EFFECTS OF BRAIN DRAIN ON PERFORMANCE OF PUBLIC INSTITUTIONS IN KENYA: A CASE STUDY OF KENYA AGRICULTURAL RESEARCH INSTITUTE

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ABSTRACT
The outflow of professionals is narrowed in the non-academic literature and limited to the migration of engineers, physicians, scientists or other very highly-skilled professionals with university degree. As such, the achievement of many developing countries' development is threatened or hampered due to inadequate human resources and the emigration of others. It is against this background that the study sets out to find out the effect of brain drain on the performance of public institutions with reference to research scientists at KARI. More specifically, the study sought to establish the effects of brain drain on employee’s morale at KARI; to investigate the effect of brain drain on organization efficiency at KARI; to establish the effect of brain drain on operational budget at KARI; and to determine the effects of brain drain on organizational resources. The study takes a case study design that aims at assessing the effects of brain drain in public institutions in Kenya with reference to research scientists at the Kenya Agriculture Research Institute (KARI) Research Scientists. The target population comprised 970 employees at the institute’s headquarters, based in Nairobi for. Quota sampling was employed, as part of non-probability sampling to get the desired sample size necessary for the study. To this end, sample sizes of 97 respondents were arrived at. The study used primary data which was quantitative and descriptive in nature. Descriptive analysis was conducted, which involved the use of frequencies in their Mean and standard deviations were used as measures of central tendencies and dispersion respectively. Descriptive analysis such as percentages, mean, standard deviation and frequencies as well as inferential statistics (regression analysis) was used to analyze the quantitative data. Data were presented in tables and figures, bar charts and pie charts. Data was analyzed using Standard Package for Social sciences (SPSS) version 21. The study Findings established that Employee morale positively impacts on the brain drain of the organization hence reducing brain drain. Recognized as one of the major factors affecting productivity and overall financial stability of any business, low morale may lead to reduced concentration, which in turn can cause mistakes, poor customer services and missed deadlines. It
also can contribute to a high turnover rate and absenteeism. Employee morale proves to be detrimental to the business in these respects. Morale can drive an organization forward or can lead to employee discontent, poor job performance, and absenteeism. Therefore employee morale is important in lowering incidence of brain drain. Organizational efficiency positively affects the brain drain of the institutions. Increased efficiency is associated with quality output, meeting demands of customers on time and quality provision of services. A high-performing organization attains valuable results by using a clearly understood strategy and a simplified design for structure, systems and processes. Employees are contributing partners to the organization, understand the business and are committed to getting the best results. Budgetary allocation affects the effective of employees in the public institutions. The study also concludes that public institutions experienced decreased innovation as a result of brain drain. Skilled professionals like doctors, academicians, lawyers, IT experts migrate to developed countries for greener pastures thereby depriving Kenya innovative ventures.

Keywords: Effects of Brain Drain on Performance of Public Institutions

Introduction

Stark (2005) describes Brain drain as a kind of trap for developing countries, which are deprived of their most highly-educated people who would be natural leaders in terms of economic and social development, are unable to come out of poverty, which is often worsened by violence and extremism, as well as passiveness and hopelessness. The achievement of many developing countries' Millennium Development Goals and particular national targets is threatened or hampered due to inadequate human resources and this situation is compounded by the loss of both essential and beneficial professionals such as scientists, medical researchers, engineers, academics, nurses, technicians, administrators and managers who immigrate to more economically-developed countries (Dassin, 2005).

Approximately 3% of the world's population live in a country other than their country of birth (Kirigia et al, 2006). International migration is an established feature of contemporary economic, social and political life, driven by the seemingly-unstoppable forces of globalization and demography. Modern communications and transportation ensure that more and more people have access to formerly distant and unreachable lands of promise with regard to their well-being and progress. It is only the matter of the last two decades that the availability of new communication technologies have made the former sporadic, exceptional and limited connections more systematic, dense and multiple (Luthria, 2009).

The term “brain drain”, although considered by some authors (Clemens, 2009) as old-fashioned and pejorative, is still used to describe the international movement of resources in the form of human capital, represented by relatively highly-educated individuals, from developing countries to wealthier ones. The outflow of these professionals is narrowed in the non-academic literature and limited to the migration of engineers, physicians, scientists or other very highly-skilled professionals with university degree (Newland, 2009). In scientific analyses of census data, however, skilled immigration is defined with the inclusion of professionals with advanced degrees, workers with tertiary education, mid-level technical personnel and professional workers. Skilled labour migration also includes: scientific trainees studying at Master's degree and PhD
levels who go overseas for training but do not return upon completion of their studies; professionals who receive advanced training in developed countries, return upon completion of their studies and then emigrate again after working for some period; and professionals who are trained in domestic institutions but emigrate upon completion of their studies and/or after working for some period of time (Stark, 2005).

More statistics have shown that sub-Saharan Africa, skilled workers only make up 4% of the total domestic workforce, but these skilled workers comprise more than 40% of people leaving the country. Nurse and Jones (2009), using recent US data on migration rates by education levels relating 150 countries, found that most countries combining low levels of human capital and low migration rates of skilled workers tend to be positively affected by the brain drain. In contrast, the brain drain has negative growth effects in countries where the migration rate of the highly educated is above 20%, and/or where the proportion of people with higher education is above 5%. An obvious and noted regularity is that countries with higher GDP per capita have lower skilled migration rates (Mattoo et al, 2008).

There are a number of consequences of brain drain in Africa: the countries of this continent lose their best human resources and the funds invested in training them, and then additionally have to pay to employ expatriates to fill abandoned positions. This is a well-known effect, yet the overall and up-to-date statistics on these losses and burdens on the continental scale are not available. These authors found that the share of emigrants with tertiary education is much higher than the share of the unskilled. A significant imbalance also concerns emigration rates in terms of education level. In case of emigration to the USA in 1990, 11% of émigrés from Kenya was educated at tertiary/university level, while only 0.3% of those with only secondary education, and 0.1% of those with only primary educated was admitted (Docquier and Marfouk, 2006).

Statement of the Problem

According to the African Capacity Building Foundation there is a decline in performance of public institutions due to brain drain. The implications for poor source-countries are stark. African countries lose 20,000 skilled personnel to the developed world every year (Lucas, 2005). All the developed world's efforts to increase aid to these countries may not matter if the local personnel required to implement development programs are absent. Every year there are 20,000 fewer people in Africa to deliver key public services, drive economic growth, and articulate calls for greater democracy and development. That something needs to be done about brain drain is not in question (Kirigia et al, 2006). Workforce mobility is a real fact of our times, among both managers and workers (Popescu, 2013). Kenya is believed to be the most affected in absolute numbers by the outflow of skilled workers, higher percentages of resourceful people leaving the country at an alarming rate of 26%.

Kirigia, et al (2006) have analyzed the levels of international skilled emigration to OECD countries in 1990 and 2000, and have placed Kenya in the 29th position, with an emigration rate of 38.4%. When the sample was restricted only to countries with populations over 5 million, Kenya ranked fourth in brain drain intensity, while among African countries, it occupied third place. The number of arrivals of skilled workers from Kenya to the EU-15 was only 38% in 2000, in a sharp contrast to the 82% who arrived in the USA. Countries in Sub-Saharan Africa have lost a tremendous amount of their educated and skilled populations as a result of emigration
to more developed countries, which has harmed the ability of such nations to get out of poverty (WHO, 2012). In the absence of systematically-gathered and credible material, the brain drain debate remains almost exclusively theoretical, political, anecdotal and emotional (Lucas, 2005).

It is upon this basis that this study was conducted. A turn out trend of an increasing number of research staff has been evident at KARI and other government agencies. Between 2004 and 2013, KARI has experienced high staff turnover with 987 researcher scientists leaving the Organization. Within the period, 19.7% of the staff who left was scientists; this proportion was highest in 2011 (26.5%), 2012 (31.7%) and 2013 (29.2%). Of the scientist who left, 73.2% resigned from KARI which is attributable to brain drain (KARI, 2014). This study therefore seeks to assess the effects of brain drain in public institutions with reference to KARI researchers.

**Objectives of the Study**

**General Objective**

To assess the effects of brain drain on performance of public institutions in Kenya: A case study of KARI

**Specific Objectives**

i. To find out the extent to which employee morale affects organizational performance in Kenya

ii. To determine how organization efficiency affects organizational performance in Kenya.

iii. To examine how organization operational budget affects organizational performance in Kenya.

iv. To establish the extent to which organizational resources affects organizational performance in Kenya.

**Literature Review**

**Herzberg’s Theory of Motivation**

Herzberg (1968) was one of the best known of all the theorists on motivation. He was well-known for his formal job analysis methods and his ideas on employee morale, particularly on job enrichment, improvement, enlargement and rotation. His ideas on motivation in the hygiene-motivation theory was particularly useful to help the average manager understands what motivates people. His theory attempted to explain the factors that motivate individuals through identifying and satisfying their individual needs, desires and the aims pursue to satisfy these desires (Herzberg, 1968). His original research was undertaken in the offices of engineers and accountants rather than on the factory floor and involved interviewing as much as two hundred employees. The goal was to determine work situations where the subjects was highly motivated and satisfied instead of the opposite and his research was later paired with many studies involving a broader sampling of professional (Herzberg et al 1968).

**The Open-Systems Theory**
Traditional theories regarded organizations as closed systems that were autonomous and isolated from the outside world. In the 1960s, however, more holistic and humanistic ideologies emerged. Recognizing that traditional theory had failed to take into account many environmental influences that impacted the efficiency of organizations, most theorists and researchers embraced an open-systems view of organizations (Boulding, 1956). The term "open systems" reflected the newfound belief that all organizations are unique in part because of the unique environment in which they operate and that they should be structured to accommodate unique problems and opportunities. For example, research during the 1960s indicated that traditional bureaucratic organizations generally failed to succeed in environments where technologies or a market was rapidly changing. They also failed to realize the importance of regional cultural influences in motivating workers (Byeon, 2005).

**Resource Dependency Theory**

Resource dependence was originally developed to provide an alternative perspective to economic theories of mergers and board interlocks, and to understand precisely the type of inter-organizational relations that have played such a large role in recent ‘market failures’ (Pfeffer, 2013). The motivation of those running the organization was to ensure the organization’s survival and to enhance their own autonomy, while also maintaining stability in the organization’s exchange relations. These were the drivers behind many of the organization’s observed actions. Moreover, when it came to explaining strategy, power often trumped profits, an insight distinctly at odds with the dominant economic approaches of the time. The emphasis on power, and a careful articulation of the explicit repertoires of tactics available to organizations, is a hallmark of resource dependence theory that distinguishes it from other approaches, such as transaction cost economics.

**The Resource Based View Theory**

The resource based view of the firm (RBV) according to Werner felt et al (1984), explains that each firm has resources and capabilities, and that there are resources that can be exploited and become sources of competitive advantage under certain conditions. The foundations of RBV defer from previous paradigms in which other theories of the firm was built upon. The assumptions that the firms have a competitive advantage because they have heterogeneous resources and that these resources are immobile do not hold under RBV; here, it is assumed that there may be heterogeneity in the strategic resources firms have, and that there is imperfect mobility in the market of these strategic resources, thus allowing the possibility that firms may achieve a lasting advantage (Barney, 1991).

A resource means anything which could be thought of as a strength or weakness of a given firm. More formally, a firm's resources at a given time could be defined as those (tangible and intangible) assets which are tied semi permanently to the firm (Caves, 2010). Examples of resources are: brand names, in-house knowledge of technology, employment of skilled personnel, trade contacts, machinery, efficient procedures, capital, etc. Most products require the services of several resources and most resources can be used in several products.
Empirical Review

Recent developments in the migration literature, however, have identified a series of positive feedback effects. Starting from Mountford (2007), it is demonstrated that increased migration prospects for the highly skilled could stimulate more human capital formation, thanks to higher expected returns to education; thus, in countries with low emigration rates among the highly skilled, their post-migration human capital stocks may increase as a result.

Furthermore, Diaspora at the destination countries may reduce information related investment risks and is shown to spur FDI at the origin countries (Kugler and Rapoport, 2007; Docquier and Lodigiani, 2009). Through immigrants’ ties with their home countries, Diaspora may also lower transaction costs, and empirical evidence suggests that it encourages bilateral trade flows (Gould, 2008; Head and Ries, 2008). While the aforementioned network externalities are not specific to more educated migrants, high-skilled Diaspora nevertheless plays a unique role in promoting international technology diffusion, which raises the total factor productivity (TFP) in immigrants’ home countries (Kerr, 2008).

Arguably, the list of potentially positive effects of Diaspora may also include transfers of norms, which could alter fertility behavior (Beine et al., 2009) or bring about institutional reforms (Spilimbergo, 2009), and thus indirectly enhancing economic development at the origin. Docquier and Rapoport (2003) show that while the prospect of migration can protect ethnic and religious minorities from excessive discrimination when international mobility is free, restrictions on mobility can paradoxically increase emigration and domestic discrimination beyond their closed economy level. Mariani (2007), on the other hand, extended the allocation of talent model developed by Murphy, Shleifer, and Vishny (2011) to show that migration can decrease the fraction of highly skilled workers who opt for rent-seeking activities, thereby offering another channel through which highly skilled emigration can enhance growth.

Todaro (2006) argues that when foreign and domestic needs differ, the cost of such distortions in the supply of skills can be quite large. To give an extreme example, doctors contemplating emigration may choose to study geriatrics instead of pediatrics, meaning that if they end up not migrating, their skills are likely to be partly affected. A similar argument was made recently by Di Maria and Stryszowski (2009) in relation to productivity growth: they assume that adoption and innovation require different types of human capital and, as in our model that a poor country’s productivity growth relies mainly if not exclusively on its capacity to adopt new technologies. Since migration prospects tend to drive human capital investments away from fields useful for adoption, poor countries may not benefit from their additional human capital even if would-be migrants end up remaining in the home country. This is a form of migration-induced brain waste.

Brain waste also occurs when people invest in skills they end up not using even if they succeed in migrating (Mattoo, Neagu, and Özden 2008). Such brain waste may be due to a host of possible circumstances such as lack of information about job market opportunities, discounting of skills due to imperfect transferability of human capital, or purposeful acquisition of a signal aimed at increasing one’s chance of emigration. However, empirical evidence suggests brain waste is a second order phenomenon and will therefore be neglected in what follows.
Beine, Docquier, and Rapoport (2008) confirmed this result using Docquier and Marfouk’s (2006) estimates of emigration rates for the highest (tertiary) education level as their measure of brain drain in a cross section of 127 developing countries. They obtain an elasticity of 0.054 in the short run and of 0.226 in the long run, in both their OLS and IV regressions.

Taken literally, this means that doubling high-skill emigration prospects multiplies the proportion of highly skilled natives by 1.054 after ten years and by 1.226 in the long run. This is not negligible for countries where the average proportion of highly educated people typically lies between 2 to 8 percent. Similar results was obtained using alternative brain drain estimates (controlling for whether migrants acquired their skills in the home or the host country), alternative definitions of human capital (e.g., school enrollment, youth literacy), and alternative functional forms (Beine et al, 2010).

**Research Methodology**

This study adopted a descriptive research design. Donald (2006) notes that a research design is the structure of the research, it is the “glue” that holds all the elements in a research project together. Further, Orodho (2003) defines a research design as the scheme, outline or plan that is used to generate answers to research problems. The study took a case study design that aims at assessing challenges of brain drain in public institutions in Kenya with reference to research scientists at the Kenya Agriculture Research Institute (KARI) Research Scientists.

The study used questionnaires with closed ended and open ended questions (semi structured). The questionnaires had descriptive statements in a 5-point Likert scale in which respondents were required to rate by scoring the extent to which they perceived a particular statement is descriptive of the force of brain drain in the organization.

**Data Analysis/Findings**

**Correlation Co-efficient**

Correlation analysis was used to determine both the significance and degree of association of the variables. The correlation technique is used to analyze the degree of relationship between two variables. It varies between -1 and +1 with both ends of the continuum indicating perfect negative and perfect positive relationship between any two variables respectively. The results of the correlation analysis are summarized in Table 4.16.
Table 4.1: Pearson Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>EM</th>
<th>OE</th>
<th>OB</th>
<th>OR</th>
<th>BD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OE</td>
<td>0.876</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OB</td>
<td>0.857</td>
<td>0.872</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>0.718</td>
<td>0.815</td>
<td>0.838**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>BD</td>
<td>0.827</td>
<td>0.843</td>
<td>0.863</td>
<td>0.814</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The finding revealed that brain drain is strongly positively correlated with operational budget (OB) closely followed by organizational efficiency (OE) while employee morale (EM) and organizational resources (OR) are also positively correlated with brain drain. On average, a moderate relationship was established given a Pearson correlation coefficient of between 0.863 and 0.814. A stronger relationship was established between brain drain and operational budget (OB) given a coefficient of 0.863; this was followed by organizational efficiency at 0.843. The findings also give a correlation between brain drain and employee morale at 0.827 and a correlation between brain drain and organizational resources at 0.814.

The study deduced that operational budget would affect brain drain in the organization because of the costs incurred in the hiring and training to replace those who leave. The organization would take a longer time to find a match qualified personnel to fill in the gap left in the organization in the event of brain drain. According to Graham and Harvey’s (2001) that a good budgeting process engages those who are responsible for adhering to the budget and implementing the organizations objectives in creating the budget. Both finance committee and senior staff participation is built into the process and a timeline is established leaving adequate time for research, review, feedback, revisions, etc. before the budget is ready for presentation to the full board.

**Regression equation**

The study conducted regression analysis to assess the effects of brain drain on brain drain of public institutions in Kenya with reference to KARI research scientists.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

The table below shows the results for the goodness of fit statistics.

**Goodness of Fit Statistics**
The study also established the goodness of fit for the model. This was to check on the significance of explanatory variable in explaining the variation in brain drain. The Analysis of Variance (ANOVA) was used to check how well the model fits the data. The results are presented in table 4.16.

Table 4.2: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.403&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.672</td>
<td>.653</td>
<td>1.104</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Employee morale, organizational efficiency, operation budget, organization resources.

Analysis in table above shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R square equals 67.2%, which implies that 67.2% of the total variation in brain drain is attributed to the changes in explanatory variables (Employee morale, organizational efficiency, operation budget, organization resources).

Determination coefficients (R<sup>2</sup>) were also carried out to determine the strength of the relationship between independent and dependent variables. The study established an adjusted R<sup>2</sup> of 0.672. R<sup>2</sup> of 67.2% indicates that 67.2% of the variation in brain drain is attributed to changes in the independent variables.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5.247</td>
<td>9</td>
<td>2.094</td>
</tr>
<tr>
<td>Residual</td>
<td>24.753</td>
<td>73</td>
<td>.676</td>
</tr>
<tr>
<td>Total</td>
<td>34.000</td>
<td>82</td>
<td></td>
</tr>
</tbody>
</table>

Note: df = degrees of freedom; F = Anova; α = level of significance; F<sub>o</sub> = calculated value of F; F<sub>c</sub> = the critical value of F; α<sub>o</sub> = calculate value of α; and α<sub>c</sub> = the critical value of α.

a. Dependent Variable: Brain Drain (BD)

b. Predictors: (Constant), Employee morale, organizational efficiency, operation budget, organization resources.
The above summary of the basic logic of ANOVA is the discussion of the purpose and analysis of the variance. The purpose of the analysis of the variance is to test differences in means (for groups or variables) for statistical significance. The accomplishment is through analyzing the variance, which is by partitioning the total variance into the component that is due to true random error and the components that are due to differences between means. The ANOVA analysis is intended to investigate whether the variations in the independent variables explain the observed variance in the outcome – in this study the brain drain.

The ANOVA results indicate that the independent variables significantly $F (df_b, df_w) = 2.094 p<0.05; F(5,150=2.094 p<0.05$ explain the variance in Brain Drain. In this context, as have been presented in the table above, the dependent variable is the brain drain whilst the independent or the predictors, Employee morale, organizational efficiency, operation budget, organization resources.

**Regression Coefficients**

Multiple regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. This analysis was used to answer the questions; how do the independent variables influence the dependent variable collectively; to what extent does each independent variable affect the dependent variable in such a collective set-up, and; which are the more significant factors? The results are given in the model summary in Table 4.19.

**Analysis of Findings**

**Table 4.3: Regression Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.53</td>
<td>.884</td>
<td>.729</td>
</tr>
<tr>
<td>Employee morale</td>
<td>.22</td>
<td>.010</td>
<td>.373</td>
</tr>
<tr>
<td>Organizational efficiency</td>
<td>.35</td>
<td>.027</td>
<td>-.216</td>
</tr>
<tr>
<td>Operational budget</td>
<td>.76</td>
<td>.882</td>
<td>.130</td>
</tr>
<tr>
<td>Organizational resources</td>
<td>.85</td>
<td>.92</td>
<td>.095</td>
</tr>
</tbody>
</table>
From the regression analysis, the following model was established:

\[ Y = 0.53 + 0.22 X_1 + 0.35 X_2 + 0.76 X_3 + 0.85 X_4 \]

\( Y \) = Organizational Performance

\( X_1 \) = Employee Morale

\( X_2 \) = Organization Efficiency

\( X_3 \) = Operational budget

\( X_4 \) = Organization Resources

All the explanatory variables are significant at 5\% level of significance in explaining the variation in brain drain on Organisational Performance. Going by the rule of the thumb, at level of significance of 5\% the P-values are less than 0.05 hence the explanatory variables are important in explaining the changes in organizational performance. The regression result indicates that holding all factors constant, the organizational performance increases by 0.53, a unit increase in employee morale leads to 0.22 increase in organizational performance; a unit increase in organizational efficiency leads to 0.35 increase in organizational performance; a unit increase in operation budget leads to 0.76 increase in organizational performance and a unit increase in organizational resources leads to 0.85 increase in organizational performance.

Discussion

The study adopted descriptive research design. Stratified sampling technique was used to identify the right sample. A sample size of 97 respondents was selected from a list of 970 employees of KARI. A questionnaire with both structured and semi-structured questions was the key data collection instrument. Cronbach’s alpha co-efficient above 0.7 was accepted in reliability test. Quantitative and qualitative data analysis methods were used. Regression and correlation were used in analysis of inferential statistics. Analyzed data was presented using frequency tables, graphs and charts. From the study, the response rate of was 85\% and the respondents had different levels of education.

Employee Morale

The first objective of the study was to assess the effects of brain drain on employee morale at KARI. The results revealed that majority of the respondents (76.8\%) indicated that brain drain affects the morale of employees of KARI. This is similar to the findings of Ikenwilo (2013) who found that brain drain leads to low morale which may eventually cause some health care professionals to leave their countries. The respondents cited depression and lack of motivation as some of the effect of brain drain on employee’s morale. Employees who remain behind feel demotivated which impacts negatively on their morale. Employee’s loss of morale affects their performance resulting to low output for the institution.
Organizational Efficiency

The second objective of the study was to investigate the effect of brain drain on organization efficiency. The findings of the study revealed that brain drain affects organization efficiency. The study also established that brain drain contributes to a decrease in quality of research based activities. Respondents further agreed that brain drain has contributed to a decrease in innovation as few or no researchers are available at KARI to conduct research work. Efficiency also is affected when certain people are missing and especially where they work as teams. Efficiency also is affected in terms of flow of work or various lead times are increased say in supply of various organizational requirements. Eventually, this affects the overall performance of institutions.

Organizational Operational Budget

The third objective of the study was to determine how brain drain affects organization. The study established that brain drain affects organization operation budget. Mostly public institutions have a budget that is government sponsored. When brain drain occurs they have to adjust or alter the existing budget to cater for new expenses such as recruiting costs, training costs and salary costs just to mention but a few. The government at times delays before disbursing more funds to the organizations and as a result inefficiency of work leads to poor performance of the mandate the organizations are expected to meet.

Organization Resources

The fourth objective of the study was to investigate the effect of brain drain on organization resources. The study revealed that brain drain affect organization resources. From the findings a majority of the respondents agreed that skill loss resulting from brain drain has led to poor achievement of organizational goals and the rate of production has gone low as a result of skill loss to brain drains. The organization experiences increased expenses in miscellaneous expenses especially injuries resulting from unskilled use of equipment implementation and loss of patronage has been experienced due loss of skill in the organization to brain. The resource of time is wasted in bringing in new hires and also in forming new teams. This resource would have been utilized in adding value to the organization. Loss of the human resource was also considered detrimental to the performance of the organization.

Conclusions

Brain drain positively impacts on the morale of employees in organizations. Recognized as one of the major factors affecting productivity and overall financial stability of any business, low morale may lead to reduced concentration, which in turn can cause mistakes, poor customer services and missed deadlines. It also can contribute to a high turnover rate and absenteeism. Employee morale proves to be detrimental to the business in these respects. Morale can drive an organization forward or can lead to employee discontent, poor job performance, and absenteeism. Therefore employee morale is important in lowering incidence of brain drain.
Brain drain affects resources in an organization. These resources are the tangible and intangible assets firms use to develop and implement their strategies. Organizational resources are variable in general models of organizational performance. Organizational resources are usually treated as environmental factors or constraints rather than the main variables of interest. These resources include the human resources, assets and time to mention but a few.

Acknowledgement

My thanks goes to the almighty God for it is by His grace that I have come this far. Secondly, I am grateful to my University Supervisor Mr. Allan Kihara for his tireless assistance, valuable support and initiative which guided and enriched in completing my research project. Finally, I would like to extend my appreciation and gratitude to all those that contributed towards the completion of this research project. May God bless you all.

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