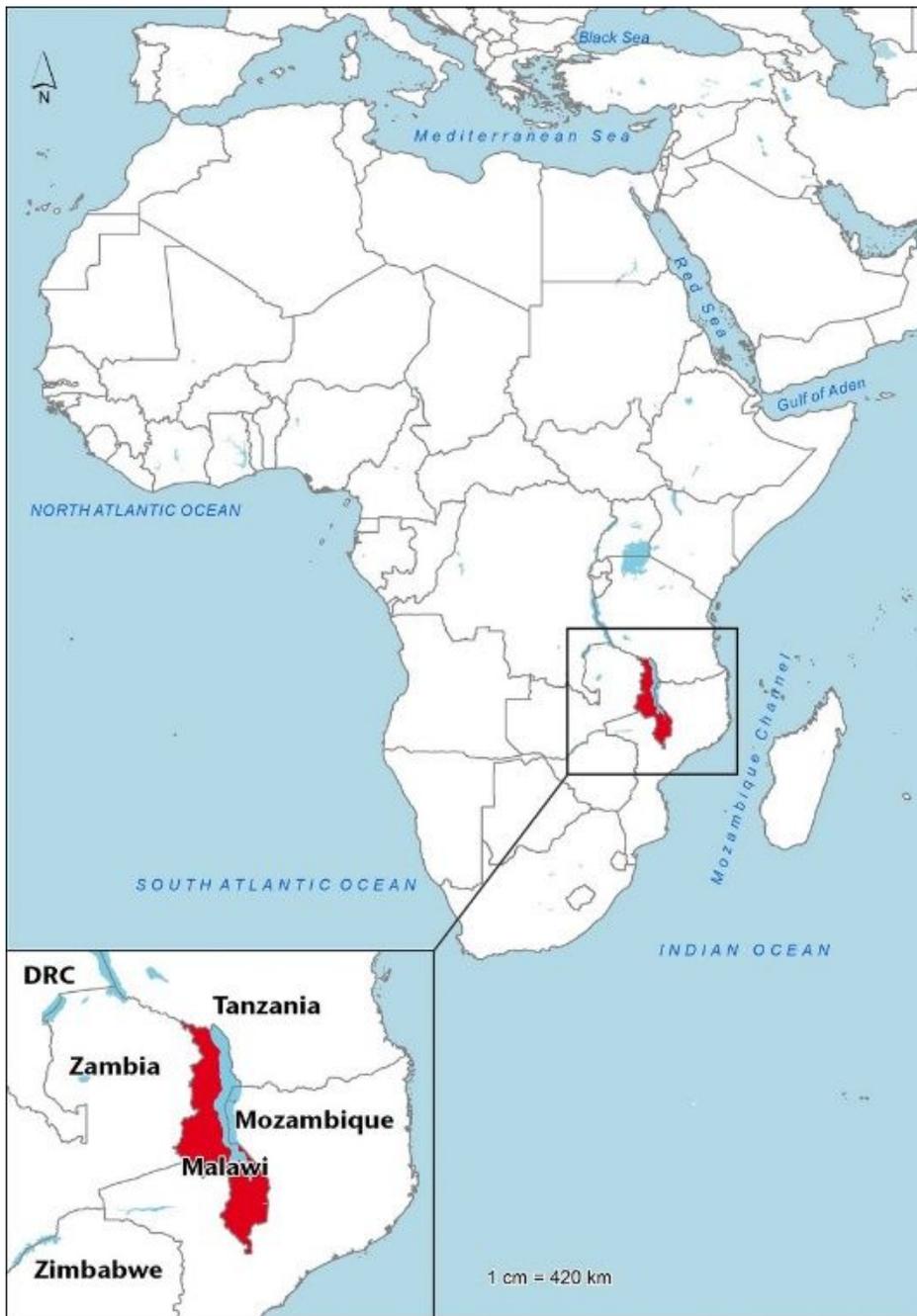


Figure 1

Showing the Study Area of Malawi