STRATEGIC CHANGE IN THE KENYA NATIONAL MALARIA STRATEGY BY THE DIVISION OF MALARIA CONTROL OF THE MINISTRY OF PUBLIC HEALTH AND SANITATION

BY

ANDREW JOHNSON NYANDIGISI

A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER 2011

DECLARATION

This project is my original work and has not been presented for a degree in any other university.

Signed..... Date 04/11/2011

Andrew Nyandigisi

SUPERVISOR

This project has been submitted for examination with my approval as a university supervisor.

Signed..... Date 4/11/11

Mr. Eliud Mududa

Lecturer

School of Business

University of Nairobi

ACKNOWLEDGEMENTS

I would like to thank all the members of the Division of Malaria Control for the immense support they gave me during my project. In particular, my sincere gratitude goes to Dr Elizabeth Juma and Dr John Logedi for their insights into critical areas of my research. I am also grateful to all the focal persons including Dr Dorothy Memusi, Dr Rebecca Kiptui, Dr Agneta Mbithi, Mr. John Moro and Mr. James Sang who contributed in their respective units towards the finalization of this project.

Other partners I would like to thank include, Dr Kalu Akpaka, Dr Alex Muturi and Miss Patricia Njiri for their guidance in the course of my project work. I will forever be indebted to Mr. Andrew Wamari for his IT support whenever I needed it. Finally, I would like to acknowledge the Almighty God for giving me life and strength to complete this project.

I would like to also acknowledge my very able supervisor Mr. Eliud Mududa for his guidance and support during the course of my project. May the Almighty God richly reward you.

DEDICATION

I would like to dedicate this project to my dear wife who supported me throughout the project. May God richly reward you.

I would also like to dedicate this project to my parents who set me upon this noble path.

ABSTRACT

This project set out to do a case study of the strategic change in the Kenya national malaria strategy by the division of malaria control of the ministry of public health and sanitation. Data was collected from the head of DOMC, deputy head of DOMC, focal persons of the various units in DOMC including vector control, case management, epidemic preparedness and control, monitoring and evaluation, advocacy communication and social mobilization and malaria in pregnancy. Additional data was also collected from the malaria advisors in WHO and MSH. The nature of the questions was structured open ended questions on the need and nature of the strategic change. Secondary data was collected from the national malaria program review, the national malaria strategy 2000 to 2010, the national malaria strategy 2009 to 2017 and other programmatic guidelines.

The objectives of the study were to determine the need for strategic change in the Ministry of Public Health and Sanitation's Division of Malaria Control and to establish the nature of the strategic change in the Ministry of Public Health and Sanitation's Division of Malaria Control.

Results showed that the need for the change in the strategy included the adoption of a new vision, the changing malaria epidemiology, the push for impactful indicators, the global economic crisis, the expiry of the old strategy, the need for teamwork, focus and partnerships and the introduction of performance contracting by the government of Kenya. The vision was arrived at through alignment with vision 2030, the Abuja targets and the millennium development goals. The process of developing the new strategy was through a multi-stakeholder, multi-sector participatory approach in line with

recommendations from the Malaria Programme Performance Review. The malaria program review provided a situation analysis of malaria in the country outlining its strengths, weaknesses, opportunities and threats.

The nature of the strategic change was planned with the key feature being the malaria program review which provided the situation analysis and recommendations for adoption in the new strategy. The type of change was mainly transitional because the new strategy was not a significantly different from the old one.

TABLE OF CONTENTS

LIST OF TABLES

TABLE OF FIGURES

ACRONYMS

ACSM	Advocacy Communication and Social Mobilization
ACT	Artemisinin Based Combination Therapy
AMFm	Affordable Medicines for Malaria
DFID	Department for International Development
DOMC	Division of Malaria Control
DVBD	Division of Vector Borne Diseases
EPR	Epidemic Preparedness and Response
GFATM	Global Fund to Fight AIDS TB and Malaria
IEC	Information Education and Communication
IRS	Indoor Residual Spraying
LLIN	Long Lasting Insecticide Treated Nets
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MOMS	Ministry of Medical Services
MOPHS	Ministry of Public Health and Sanitation
MPND	Ministry of Planning and National Development
MSH	Management Sciences for Health
PSM	Procurement and Supply Chain Management
USAID	United States Aid for International Development
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Malaria still remains the number one killer of children under five in Africa accounting for four deaths every one hour. Malaria is caused by a parasite called *Plasmodium falciparum* and transmitted by the female Anopheles mosquito. Kenya remains to be largely an endemic country in malaria meaning that transmission of the disease occurs evenly throughout the year in most parts of the country (DOMC, 2009). It is for this reason that the disease has continued to be a health burden for the government and the society at large. The burden of malaria is not just a health problem; it is a social and economic burden to the country due to the high cost of treatment to the community and the government as a whole. No wonder it has been prioritized by the Ministries of Health and international donors by setting up the division of malaria control (DOMC), a division within the Ministry of Public Health and Sanitation responsible for overseeing all malaria related matters (MOH, 2000).

With better articulated strategies that were achievable and measurable, the ministry of health was able to attract funding for malaria control. This resulted in the increased delivery of malaria control interventions resulting in a decline in malaria morbidity and mortality (Noor, 2009). These gains need to be sustained in order to ensure that the country achieves the global malaria control targets and the Millennium Development Goals for 2015 (MOPHS, 2009). A new strategy was therefore necessary to better articulate evidence based approaches towards achievement of a malaria free Kenya.

1.1.1 Strategic Change

In a fast paced global economy, change cannot be an occasional episode in the life of a corporation. A company with rigid structures will be swept away while corporate cultures that can adapt will survive and thrive. With the increase in turbulence in the political, environmental, social and technological background, this statement cannot be over emphasized. Organizations are increasingly bracing themselves to adapt to environmental changes that will allow them to survive in an increasingly unpredictable environment.

Change can be simply defined as a transition from one state to another with focus on being different. This is a rather simplistic view of change but containing important aspects on the need to be different. Organizations will seek to be different for a number of reasons such as to maintain uniqueness in a certain product or service, to maintain a competitive advantage over rivals or even to build a sophistication that is valued to their customers for example in the motor vehicle industry. When defining change in management, the focus may be on the process or the people. When focusing on the process, change management can be described as the use of systematic methods to ensure that an organization change is guided in the planned direction, conducted in a cost effective manner and completed within the targeted time frame and the desired result. When focusing on the people, change management can be described as a structured and systematic approach to achieving a sustained change in human behavior within an organization (Todd A. , 1999)

An organization is composed of people with various backgrounds all working towards a common goal. In the process of interaction the people within the organization develop a

unique culture influenced by the environment of the organization. Organizational change is therefore a form of social change and can either be described as strategic or operational. Strategic change involves fundamental changes in the business of the organization and its future direction. It is therefore involves high level decision making by the top most management of the company.

Strategic change is usually aimed at aligning a business to its environment with the goal of building and maintaining a sustainable competitive advantage and maintaining shareholder value. Strategic change can be described as changing the organizational Vision, Mission, Objectives and the adopted strategy to achieve those objectives. The central focus of strategic change is therefore effectiveness of a business in terms of the strategic direction. Operational change is the type of change aimed at ensuring that the organizational activities are being performed in the best way possible. In contrast with strategic change, the main focus of operational change is efficiency in whatever the organization does. This project sought to evaluate the strategic change of the Division of Malaria Control from the old to the new strategy .

1.1.2 The Kenya National Malaria Strategy 2000-2010

In the year 2000, the then Ministry of Health developed the National Malaria Strategy 2001-2010 which was the first ever formal malaria strategy put forward to guide malaria control in Kenya. This strategy was the result of a clearly defined problem by malaria researchers. With more than half the entire population regularly affected by the disease, with the vast majority being children, a concerted effort to control the disease was paramount. It was estimated that 26,000 children (72 per day) died from direct

consequences of malaria infection (Snow, 1998) and 170 million working days lost each year as a result of malaria (Maneno, Oloo, & Kireria, 1998).

Even though malaria is a curable disease, there was a worldwide fear of drug- resistance towards the malaria parasite. This not only threatened the health system but also the tourism industry which was at the time earning 6.6 billion of annual foreign exchange (Maneno, Oloo, & Kireria, 1998). In addition, the climatic and ecological conditions especially those in the coastal and lake regions provided a conducive environment for transmission by the malaria vector, the mosquito. All these factors represented a massive barrier to socio-economic development and poverty alleviation thus pointing towards the need of a robust strategy to reverse the trends.

It was focused on 4 main strategic approaches and two supporting structures as follows. The strategic approaches included clinical management of malaria (providing prompt and effective treatment), management of malaria and anaemia in pregnancy, vector control using insecticide-treated nets (ITN) and other methods, Epidemic preparedness and response. The supporting interventions included Information Education and Communication and Monitoring and Evaluation. The strategy however did not have a vision and mission to guide its long term objectives (MOH, 2000).

1.1.3 The Division of Malaria Control of the Ministry of Public Health and Sanitation

The Division of Malaria Control (DOMC) is a division under the Ministry of Public Health and Sanitation mandated to plan and coordinate all matters pertaining to malaria prevention and control. The main duties of the DOMC include, developing malaria policies, developing strategies to implement the policies, coordinating policy implementation through training and dissemination workshops, resource mobilization for policy implementation, monitoring and evaluation of policy implementation, and providing information to the public and other relevant stakeholders on current malaria policies (MOH, 2000).

DOMC comprises of a total of over 100 staff working throughout the country. The Central level comprises of 30 technical staff and 15 supporting staff all reporting to the head of the DOMC. Each province has a malaria coordinator reporting to the DOMC and each district has a district malaria coordinator reporting to the provincial coordinator (MOPHS, 2009).

In the year 2000, the then Ministry of Health developed the National Malaria Strategy 2001-2010 which was the first ever formal malaria strategy put forward to guide malaria control in Kenya. It was focused on 4 main strategies (intervention areas) and two supporting interventions as follows; Case management of malaria, Vector Control, Epidemic Preparedness and Control and Malaria in Pregnancy. The supporting interventions were Information Education and Communication and Monitoring and

Evaluation. These intervention areas also formed the units (departments) currently forming the Division of Malaria Control (MOH, 2000).

Case management of malaria mainly deals with the management of patients already infected with malaria. The main duties under case management include the procurement and distribution of effective medicines, development of current diagnosis and treatment policies and guidelines which are used to train of health workers. The unit's main goal is to achieve prompt and effective diagnosis and treatment of malaria. Vector control of malaria is mainly concerned with the prevention of transmission of malaria by mosquitoes (vector) through the use of insecticide treated bed nets (ITNs) and indoor residual spraying (IRS) of chemicals. Its main duties include the procurement and distribution of ITNs and IRS chemicals and the development of vector control polices.

Epidemic preparedness and response primary role is to avert epidemics in malaria through closely monitoring reported malaria cases in epidemic prone areas such as the highlands and semi arid areas. Any impending outbreaks are determined using threshold levels developed by the DOMC. Response measures include spraying houses with IRS chemicals and prompt treatment of any severe cases of malaria following an epidemic. Malaria in pregnancy mainly deals with the reduction in the parasite levels of expectant mothers in the second and third trimesters of pregnancy. By so doing, the fetus is protected from malaria parasites which are common causes of low birth weight and still births. IEC is a supporting intervention that mainly deals with communicating and educating the public on current recommendations of the DOMC on matters pertaining to malaria. It is commonly involved in malaria campaigns or in a launch of a particular policy recommendation. M&E is also a supporting intervention used to track the progress

towards achieving targets outlined in the national malaria strategy (NMS). All interventions have performance indicators against which progress is measured (DOMC, Kenya Malaria Programme Performance Review, 2009).

1.2 Research Problem

Although strategic change is usually defined simply as the change of an organization's vision, mission and objectives, the process of undergoing this transition is much more challenging and usually yields little benefits on the organization if not well done. Ongaro (2004) however argues that if the already developed models for strategic change are well applied, the transition should be successful. Past studies on strategic change have revealed several factors that influence the change process in and organization.

A study by Ogwora (2003) which looked at strategic change management in the National Cereals and Produce Board (NCPB) found that the main enabling factor for change was the need to plan ahead. Another study by Gekonge in 1991 looking at strategic change management practices in the Nairobi stock exchange found that the main constraining factor of change was employees' resistance to change. In 2003, Mbogo studied the strategic change management process in Kenya Commercial Bank (KCB). He concluded that the main constraining factor to change was a non-supportive organization culture. Nyororo (2006) set out to study the strategic change management and performance of National Social Security Fund (NSSF). She found that one of the hindrances to strategic change in NSSF was meddling by the government in NSSF management.

Numerous environmental changes associated with malaria control have occurred over the last 10 years over which the old NMS was effective. These changes include parasite

resistance to malaria medicines, change in mosquito biting habits making them more formidable transmitters of the disease, change in climate thus creating new breeding sites for mosquitoes and change in the prevalence of malaria thus requiring targeted interventions. Other changes include the development of more effective malaria medicines using the latest technology, new policies by the world health organization and a new vision of a malaria free Kenya. These changes point towards the need for new strategies that are better aligned to the environmental changes. It is in this light that the DOMC in the year 2009 planned the process of developing a new strategy which would better target its efforts towards the control of malaria. The vision for the new strategy was agreed upon as 'a malaria free Kenya' which was different from the previous one that aimed at simply controlling malaria. This study sought to evaluate the need for change from the old malaria strategy to the new strategy and the nature of the strategic change in the DOMC.

1.3 Research Objectives

The objectives of this study were:

i. To determine the need for strategic change in the Ministry of Public Health and Sanitation's Division of Malaria Control

ii. To establish the nature of the strategic change in the Ministry of Public Health and Sanitation's Division of Malaria Control

1.4 Scope of Study

The focus of this study is on the changes within the DOMC in the process of changing from the old NMS (2000-2010) to the new NMS (2009-2017). Malaria is a universal

problem and therefore efforts to control it involve many more stakeholders than will be discussed in this paper. As already stated, the DOMC is a division within the department of disease prevention and control in the ministry of public health and sanitation. The change from the old to the new strategy involves international partners, the head quarters of both the ministry of public health and sanitation and the ministry of medical services, the provincial teams and the district teams. The international partners such as the World Health Organization (WHO) and other partners are involved in developing international policies on malaria control that are usually generic for possible adoption by individual countries. The ministry of public health and sanitation (MOPHs) particularly the DOMC is responsible for adapting these international policies to suite the country needs. The adaptation of the policies include the development of strategies, guidelines and curricular for use by the provincial and district teams. The ministry of medical services (MOMs) is responsible for developing and implementing all hospital policies including those pertaining to the diagnosis and treatment of malaria. The provincial and district teams are solely responsible for implementing the policies developed by both ministries with only a supervisory role from the DOMC. It is therefore clear that the DOMC is only part of a functional health system involving two ministries working together in the fight against malaria.

This project therefore restricted its evaluation to the shift from the old NMS to the new NMS within the DOMC alone. The study therefore excluded international factors affecting development of malaria control policies and the implementation bottlenecks faced during the rollout of the new NMS at provincial and district levels.

1.5 Value of the Study

The government has recently moved towards a performance based system of governance. This requires that all heads of government departments report on key performance areas and that all staff under them be appraised on their performance. Key performance areas can only be derived from a sound strategy that outlines the core activities of an organization and how they will be implemented. The development and implementation of the new NMS is part of the performance areas of the DOMC and therefore a smooth changeover is useful in assessing the performance of DOMC.

Malaria being a priority disease for the ministry, all provincial directors are inevitably evaluated on their performance in malaria control. The new NMS presents new and more effective methods of fighting malaria and therefore the sooner these are adopted the more effective the fight against malaria will be.

Malaria is one of the diseases that are prioritized under the millennium development goals to be achieved by 2015. African countries are generally lagging behind in terms of implementation of the MDGs owing to disjointed activities among other factors. With the introduction of the new NMS, a better coordinated and concerted effort can be made in achieving MDG 6 which involves combating HIV AIDs, malaria and other diseases.

The funding for malaria control is mainly donor funded by bodies such as the global fund to fight AIDs TB and Malaria (GFATM), United States Aid for International Development (USAID) and Department for International Development (DFID) among others. With the global economic crisis, donor funds have become increasingly difficult to access thereby emphasizing the need for strong proposals backed by sound strategies

when doing resource mobilization. A new NMS therefore gives malaria control in Kenya a competitive edge when seeking funding for health programs.

Kenya is one of the pioneer countries that has undergone a change in the malaria control strategy based on a national review of the status of malaria. Because this switch is unprecedented, lessons learnt by Kenya can be borrowed by other countries soon to undergo the same transition like Uganda and Tanzania. The need for a well documented procedure clearly outlining the challenges and best practices is therefore paramount to effectively guide implementation in other countries.

A recent malaria review in Kenya showed that the distribution of malaria was varied in terms of parasite prevalence (Noor, 2009). Some of the recommendations that were put forward towards the achievement of a malaria free Kenya included the need for targeted interventions based on the prevalence of the disease. These recommendations presented a departure from the old NMS which did not emphasize as much on the need to target interventions based on the parasite prevalence. An evaluation of the change from the old to the new strategy will therefore better gauge how well the DOMC has addressed the recommendation of the review team. The malaria map developed during the review is annexed as figure 2.

CHAPTER TWO: LITERATURE REVIEW

2.1 The Concept of Strategy and Strategic Change

According to Johnson and Scholes (2002), strategy can be defined as the direction and scope of an organization in the long term which achieves advantage for the organization through its configuration of resources within a changing environment and to fulfill stakeholder expectations. This definition dwells more with the general direction managers intend to focus their organizations so as to keep them afloat amidst a changing environment. Considering that all organizations exist within a certain environment, alignment to this environment is critical for the survival of any organization. It is for this reason that Boseman and Phatak (1989) argued that for a firm to remain vibrant and successful in the long run, it must make strategic decisions that take into account the impact of the external environment on its operations.

Strategy would not be important if factors in the environment such as products and markets were stable (Burnes, 2000). The current markets and products are increasingly becoming dynamic owing to the rapidly changing tastes and preferences of consumers. Organizations must therefore constantly scan the environment for any changes that are likely to affect their business position. Organizations that respond to these changes more rapidly are likely to remain afloat for longer because they are better positioned in the market. By so doing, they are termed to be fitting with the external characteristics with the aim of solving a strategic problem (Aosa, 1992).

Strategy can also be seen as creating opportunities by building on an organization's resources and competences (Hamel & Prahalad, 1994). This definition is usually referred

to as the resource-based view of strategy, which is concerned with exploiting the strategic capability of an organization, in terms of the resources and competences to provide competitive advantage to yield new opportunities. In this case an organization focuses on a business line in which it feels it has adequate or unique resources to provide a competitive advantage in the market. Should an organization's competences, resources or market shift, a change in the strategy will be inevitable for it to remain competitive. It is therefore the prerogative of the management to constantly ensure that the organization's resources and environment are constantly in tandem with a view to diagnosing the need for strategic change and its management.

An organization's strategy may also be influenced by the stakeholder's interest rather than the environment alone. Stakeholders who are responsible for the financing of an organization may also determine how the organization will do business, what business they will be involved in and even the scope of the business. In this case, the environment will not be the only driver of the strategic change but the stakeholder's interests will also play a major role in defining the strategic direction of an organization. This is usually the case of many government funded programs, non-governmental organizations and charity organizations. The strategy is not always aligned to the environment but because of the interests of the donors, the organization is compelled to engage in a particular line of business to address the needs of the donors. The beliefs and values of stakeholders will have a greater or lesser influence on the strategy development of an organization depending on the power of each stakeholder (Johnson, Scholes, & Whittington, 2006)

2.2 Nature of Strategic Change

The management guru Tom Peters, when describing change put it bluntly as "change or die." Even though this approach seems rather radical, it can not be further from todays reality about the nature of businesses. Changes in the business environment require organizations to be constantly on the lookout in order to remain competetive. Todd and Maury (2003) describes change in its broadest sense as a planned or unplanned response to pressures and forces. These pressures include changes in the macro environment, industry or more commonly the business environment.

Stretegic change has been described simply as the change of an organizations vision, mission, objectives and the adopted strategy. This description although concise, does not take into account the people aspects of changing an organization's strategy. There is an assumption in most of what is written about strategic change that there will be a tendency towards inertia and resistance to change (Kurt, 1958), this often leads to strategic drift (Johnson G. , 1988). Strategic change can also be defined as the process of organisational transformation and renewal. It applies innovative and entrepreneurial skills to develop an envisioned future, to draw out the entire organisations capabilities, competences, knowledge and individuals skills with the objective of improving operating performance, realising growth, increasing shareholder value and creating new wealth (Management Papers, 2011). Considering that in strategic management, organizations are often referred to as open systems, it is expected that change will not be an event owing to the dynamic nature of the environement. This understanding of change is critical in managing the people aspects of change.

Environmental pressures for change will be constrained by the capabilities available to make changes, or by organizational culture which may lead to resistance to change (Johnson, Scholes, & Whittington, 2006). This means that as an organization plans to undergo strategic change both external and internal factors must be considered in order to reconcile the different forces and influences on strategy (Kees & Wiley, 2004). The SWOT analysis which analyses the strengths, weaknesses, opportunities and threats of an organization before has therefore found wide use in assessing organizations ahead of planned strategic change. It summarizes the key issues from the business environment and the strategic capability of an organization that are most likely to impact on strategy development and change (Johnson, Scholes, & Whittington, 2006).

2.3 The Need for Strategic Change

Ansoff (1975) emphasized the need for mangers to understand all they possibly could about their organisational world. By so doing they could make optimal decisions about the organisation's future. If organisations are to remain competitive and therefore relevant in their environments, decisions concerning when to change are not going to be events in the life of the organisation but rather a constant management function. The understanding of the business environment as a key driver of change is important during strategy development and implementation.

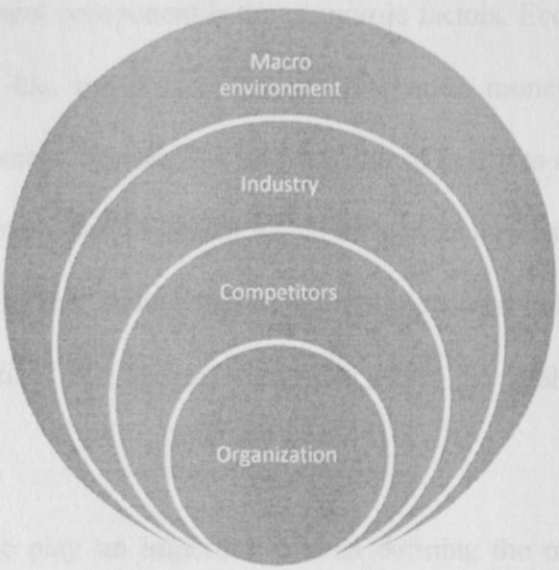
The business environment can be categorized into three namely the macro environment, the industry or sector and the competitors. These three levels however don't influence change in isolation, instead a multiplicity of changes at these various levels drive the need for change in an organization. The drivers of change are many, too many to list

which is why manaing change has been described more as a an art rather than a science (Todd & Maury, 2003).

2.3.1 The Business Environment as a Driver of Change

If the business environment is the key driver of change in any organization then the need for a better understanding of the environment is important during strategy development and implementation. The business environment can be categorized into three namely the macro environment, the industry or sector and the competitors as illustrated in figure 1 below.

Figure 1: Layers of the business environment



Source: (Johnson, Scholes, & Whittington, 2006)

The macro environment forms a significant part of the external factors that affect the strategy of an organization. The macro environment can be broken down into six

categories commonly referred to as the PESTEL framework (Worthington & Britton, 2003).

The first one is the political environment which looks at the general influence government policies have on the business strategy. Some of the political factors include government stability, taxation policy, foreign trade regulations and social welfare policies. Various countries have varying policies on these factors and therefore create unique environments for business operations. The Kenyan health sector heavily relies on donor funds to run health interventions particularly for the three priority diseases namely, malaria HIV and TB. The funding for these three diseases is therefore contingent on a favorable foreign political environment.

The next macro environment component is the economic factors. Economic factors span a wide range of factors like business cycles, interest rates, money supply, inflation, unemployment and disposable income. The affordability of health to a nation is therefore directly related to the economic environment which influences the cost of drugs and other health services. Considering that about a half of antimalarials used in Kenya are imported (CHAI, 2011), the inflation rate and taxation will affect the health delivery by the ministries of health.

Socio-cultural factors also play an important role in defining the macro environment. These include population demographics, income distribution, social mobility, lifestyle changes and levels of education. Children under the age of five years are generally more affected by diseases such as malaria to a greater extent (DOMC, 2007). The

demographics of a country therefore influence the type of strategy that the health authorities will employ to ensure equitable health to all members of society.

Technological aspects also influence the business environment. They include new discoveries or developments, speed of technology transfer and rates of obsolescence. Technology can reduce the cost of production thus a low cost strategy will be appropriate while a differentiation strategy will be preferred if the technology confers a unique feature that is valuable to customers. In the health sector, new technology such as a new discovery of a medicine will increase the access to a life saving medicine thereby improving the health of a nation. This discovery may force the ministry to change its strategy to adopt the new technology which will confer a benefit to its overall vision of ensuring a healthier nation.

Environmental factors such as environmental protection laws, waste disposal policies and energy consumption guidelines can have a bearing on the strategy an organization adopts. Global warming has recently tightened laws governing waste disposal requiring firms to be more conscious about how to dispose their waste. This inevitably increases the cost of production thereby reducing their competitive advantage of a firm.

The industry or sector in which an organization operates often applies pressure on an adopted strategy that is not well aligned to it. An industry can be defined as a group of firms producing the same principal product (Rutherford, 1995) or, more broadly, a group of firms producing products that are close substitutes to for each other (Porter, 1980). While the macro environment has a bearing on the strategy, the immediate environment impacts the organization much more. Competition is expected to be highest among firms

dealing in similar goods and services. Johnson, Scholes and Whittington (2006) extends the concept of strategy to the public service through the idea of a sector. Related services are all grouped together to form a ministry such as the health ministry or education ministry. Competition in this case is for the resources from the government or other donor organizations such as the world bank or global fund. Health programs that are seen to be of more relevance to donors (such as malaria and HIV) will attract more funding and therefore be sustained longer than those deemed to be of little consequence such as jiggers. Over the last 10 years, donors have developed a keen interest in the three priority diseases mentioned earlier and therefore the disease program strategies have had to change to align themselves with this growing interest.

2.4 Types of Strategic Change

According to Ackerman (1986), there are three types of change. These include developmental change, transitional change and transformational change. Developmental change is more incremental in nature rather than radical. It is described to involve the improvement of a skill, method or condition that for some reason does not measure up to current expectation thereby doing better or doing more of what already exists (Argyris & Schon, 1978). Management of such change is thought to be direct and therefore less challenging because the beginning and end point are fairly well understood. This change is the most common in organizations because it occurs within an existing paradigm and occurs incrementally. This makes its management fairly straightforward because it involves minimal or no change in the organizations culture. This type of change has also been referred to as adaptation change. When dealing with developmental change, the level of turbulence in the environment is usually low and therefore management can

easily respond to external changes. It is however important for management to distinguish between the need for developmental change as opposed to shortsightedness of management.

Transitional change is more complex and more involving than developmental change. This is because it is evolutionary rather than incremental. The organization seeks to be something different from what it initially was. This therefore requires change in paradigms and therefore has a greater bearing on the people within the organization. Transitional change gave rise to the idea of conceiving of organizations as "learning systems," continually adjusting their strategies as their environment changes (Johnson, Scholes, & Whittington, 2006). This means that the process of change involves many transition steps, during which the organization is neither what it wants to be or what it originally was (Todd & Maury, 2003). Instances in which such change is employed is like during mergers and introduction of new business lines. The need for management of the people during the process is important because of the more profound effect this change has on them.

Transformational change is the most radical of all the three. Ackerman (1986) compares it to letting go of a trapeze mid air before a new one swings into view. It is this analogy that makes this type of change more nerve wrenching for the employees and the management than the other types of change. Most variables are not to be controlled, rushed or short-circuited when managing transformational change (Kurt, 1952). This type of change has also been described as revolutionary change because it requires rapid and major strategic and paradigm change (Johnson, Scholes, & Whittington, 2006). This change should only be turned to as a last resort owing to its complex nature and

propensity to result in a strategic drift. Circamstances that require this kind of change include those where the strategy has been so bounded by the existing paradigm and established ways of doing things in the organization that even when environmental or competitive pressures might require fudamental change, the organization fails to do so. Because transformational change requires a radical change in the organization's mission, culture, critical success factors, form and leadership, its management is much more difficult to approach in a proactive sense (Todd & Maury, 2003).

2.5 The Context of Change

In order to have a successful change process, the context in which the strategic change occurs must be well understood and taken into account. All organizations vary in nature, size and even culture so the contexts of change vary and therefore require different approaches to managing change (Newton, 2003).

Balogun and Hope (1994) highlighted a number of contextual features that need to be considered in designing change programs. These features include time, scope, preservation, diversity, capability, capacity, readiness and power. The amount of time an organization has to undergo change will have a bearing on the type of change it will choose to adopt. The longer the time available for the change program, the less the pressure on management and people there will be.

The scope of change and the extent of features to be preserved affects the change approach. The wider the scope of the change, the more difficult the change is expected to be. Transformational change is often adopted when the scope of change is far reaching and when the strategy significantly varies from the previous one. The diversity of the

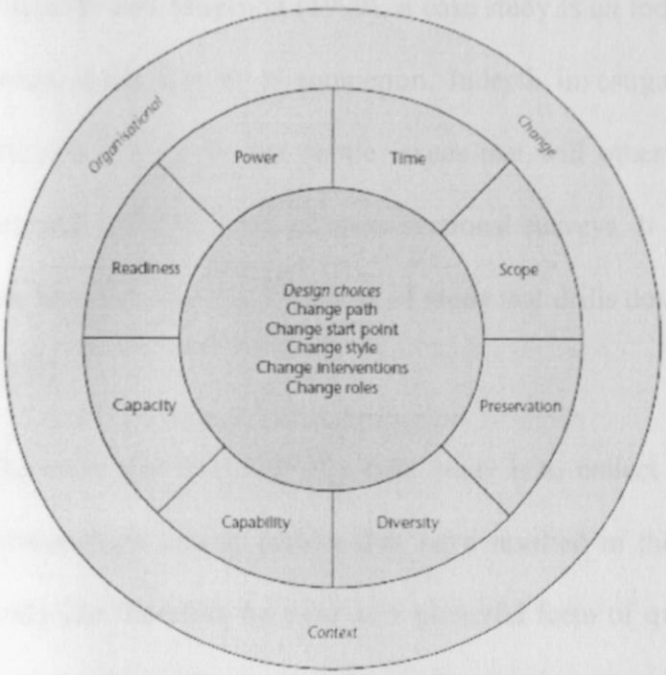
staff required to change also determines the context of change. The more diverse the staff, the more challenging the change will be. Employees who are more involved in the process and have confidence in the leadership are deemed more ready for the change process and therefore make it easier to change.

The capability, capacity and power of management is also a very important feature in defining the context of change. An organization with staff that have undergone change in the past is expected to more readily undergo change and is therefore deemed more capable than one which views change as a new feature. The resources available for change will to a large extent determine how fast and smoothly the change process will be driven. Resources for training staff on the new strategy, restructuring office space or even hiring change agents and consultants are important to drive the change agenda forward. The degree of readiness among the people also has a bearing on the context of change. Resistance to change within the organization varies with the level of readiness among the various members of the organization. The degree of power and influence of management over the staff is important in drumming up support of the new strategy. The management power also determines the approach it will employ during the change process. Approaches such as coercion or direction can be used when the management has significant power and collaboration can be used when management has significant influence over the staff.

The context of strategic change can assist managers who plan to steer change in diagnosing the capacity, capability, readiness and power structures to achieve the scope of change required. By so doing, potential pitfalls to change can be averted and the speed of change accelerated. A well defined context can guide managers on the strategic change

choices, change path, start point, style and roles to be employed ahead of a planned change program as shown in figure 2 below.

Figure 2: Change Kaleidoscope



Source: (Balogun & Hope, 1994)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

The research design was a case study of the Division of Malaria Control. According to Mugenda and Mugenda (1999), a case study is an indepth investigation of an individual, group, institution or phenomenon. Indepth investigations are particularly useful when attempting to bring out subtle issues that will otherwise not be obvious under normal research methods such as cross-sectional surveys. It is for this reason that a case study has been described as a method of study that drills down rather than casts wide (Bamford, 2005).

The main aim therefore of a case study is to collect qualitative data that will bring out relationships among factors that have resulted in the behaviour being studied. A case study can therefore be used as a powerful form of qualitative analysis to study a social unit, a person, a family or even a cultural group (Kothari, 1990).

3.2 Data Collection

Both primary and secondary data was collected for analysis. Primary data was collected using comprehensive interview guides targeted at, the head of DOMC, the deputy head of DOMC, the focal persons incharge of case management, vector control, monitoring and evaluation, IEC and the global fund units. These constituted the key informants within the DOMC who provided indepth information on the need for change within the organization and the nature of the change. Primary data was also collected from other key partners involved in the day to day planning and implementation of DOMC activities. These provided useful information that could not otherwise be obtained from within the

DOMC on the need for change in the malaria strategy. The partners included the malaria focal person in WHO and the malaria focal person in Management Sciences for Health (MSH).

Secondary data was collected from existing documents such as the malaria program review, the old NMS, the new NMS and the respective guidelines or manuals within each focal unit. The multiple sources of information secured the data, allowed for evidence to be verified thereby avoiding missing data (Cooper, 2003).

3.3 Data Analysis

Data analysis was done by grouping all respondents answers thematically. The thematic groups included, the malaria environment before the change process, the context of the strategic change process, the drivers of change in malaria strategy nationally, the drivers of change in malaria strategy internationally and the intended outcomes of the strategy change. Other groupings included the planning process of the strategy change and the process used in the determination of the vision, mission and objective of the new strategy. On grouping the responses thematically, the secondary data was used to complete the data afterwhich a content analysis was performed.

CHAPTER FOUR: RESULTS

4.1 The Need for Strategic Change in DOMC

Multiple factors in the DOMC environment pointed towards the need of a new strategy which better align it to its changing environment. A number of changes had already occurred in the DOMC environment including the changes in donor requirements, noble interventions such as the affordable medicines for malaria, a new global push towards malaria elimination and more structured performance targets by the government. Other changes included the expiry of the previous strategy, the need for a more robust monitoring and evaluation plan, the changing malaria epidemiology and renewed efforts towards the achievement of global targets such as the millennium development goals. All these factors meant that the DOMC could not continue operating using a strategy that was not aligned with its current situation.

4.1.1 A Malaria Free Kenya as the New Vision for DOMC

Malaria being both a preventable and curable disease puzzled many why it still accounted for the majority of deaths especially for children under the age of five years. It is for this reason that the ambitious vision of *a concerted effort towards a malaria-free Kenya* was arrived at after much debate amongst stakeholders. The new vision sounded good on paper but required radical changes for realization to take place within the set time period. Members of the DOMC were up to the challenge and gladly adopted the vision with the required enthusiasm.

The old strategy did not have a clearly outlined vision although it was mainly designed for the control of malaria which at the time had plagued the health system with frequent outbreaks of malaria culminating in high mortality rates. With the rollout of the new vision, there was need for a new mission, objectives and strategy which would focus the program activities towards the new vision of a malaria free Kenya. It is for this reason that the new mission, *to direct and coordinate efforts towards a malaria-free Kenya though effective partnerships* was coined.

The six key objectives to be achieved were informed by vision 2030 and the ministry's own national health sector strategic plan. The first objective was by 2013, to have at least 80 per cent of people living in malaria risk areas using appropriate malaria prevention interventions. The second objective was to have 80 per cent of all self-managed fever cases receiving prompt and effective treatment and 100 per cent of all fever cases who present to health facilities receiving parasitological diagnosis and effective treatment. The third objective was by 2010, to ensure that all malaria epidemic prone districts had the capacity to detect and be prepared to respond to malaria epidemics annually. The fourth objective required that by 2011, surveillance, monitoring and evaluation systems were strengthened so that key malaria indicators were routinely monitored and evaluated in all malarious districts. The fifth objective was by 2014, to strengthen advocacy, communication and social mobilization capacities for malaria control to ensure that at least 80 per cent of people in malarious areas have knowledge on the prevention and treatment of malaria. The last objective was by 2013, to strengthen capacity in programme management in order to achieve malaria programme objectives at all levels of the health care system.

4.1.2 The Changing Malaria Epidemiology

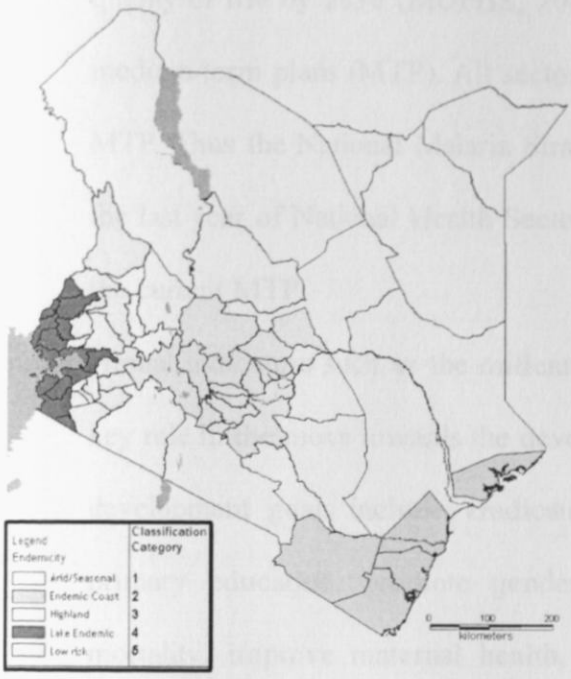
The changing epidemiology of malaria also exerted pressure on the need to change the strategy to better focus interventions on the current malaria situation. Data from a variety of surveys and operational research had already shown declines in malaria parasite prevalence, malaria trends, vector densities and other entomological indices over the last ten years. This meant that old interventions would either bear little impact in reduction of malaria or in some cases have no effect at all owing to the new distribution of the disease.

Kenya has four malaria epidemiological zones, with diversity in risk determined largely by altitude, rainfall patterns and temperature. The zones include endemic, seasonal transmission areas, epidemic prone areas and low risk malaria areas. Endemic areas have altitudes ranging from 0 to 1,300 metres around Lake Victoria in western Kenya and in the coastal regions. Rainfall, temperature and humidity are the determinants of the perennial transmission of malaria. Transmission is intense throughout the year, with annual infection rates ranging from 30–100. Seasonal transmission, arid and semi-arid areas of northern and southeastern parts of the country experience short periods of intense malaria transmission during the rainfall seasons. Temperatures are usually high and water pools created during the rainy season provide breeding sites for the malaria vectors. Extreme climatic conditions like the El Niño southern oscillation lead to flooding in these areas, resulting in epidemic outbreaks with high morbidity rates owing to the low immune status of the population. Epidemic prone areas of western highlands of Kenya:

Malaria transmission in the western highlands of Kenya is seasonal, with considerable year-to-year variation. Epidemics are experienced when climatic conditions favour sustainability of minimum temperatures around 18□C. This increase in minimum temperatures during the long rains favours and sustains vector breeding, resulting in increased intensity of malaria transmission. The whole population is vulnerable and case fatality rates during an epidemic can be up to ten times greater than those experienced in regions where malaria occurs regularly. Low risk malaria areas cover the central highlands of Kenya including Nairobi. The temperatures are usually too low to allow the breeding cycle of the malaria parasite in the vector. However, the increasing temperatures and changes in the hydrological cycle associated with climate change are likely to increase the areas suitable for malaria vector breeding with the introduction of malaria transmission in areas where it had not existed before (MOPHS, 2009).

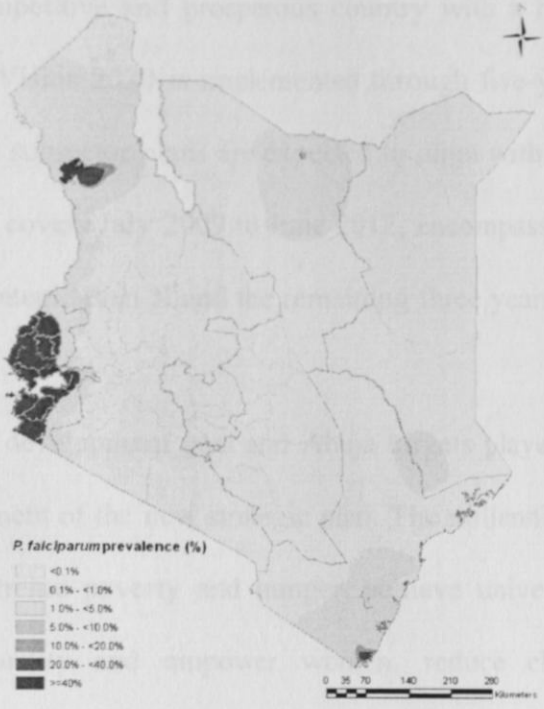
A comparison of the old and new malaria endemicity maps shows demonstrated a shrink in malaria endemic areas and expansion of low transmission zones. Other reports also showed declines in parasite prevalence, malaria trends, vector densities and other entomological indices in areas where insecticide treated nets and indoor residual spraying were scaled up. This is shown in figures 3 and 4 below.

Figure 3: Old Malaria Endemicity map



Source: (MOH, 2000)

Figure 4: New Malaria Endemicity Map



Source: (MOPHS, 2008)

4.1.3 Global and National Push for Impact Indicators

Considering that resources for malaria control interventions were on a steady increase, donors began demanding for more tangible impact indicators that were previously less emphasized. This coupled with the introduction of the vision 2030 by the government of Kenya meant that all activities that were planned by the DOMC required to be well thought through and measurable in order to align themselves with the national and global targets.

Kenya's overall development framework is guided by Kenya Vision 2030, a long-term policy that aims to create a globally competitive and prosperous country with a high quality of life by 2030 (MOPHS, 2009). Vision 2030 is implemented through five-year medium-term plans (MTP). All sector and subsector plans are expected to align with the MTP. Thus the National Malaria Strategy covers July 2009 to June 2012, encompassing the last year of National Health Sector Strategic Plan II and the remaining three years of the current MTP.

Global indicators such as the millennium development goal and Abuja targets played a key role in the move towards the development of the new strategic plan. The millennium development goals include, eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and develop a global partnership for development. These goals being central to any global initiative required adoption into any sound strategy that could attract funding and partnerships from multilateral and bilateral partners. It is for this reason that a new malaria strategy was needed to re-focus activities towards achieving these universal indicators as shown in table 1 below;

Table 1: Millennium Development Goals, Targets and Malaria Related Indicators

Millennium Development Goals, targets and malaria-related indicators			
Goals	Targets	Malaria-related indicators	Programmes to integrate or collaborate with
1. Eradicate extreme poverty and hunger	2. Halve between 1990 and 2015, the proportion of people who suffer from hunger	Prevalence of underweight children under five years of age	Nutrition; DCH; DVI; Ministry of Education; Ministry of Agriculture
4. Reduce child mortality	5. Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	Under-five mortality rate Infant mortality rate	DCH; DVI
5. Improve maternal mortality	6. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	Maternal mortality ratio	DRH
6. Combat HIV/AIDS, malaria and other diseases	8. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	Prevalence and death rates associated with malaria Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures	DRH; DCH; DVBD; DDSR; HMIS; MOMS; Ministry of Local Government; Ministry of Education; Ministry of Tourism; Office of the President
8. Develop a global partnership for development	18. In cooperation with the private sector, make available the benefits of new technologies, especially information and technology	Proportion of population with access to affordable essential drugs on a sustainable basis	Department of Pharmacy; KEMSA; Pharmacy and Poisons Board

Source: (MOPHS, 2009)

Moreover, monitoring and evaluation had not been given the requisite priority to measure the performance of programmatic interventions. With the global and national targets, a well articulated monitoring and evaluation framework was vital in backstopping the new strategy. This push culminated in the development of the "three ones" policy of one coordinating mechanism, one strategy and one monitoring and evaluation mechanism.

4.1.4 The Global Economic Crisis

In 2008, the world underwent an unprecedented economic crisis that affected the business environment drastically. The health sector was not spared in this crisis which saw donors demand a "*bigger bang for their buck,*" owing to more stringent foreign investment policies by their respective governments.

In 2007/08 the government allocation to the health sector was 6.4 per cent of the overall budget, far below the Abuja target of 15 per cent. At this level of investment, there was concern that the country would not attain the health-related MDGs by 2015. That notwithstanding, bilateral and multilateral partners contributed significantly to the overall health budget and malaria was one of the beneficiaries of this support. In the year 2008/09 the budget allocation to malaria control was approximately 4.78 per cent of the MOPHS budget. Malaria control was mainly supported under the development budget, with the bulk of the funds coming from the Global Fund. Among other partners providing support were DFID, USAID, WHO and UNICEF.

With the global economic meltdown, donor fatigue was beginning to be apparent making it more and more difficult to justify the support of various malaria interventions which were deemed ineffective. The need of a malaria program review which clearly documented the situation of malaria, the gains made from the various interventions and the lessons learnt was therefore inevitable. The malaria program review would later form an ideal platform from which the new strategy was developed. A new strategy based on sound public health needs was therefore critical in the renewed donor interest in the support for malaria activities even in the wake of a global economic crisis.

4.1.5 The Expiry of the Old National Malaria Strategy

The first ever NMS was developed in the year 2000 by the DOMC and was principally aimed at controlling malaria, a disease that had increasingly become uncontrollable characterized with high morbidity and mortality rates. The old strategy was therefore mainly focusing on the development of a framework to be used for the fight against malaria. It is for this reason that its ultimate goal was "*to reduce the level of malaria infection and consequent death in Kenya by 30% by the year 2006, and to sustain that improved level of control to 2010.*" Its key objective was to set up an enabling environment for the creation and implementation malaria control activities through co-coordinating stakeholders and efforts, strengthening partnerships, integrating systems, advocating resource priority, focusing national commitment and designing national guidelines (MOH, 2000).

Even though the old strategy was effective in achieving its goal and objectives, times had changed and there was demand for a new goal which could align DOMC with the global trends in malaria control. Countries whose efforts in the control of malaria were dramatic were encouraged by WHO to plan for malaria elimination while those whose interventions were minimal were required to plan to reduce the burden of malaria by a significant proportion. Kenya being one of the countries whose burden of malaria was still significant, had to adopt novel ways of bringing the disease burden down. It is in lieu of this that the goal for the new strategy was adopted as "by 2017, to have reduced morbidity and mortality caused by malaria in the various epidemiological zones by two thirds of the 2007/08 level" (MOPHS, 2009). This ambitious goal required smart

objectives coupled with sound strategies that could steer DOMC towards the attainment of this goal within the stipulated period. A new strategy was therefore paramount in achieving this goal.

4.1.6 The Need for Teamwork, Focus and Partnerships

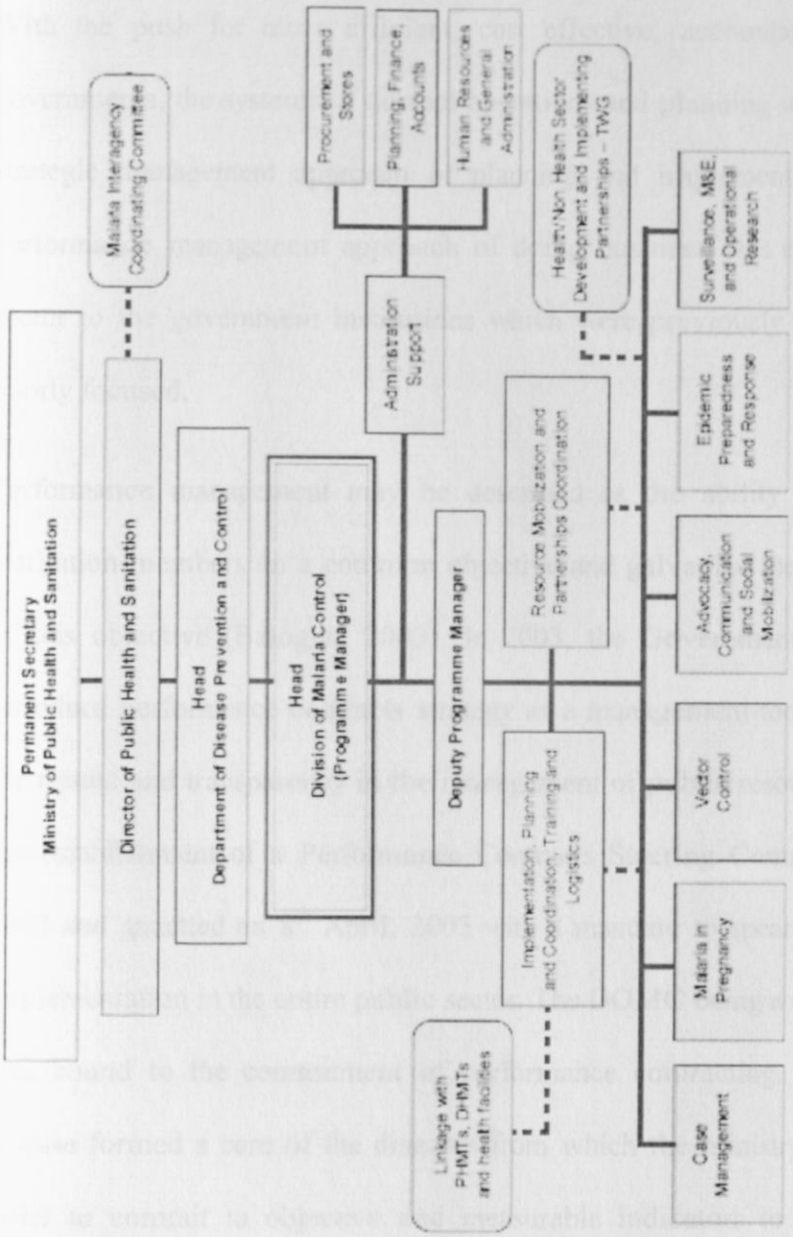
One of the key weaknesses of the DOMC when operating under the old strategy was the disjointed nature of engagement of partners resulting in duplication of activities and investment in less impactful interventions. Activities were mainly influenced by specific program officers' interests rather than a sound and objective rationale. The result of this was a less focused organization with the focus of officers being more on individual interests rather than the general interest of the program.

DOMC initially existed as a unit under the division of vector borne diseases (DVBD) which is mandated with the surveillance and reporting of vector borne diseases. With the increased disease burden and interests in malaria control, malaria was hived out of DVBD to ensure greater visibility by partners who preferred to engage directly with the program. This move was part of an epidemic response strategy to ensure that the prevention and management of malaria was a top priority within the ministry agenda. Although the strategy was a sound public health intervention, supporting structures such as a well outlined organogram were not put in place to ensure that DOMC operated as a semi autonomous division. This situation was further propagated by the fact that the initial staff of the DOMC was relatively lean and therefore management structures were flexible. However, with the increase in the responsibilities and workload accruing from the increased funding a surge in the human resource working at the DOMC occurred

without the commensurate structures. The result of this was a disjointed program in terms of administration and human resource management. This culminated in the personalization of activities and the engagement of partners at a personal level rather than at an institutional level. This meant that partners and donors ran the risk of addressing people's ideas which were more subjective than objective. With time, this practice became embedded in the fabric of DOMC which needed a radical intervention to change.

It is for this reason that the mission of the new malaria strategy was adopted as to direct and coordinate efforts towards a malaria-free Kenya through effective partnerships. The role of "effective partnerships" in the new strategy could therefore not be over emphasized in achieving the vision of a malaria free Kenya. A new organogram was therefore put forward to define the interactions among DOMC members and with partners. This organogram is represented in figure 5 below:

Figure 5: DOMC Organizational Structure



Source: (MOPHS, 2009)

4.1.7 Introduction of Performance Contracting

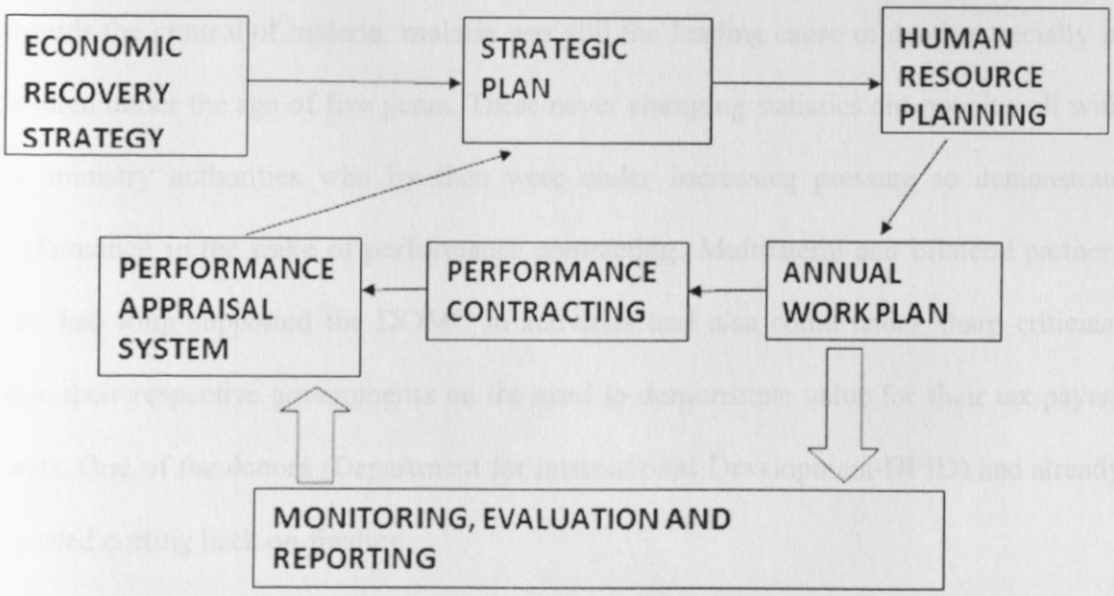
With the push for more efficient, cost effective, accountable and more responsive governments, the systems of normal operations and planning were forced to embrace the strategic management approach of planning and implementation. This means that a performance management approach of doing business was extended from the private sector to the government institutions which were previously viewed as inefficient and poorly focused.

Performance management may be described as the ability to unite the attention of institution members on a common objective and galvanize them towards the attainment of this objective (Balogun, 2003). In 2003, the Government made a commitment to introduce performance contracts strategy as a management tool to ensure accountability for results and transparency in the management of public resources. This culminated in the establishment of a Performance Contracts Steering Committee (PCSC) in August 2003 and gazetted on 8th April, 2005 with a mandate to spearhead the introduction and implementation in the entire public sector. The DOMC being a constituent of government was bound to the commitment of performance contracting. Malaria being a priority disease formed a core of the diseases from which the ministry was to be evaluated. In order to commit to objective and measurable indicators to be used to appraise the program, a sound strategy that articulated the interests of the division had to guide the formulation of the performance indicators. A new malaria strategy offered an opportunity to provide unbiased performance indicators for both the program and the ministry as a whole which could be used to evaluate the performance of DOMC and the ministry.

Furthermore, the staff within DOMC could now be appraised objectively based on performance indicators that were of interest to the program rather than of personal interests. Although this initially evoked some suspicion among the existing staff, it eventually became a welcome development when properly understood as an objective approach of appraisal.

The new strategy was resourceful in providing a basis for the appraisal of the DOMC and its human resource. Annual work plans derived from the strategy would offer a platform from which program targets could be developed and officers appraised as shown in figure 6 below:

Figure 6: Performance Management Cycle



Source: (Kobia, 2006)

4.2 The Nature of the Strategic Change

Based on the clear need for a new strategy, the DOMC was left with little choice but to boldly plan and rollout a new strategy. A number of changes had taken place in its environment and the DOMC could no longer continue operating in an old strategy if it was going to remain relevant. Several factors influenced the nature of the strategic change that the DOMC underwent including the context of the change, the resources available for the change, the DOMC staff readiness for the change among others...

4.2.1 The Context of the Strategic Change to the New Strategy

A number of factors contextualized the strategy change from the old to the new strategy. Increasing evidence had shown that despite the numerous interventions that had been put towards the control of malaria, malaria was still the leading cause of death especially in children under the age of five years. These never changing statistics did not sit well with the ministry authorities who by then were under increasing pressure to demonstrate performance in the wake of performance contracting. Multilateral and bilateral partners who had long supported the DOMC in activities had also come under sharp criticism from their respective governments on the need to demonstrate value for their tax payers funds. One of the donors (Department for International Development-DFID) had already signaled cutting back on funding.

Table 2: Populations at Risk of Malaria in Kenya

Populations at risk of malaria in Kenya			
Epidemiological zone	Total population projection for 2009	Pregnant women	Children <1 year
Endemic	11,212,645	504,569	448,506
Seasonal/Arid	8,375,922	376,916	335,037
Highland epidemic prone	8,007,718	360,347	320,309
Low risk	11,826,978	532,214	473,079
Total	**39,423,263**	**1,774,047**	**1,576,931**

Source: (DOMC, 2009)

Resources available for malaria had also dwindled over the years however a renewed interest in malaria by the donor community promised an unprecedented flow of funds for three priority diseases one of which was malaria. This renewed interest saw new donors such as the Global Fund to Fight AIDs Tuberculosis and Malaria (GFATM) and President's Initiative for Malaria (PMI-USAID) come into the malaria donor arena. These resources were however not free for all but required a sound strategy from which donors could be adequately convinced of the need and potential value the funding would bring. Interventions that were both sound from a public health perspective and that were measurable stood a better chance of being funded. Considering that limited funds were available for a pool of countries, a well developed strategy offered a competitive advantage to the respective country.

Noble interventions on malaria also contextualized the malaria the planning for the new strategy. Initiatives such as the affordable medicines for malaria (AMFm), an initiative to subsidize antimalaria medicines in the private sector was proposed in 2008 and Kenya was selected as one of the ten pilot countries to roll it out. The initiative meant that antimalaria medicines could now be available countrywide including the rural areas at

only Kshs 40 or for free in the public sector. This meant that a key objective in malaria control, prompt and effective treatment of malaria within 24 hours, could now be attained with much ease considering that both the private and public sectors were being used to deliver medicines. Although a very welcome initiative, it also came with challenges that could not be addressed by the old strategy. Some of these challenges include the need for a better monitoring and evaluation system to ensure the intervention was efficacious, the risk of interfering with the pharmaceutical industry (due to subsidies) and the risk of irrational medicine use. Other interventions that contextualized the new strategy included the push towards universal coverage of vector control activities. Notable among this push was the idea of ditrsibuting one net for every two people in high malaria risk areas. This intervention required enourmous resources and meticulous logistical planning.

Within the DOMC, historical practices had created a situation that somewhat was out of step with the requirements of a new strategy. Key among these was the skills mix that had been built over time. Although experienced, some skills that were required to implement a new strategy were lacking and posed an immediate risk to the new strategy. Some of the skills that were lacking were an epidemiologist, a planner and a training coordinator. Structures that were required to support the new strategy were also not lacking, these included support units such as a planning unit, procurement unit within the division, a resource mobilization unit, the office of a deputy head and provincial structures that would devolve the activities of DOMC. Office space and IT equipment were also in short supply at the time when the new strategy was being planned.

Unlike many other organizations, resources that were required to initiate the development and the change to the new strategy were available from DFID through WHO. This served as a motivating factor in the planning and development of the new strategy.

4.2.2 The Malaria Program Review as the Basis for the Development and Change to the New Strategy

A multi-stakeholder, multi-sector participatory approach characterized the development of the new strategy. The interests at stake required that all stakeholders had a part in the development of the new strategy without which resistance to change would be anticipated during the strategy implementation. The main feature of the planning process was the launch of the malaria program review, a process that would highlight programmatic strengths, weaknesses and gaps to address under the new strategy.

The malaria program review pulled together all stakeholders in the malaria industry including government institutions, policy makers such as WHO and UNICEF, nongovernmental organizations (NGOs), the donor community and civil society members. The review was organized into two phases, phase 1 and phase 2. Under phase 1, consultation of partners to agree on the need and scope of the review was done, development of an implementation plan and mobilization of resources. Also under phase 1, thematic reviews of eight components of the malaria control program by six thematic review teams whose memberships were drawn from all the stakeholders was done. The eight components included malaria program management, procurement and supply chain management, malaria case management, malaria in pregnancy, malaria vector control, epidemic preparedness and response, advocacy communication and social mobilization,

policies and finally surveillance monitoring and evaluation and operational research. Phase 2 entailed central level consultations with senior management of both health ministries and representatives of partner agencies and stakeholders, plus field visits to provinces and districts to validate the findings of the desk reviews.

The subsequent activities after the malaria program review were finalization of the national malaria strategy by the drafting team on the basis of the programme review report. This was then to be followed by a stakeholders meeting for final review and adoption of the strategy after which a grand formal launch of the National Malaria Strategy was planned. This meticulous planning process ensured that stakeholders were not only informed of the process but also engaged appropriately to ensure ownership of the strategy that was to emerge from the review.

4.2.3 The Findings of the Malaria Program Review

The malaria program review offered a comprehensive situation analysis of the DOMC prior to the development of the new strategy. A good understanding of the strengths, weaknesses opportunities and threats of the various thematic components provided a picture of where DOMC was coming from, was currently at and where it needed to be.

4.1.1.1 Program Management

The DOMC program management structure was largely flat and centralized at the national level. This meant that policies were developed within the DOMC for adoption by the provincial and district teams. The strengths of the program management system included the availability of skilled staff at the central level, availability of experienced

staff, and availability of technical guidelines on malaria control. Other strengths included the use of IT for planning and reporting of malaria control activities, availability of functional technical working groups that guide policies and relatively well funded interventions by bilateral and multilateral partners. Increased political will was also identified as a strength the DOMC possessed at the time of the review.

The weaknesses of program management at the time of the review included a centralized governance system which lacked control and ownership at the provincial and district levels. This situation created a disconnect between the central and regional level making it difficult for DOMC to implement policies it had developed. Another weakness was the fact that DOMC relied mainly on donor funding. According to the Abuja targets, the health ministry is required to allocate 15percent of the national budget towards health. Kenya is still far from achieving this target considering the 6percent allocation in 2008. Disaggregated partnerships were also identified as a weakness during the review process. It was noted that there had been no unifying strategy for partners willing to support DOMC interventions. This sometimes resulted in duplication of interventions by partners or the involvement in interventions that were popular rather than impactful. Although DOMC had skilled and experienced officers, some skills such as an epidemiologist, planner, logistician and training coordinator were lacking. Other weaknesses identified under program management included the weak reporting systems from districts, non routine supervision of malaria control activities and lengthy procurement times which resulted in frequent stockouts of malaria medicines.

The recommendations for program management were mainly centered around correcting its weaknesses and maintaining its strengths. These included at policy level the lobbying

of government to increase funding towards the health system, the development of a new strategy that would unite partners in engaging in malaria control activities and the use of training institutions to capacity build health workers. At the DOMC level, the appointment of regional malaria focal persons, recruitment of lacking skills in DOMC and the streamlining of the supply chain system to avert stockouts was recommended.

4.1.1.2 Procurement and Supply Chain Management (PSM)

The strengths of the existing procurement and supply chain management system for malaria commodities included an appropriate quantification system, an elaborate distribution system and a logistics management information system (LMIS). The constant improvement of the LMIS system has improved quantification of the antimalarial medicines needs thereby reducing stockouts.

The weaknesses identified in the old system included the exclusion of a PSM component within the old strategy, the lack of a DOMC logistician to plan and monitor antimalarial commodities and frequency of stockouts of antimalarial commodities. Other weaknesses observed during the review were the over reliance on donor funds for essential malaria commodities and a sub optimal LMIS system that captured 80 percent of the commodities procured and distributed.

The recommendations for PSM included the deployment of a logistician to DOMC, addressing the procurement and distribution bottlenecks to avert stockouts and the enforcement of supplier contracts for accountability. The LMIS system also needed to be improved to ensure it captured other commodities such as diagnostics which were increasingly becoming of interest to the program.

4.1.1.3 Malaria Vector Control

Malaria vector control is still identified as one of the key pillars of malaria control in Kenya. The DOMC had made significant achievements in this area considering the enormous investments that had been put into the intervention. Adequate numbers of long lasting insecticide treated nets (LLINs) had been made available at no cost to vulnerable groups. Furthermore, a national retreatment exercise that saw old nets retreated with an effective insecticide had been successfully accomplished. Both these interventions increased the net coverage from 6 percent to 54 percent (DOMC, 2007). Indoor residual spraying, a vector control intervention involving the spraying of households with insecticides had also dramatically improved in the target districts.

Despite all these gains, challenges still existed that required to be addressed for the goal of malaria to be achieved. Lack of vector control guidelines, inadequate storage facilities for vector control commodities and insufficient office space bogged down the vector control activities. Additionally, a lack of routine monitoring of insecticide resistance was lacking. This situation resulted mainly from the limited capacity for entomological surveillance and the limited information on knowledge attitudes and practices regarding vector control operations. The high cost of the vector control commodities such as LLINs also makes it heavily reliant on donor funding thus reducing its sustainability in the absence of donors.

The recommendations for malaria vector control included the need to develop and finalize vector control guidelines, lobby for government funding for vector control commodities and the strengthening of regional vector control systems. Noble strategies of

expanding access to LLINs such as availing them to inpatients and schools were also proposed as effective strategies. The spraying of households in other epidemiological areas such as the coast and western areas was also put forward as a recommendation for the new strategy. Efforts to bridge the knowledge gap in vector control were also a key strategy to be adopted in under the new strategy.

4.1.1.4 Malaria Case management

With its contribution of 30 percent of outpatient consultations, 19 percent of inpatient admissions and up to 5 percent of inpatient deaths, malaria remains a major public health problem in Kenya. The cornerstone of malaria control in Kenya is early diagnosis and prompt treatment using safe and effective medicines. At the time of the review, diagnosis of malaria relied on clinical examination rather than a confirmatory test from a lab. The use of monotherapy antimalarials such as amodiaquine was being phased out to the more effective combination therapy.

This notwithstanding, the DOMC had major achievements in case management of malaria. Among these were the transition to the more effective medicines for the treatment of malaria, the artemisinin combination therapies (ACTs), the availability of treatment guidelines and the training of 12,000 health workers on the new policy. The new policy replaced old ineffective medicines with new more effective treatment (ACTs). In spite of the challenge of changing policy, the DOMC had made dramatic efforts in communicating the new policy, training health workers and availing the new medicine in the public sector.

Case management was not without its weaknesses as reported by the review. The use of clinical diagnosis rather than confirmatory diagnosis worsened the irrational use of medicines which were already scarce. Funds for the wide scale rollout of a diagnostic policy were lacking further worsening the situation. Other challenges included the non routine monitoring of the efficacy of antimalarial medicines which blinded the DOMC on the effectiveness of its treatment regimens. Frequent stockouts of ACTs also curtailed the rollout of the new policy owing to the fact that health workers resorted to using ineffective medicines in the absence of ACTs. Understaffed facilities that were required to implement the new treatment policy served to dampen the rollout process too.

4.1.1.5 Malaria in Pregnancy

As part of malaria prevention efforts, at the time of the review, all pregnant mothers living in endemic areas were required to receive preventive treatment for malaria. This policy had achieved some success with the adoption of the integrated approach whereby a mother received preventive treatment, a free net and case management during an antenatal care (ANC) visit. This approach encouraged mothers to go for antenatal visits, a behavior that had for a long time been difficult to achieve.

Despite this incentive, the DOMC still experienced several challenges in rolling out this intervention. These included late presentation by mothers to the ANC clinic, low uptake of the preventive medicines especially in subsequent visits, staff shortages at the ANC clinics, stock outs of the prevention medicines and poor supervision in both the public and private sectors. The recommendations to counter these challenges included the need to review the intervention with a view to identify the bottlenecks, explore alternatives of the intervention and address the stockouts of medicines.

4.1.1.6 Surveillance, Monitoring and Evaluation, and Operational Research

At the time of the review, monitoring and evaluation (M&E) was among the supporting structures in the program whose implementation had been weak. There however existed some achievements namely the conduction of a malaria indicator survey (MIS) in the year 2007. The malaria indicator survey was the first that was ever done in Kenya and it gave the program a good evaluation of the effectiveness of its interventions. With the MIS data, the DOMC could design strategies specifically for regions that were more problematic rather than a blanket rollout of interventions. Other achievements of the M&E unit included the integration of some of its indicators with other government programs thereby capturing important data using routine reporting systems.

Among the key challenges of the M&E unit are weak government bodies that are mandated to collect routine information. The division of health management information system (HMIS), the division mandated to collect routine data is yet to achieve an acceptable reporting rate from the districts. This has slowed down the reporting of critical malaria indicators by DOMC. Another important weakness of the unit is the poor dissemination of reports and findings of surveys or studies done by DOMC. A clear research and operational research agenda also lacks within the unit to adequately guide priority research questioning pertaining to malaria control. Other weaknesses the unit possessed were inadequate skills and the lack of a harmonized database to capture malaria data. The recommendations to counter these weaknesses were the development of an M&E plan, harmonization of malaria databases, deployment of the required skills to the unit and a dissemination plan for malaria information.

4.1.1.7 Epidemic Preparedness and Response

The epidemic preparedness and response unit was mandated with the surveillance of possible malaria outbreaks and the response to the same. The unit possessed a number of strengths at the time of the review with weekly epidemiological data flowing in from high risk districts. This was made possible by the collaboration with another government body monitoring other disease outbreaks and therefore served as a symbiotic relationship. Collaboration with the meteorological department for rainfall forecasts also added to the strengths the unit had at the time of the review.

One major weakness in this unit was the lack of funds specifically earmarked for an epidemic response. Emergency funds were obtained when the emergency arose which often resulted in a delay in the planning and response process. Other weaknesses included lack of inter country collaboration during an epidemic. This made it difficult to forestall an epidemic especially when efforts were not replicated across the border country. The recommendations for the unit included the maintenance of adequate stocks of epidemic response commodities, mapping of high risk areas and empowering of communities to help prevent epidemics.

4.1.1.8 Advocacy, Behavior Change Communication, Community and Social Mobilization (ACSM)

Until the malaria program review, ACSM was simply referred to as information education and communication (IEC). A review of its performance in view of the changing malaria environment recommended the expansion of its mandate to cover community and social mobilization. This decision was arrived at following a SWOT

analysis of the unit which revealed the following: the strengths included a strong partnership among stakeholders and increased access to malaria information from various sources. This lead to increased demand for and utilization of services. In addition to this, the unit engaged community based organizations in disseminating malaria prevention messages. One weakness the ACSM unit experienced was the lack of involvement of the provincial and district health education officers in the coordination of ACSM activities.

The opportunities the ACSM had included the launch of the community health strategy which offered an avenue to conduct ACSM activities at the community level. Other opportunities identified were the use of ICT to scale up advocacy nationally and partnership with the private sector. One notable threat was the findings of a study that showed education levels of community members positively correlated with the uptake of health interventions. This meant that low literacy was a threat to behavior change communication. The recommendations that followed from this analysis were the need to develop ACSM policy guidelines, leverage the media as a strategic partner and strengthen social research for ACSM.

4.2.4 Determination of the Vision, Mission and Objectives of the New Strategy

The determination of the vision for the new strategy was based on the context of malaria with the desired situation of DOMC after the successful implementation of the new strategy in mind. Contextual considerations such as the global targets, regional targets and vision 2030 were considered in the formulation of the vision. As a health and development concern of international dimensions, malaria was on the agenda of the

MDGs and featured in a number of continental initiatives, including the Abuja Declaration and the Roll Back Malaria campaign. Nationally, the focus on malaria was captured in Kenya's second National Health Sector Strategic Plan (NHSSP II, 2005-2010) and Kenya Vision 2030, which aimed at making Kenya a middle income country by 2030 (Kenya National Economic and Social Council, 2008). NHSSP II was formulated with the aim of reversing the downward trends in health indicators observed during the course of the first strategic plan 1999-2004. Vision 2030 built on three pillars; economic, social and governance. In recognition of the importance of a healthy populace to a thriving economy, improvements in the health status of Kenyans formed a major plank in the "social" pillar of the Vision (Office of the Prime Minister, 2008).

Similarly, malaria control was directly captured in the Economic Recovery Strategy for Wealth and Employment Creation (ERS). The ERS targets under the health sector for malaria were translated from Target 8 of MDG 6: *Have halted by 2015 and begun to reverse, the incidence of malaria and other major diseases.* The ERS pledged to "Reduce malaria morbidity and mortality by 50 per cent by 2010" (MPND, 2003). And in its strategic plan for 2008-2012, MOPHS committed to *Reduce malaria incidence to 15 per cent* (MOPHS, 2008). It is against this backdrop that in 2009, the vision of a *Malaria-Free Kenya* emerged as a result of the development of a multi-sector malaria control strategy. This ambitious strategy was fitting with the global, regional and national visions within which DOMC was going to be a part of. By so doing, the new strategy would be in tandem with the environment it was operating within. The main thrust of the new vision was going to be effective partnerships that as mentioned earlier were

identified as key stakeholders in DOMC activities. The new mission was therefore adopted as *to direct and coordinate efforts towards a malaria-free Kenya through effective partnerships.*

With an elaborate situation analysis courtesy of the malaria program review, the DOMC developed the objectives of the new strategy which would eventually form the strategic interventions. The draft objectives were proposed in phase II of the malaria program review by a team of experts in the various thematic groups. Past successes and weaknesses were used to develop recommendations for each of the thematic groups. The specific conclusions of the in-depth review that guided the finalization of the strategy were as follows: low malaria burden and the transmission pattern in most parts of the country make presumptive treatment even in under-fives inappropriate. Different malaria burden and transmission patterns in different districts make a blanket nationwide malaria strategy inappropriate. Universal access to parasite and vector control interventions will interrupt malaria transmission in low transmission zones and further reduce the malaria burden in high transmission areas. Malaria elimination is possible, given current technologies and adequate funding, through strategic investments aimed in the medium term at expanding malaria free areas.

Based on these recommendations, the following six objectives were proposed and agreed upon. Objective 1 was by 2013, to have at least 80 per cent of people living in malaria risk areas using appropriate malaria prevention interventions. The second objective was by 2013, to have 80 per cent of all self-managed fever cases receive prompt and effective treatment and 100 per cent of all fever cases who present to health facilities receiving parasitological diagnosis and effective treatment. The third objective was by 2010, to

ensure that all malaria epidemic prone districts had the capacity to detect and were prepared to respond to malaria epidemics annually.

Objective four required that by 2011, the surveillance, monitoring and evaluation systems were strengthened so that key malaria indicators were routinely monitored and evaluated in all malarious districts. The fifth objective was by 2014, to strengthen advocacy, communication and social mobilization capacities for malaria control to ensure that at least 80 per cent of people in malarious areas had knowledge on the prevention and treatment of malaria. The last objective was by 2013, to strengthen capacity in programme management in order to achieve malaria programme objectives at all levels of the health care system.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter summarizes the findings of the results, draws conclusions and makes recommendations of the results.

5.1 Summary

The need for DOMC to change to a new strategy was occasioned by a number of changes in its environment. The new vision for malaria, "a concerted effort towards a malaria free Kenya," offered the biggest impetus to move towards a new strategy. It focused all the subsequent activities towards developing and adopting the new strategy. The change in the malaria epidemiology also left the DOMC with little choice but to refocus its strategies to suit the new malaria map. The old strategies were not only ineffective but also wasteful of resources that were already becoming more and more difficult to come by. Focused strategies based on sound evidence had to be articulated in a new strategy to enable DOMC to continue making an impact in reducing the malaria burden.

Funding for malaria had steadily been increasing over the life of the old strategy however the global economic crisis threatened to interrupt this trend. Donors required more impact using less funds, a situation that was being demanded by their respective governments. DOMC over the years being 80% dependent on donor funding was definitely at risk of reversing gains in malaria control that it had already achieved. A watertight justification for sustained funding was therefore timely and could not be done in a more effective way than through the development of a new strategy. A new strategy would renew the confidence of donors by assuring them that their money was going towards an important and justified cause. More funding meant more impact was required from DOMC

interventions. Globally, the millennium development goals had been put forward and the DOMC being a part of this global health community had to play its role in their attainment. Regionally, the Abuja targets had been adopted by Kenya as a country and therefore DOMC needed to direct its efforts towards them. Nationally, the vision 2030 identified health as a key pillar in Kenya's development. Considering that malaria was still the number one killer disease, a reduction in its burden would translate in a step towards the vision 2030. These factors required DOMC to develop a new strategy to guide it in the right direction.

The expiry of the old strategy also naturally required DOMC to begin the process of developing a new one. Best practices and challenges faced in the old one offered an ideal platform for developing a new strategy. Whilst the goal of the old strategy was more towards the control of malaria, the goal of the new strategy was "by 2017, to have reduced morbidity and mortality caused by malaria in the various epidemiological zones by two thirds of the 2007/08 level." This significant difference in goals required different strategies. The need for better teamwork, focus and partnerships, a value that was lacking in the operation under the new strategy needed to be cultured for the new vision to be feasible. The mission was thus adopted as "to direct and coordinate efforts towards a malaria-free Kenya though effective partnerships." Finally the introduction of performance contracting required DOMC to engage in its core duties and those that were relevant to the greater ministry of public health and sanitation. A new strategy offered the opportunity of focusing DOMC and also provided tangible objectives with which it could be appraised.

With the need of a new strategy clear to DOMC and all its stakeholders, the process of planning and developing a new strategy began in earnest. The key feature in the development of the new strategy was the malaria program review. The Kenya malaria programme review was undertaken to evaluate the overall performance of the DOMC. The review also served as a situational analysis of malaria and malaria control in the country and an assessment of strengths, weaknesses, opportunities and threats.

Among the findings of this review was that the DOMC was strong in its structure and functioning at the central level, but it had a weak coordinating capacity at provincial and district levels. This translated to a lack of support for the delivery of malaria control interventions, as well as for monitoring and evaluation. The malaria control partnerships with various donors and technical organizations had been key to the successful implementation of various strategies and interventions, including mass net distribution, indoor residual spraying, prevention of malaria in pregnancy, the implementation of artemisinin-based combination treatment (ACT) policy, and information, education and communication campaigns. Malaria surveillance and the monitoring and evaluation indicators in line with the National Malaria Strategy had been integrated with the overall health sector monitoring and evaluation plans. Although the integration was useful in avoiding vertical structures, the effectiveness of the M&E unit in DOMC was weak and therefore required strengthening.

5.2 Conclusion

With the changes in the malaria environment over the 10 years of operation under the old strategy, DOMC ran the risk of losing focus and thereby becoming less effective in the fight against malaria. The inertia of operating under the old strategy had gained momentum and the need for a new strategy was likely going to be less apparent to the DOMC team. Continuing to operate in a strategy that had already outlived its usefulness was tantamount to programmatic suicide by the DOMC.

The nature of the strategic change in DOMC can be concluded to be planned for a number of reasons. Chief among these reasons is the meticulous planning that was undertaken ahead of the development of the new strategy. A SWOT analysis (the malaria program review) which was carried out to determine the situation of DOMC before the development of the new strategy demonstrated a planned strategic change. A review of the malaria environment (external analysis) revealed a number of factors that pointed towards the change to a new strategy. The changing malaria epidemiology meant that interventions of the DOMC were no longer going to be effective and therefore needed revision. The global push for impact indicators required DOMC to better its monitoring and evaluation unit as a source of justification and evidence for its activities. The dwindling funds available from donors also required that DOMC activities be not only effective but also efficient.

The other aspect of the malaria program review focused more on the internal analysis. DOMC having operated using the old strategy for 10 years needed to change its way of doing business in order to remain afloat. One of the internal aspects that pointed towards the need of a new strategy included the adoption of a new vision. The new vision heavily

borrowed from the vision 2030 of which DOMC was meant to contribute to. Although this aspect can be viewed both as internal and external, DOMC being a constituent of the larger ministry and government had to adopt this vision rather than respond to it. The need for teamwork and focus in DOMC was also an internal factor that required articulation in a new strategy. The need for these habits to be cultivated in DOMC was so grave such that a retreat to come up with a DOMC service charter was planned and held as part of the transition. The operationalization of the new strategy needed a more cohesive team at DOMC which had been lacking and without which, the objectives of the new strategy could not have been achieved. Performance contracting was another internal issue that needed addressing by the new strategy. The introduction of the appraisals for all civil servants could effectively be managed using a strategy that had activities that were relevant and yet measurable. These were to be made available in the new strategy.

Other aspects of the planned change included the costing and resource mobilization for the malaria program review, the DOMC retreat, the use of consultants, the identification of change agents and the use of political goodwill. Ahead of the strategic change, an estimation of the resources required for the malaria program review was done. The resources were mainly financial and were provided by WHO and other partners. The use of consultants especially in conducting the situation analysis also signified a planned approach to the strategic change. Change agents such as the new program manager in DOMC whose major task was to change the strategy also strongly suggested planned strategic change. Finally the use of political goodwill available from the minister of Public Health and Sanitation alongside other political figures epitomized with the signing of the aide memoir all pointed towards a planned strategic change.

The type of change anticipated in the shift from the old to the new strategy was mostly transitional. This is because there was in existence a strategy which was used to develop the new strategy. Although the vision of the new strategy was significantly different from the old one (freeing Kenya of malaria as opposed to controlling malaria), quite a number of interventions were maintained from the old strategy. The strategies however required a new way of performing them that is, effectiveness, efficiency and accountability. These requirements required a paradigm shift from the old way of doing things. The overall planning and developing of the new strategy can be summarized as successful because of the comprehensive manner in which the planning was done and the involvement of all stakeholders. The utilization of consultants and change agents also played a role in maintaining the tempo and focus of the review and strategy development.

5.3 Recommendations

Although the strategic change process as pertains to the change in the vision, mission and objectives was well planned and executed, the people aspect of the change program needs evaluation. The change management aspect of the transition had minimal emphasis on the people aspect of change save for the DOMC staff retreat and the involvement during the planning process. Considering that resistance to change is anticipated in programs that don't adequately carry along the staff, a thorough evaluation of the strategy implementation (once it is fully implemented) will be useful in assessing the success of the transition. Strategic drift is an ever present risk in change programs that are not well planned and guided to their logical conclusion. An evaluation of the realized strategy vis-à-vis the planned strategy will also be useful once the new strategy is fully implemented.

As pertains to DOMC rollout of the new strategy, the following recommendations based on the review can be made. For effective malaria prevention, scale up towards universal coverage of all at-risk populations with LLINs (one net for every two people) and the use of preventive medicine for pregnant women living in endemic areas should be instituted. In diagnosis and treatment, it is recommended that every suspected case of malaria be tested to confirm for malaria. The use of noble interventions to increase access to treatment such as home based management of malaria and the subsidization of ACTs in the private sector is also recommended.

In epidemic preparedness and response, it is recommended that the community be empowered to quickly respond to epidemics. Implementation of the M&E plan and harmonization of malaria databases is recommended for M&E unit. To increase awareness, the advocacy unit should strengthen capacity at provincial and district levels to undertake sustained advocacy and community based communication activities. Finally program management needs to develop a malaria policy, strengthen human resource capacity nationally and regionally and to assure long term funding commitment. This would ensure the gains made in malaria control are sustained.

REFERENCES

Ackerman, L. (1986). *Development, Transition or Transformation: The Question of Change in Organizations.* OD Practitioner.

Ansoff, H. (1975). *Corporate Strategy.* Penguin.

Aosa, E. (1992). *An empirical investigation of strategy formulation and implementation within large private manufacturing companies in Kenya.* Unpublished PhD Thesis, University of Strathclyde, UK.

Argyris, C., & Schon, D. A. (1978). *Organizational Learning.* Reading, MA: Addison Wesley.

Balogun, & Hope, H. (1994). Organisational transformation as punctuated equilibrium: an empirical test. *Academy of Management Journal , 37*, pp. 1141-1161.

Balogun, J. M. (2003). *Performance Management and Agency Governance for Africa Development: The search for common cause on Excellence in the Public Service.* Addis Ababa: UNCEA.

Balogun, J., & Hope, H. (1999). *Exploring Strategic Change.* Prentice Hall.

Bamford, D. &. (2005). A case study of change management effectiveness within the NHS. *Journal of Change Management , Vol 5* (No. 4), pp. 391-406.

Boseman, G., & Phatak, A. S. (1989). *Strategic Management: Texts and Cases.* New York: John Wiley and Sons Inc.

Burnes, B. (2000). *Managing change a strategic approach to organizational dynamics* (3rd ed.). Prentice Hall.

CHAI. (2011). *Quantification of Kenya's private sector anti-malarial market.* Clinton Health Access Initiative.

Cooper, R. D. (2003). *Business Research Methods* (8th ed.). McGraw-Hill Publishing Companies, Inc.

D'Aveni. (1995). *Hypercompetitive Rivalries: Competing in highly dynamic environments.* Free Press.

DOMC. (2009). *Kenya Malaria Programme Performance Review.* Nairobi: Ministry of Public Health and Sanitation.

DOMC. (2007). *Malaria Indicator Survey.* Ministry of Health.

Faulkner, D., & Bowman, C. (1995). *The Essence of Competitive Strategy.* Prentice Hall.

Gekonge, C. (1991). *A survey of the Strategic change management practices by Kenyan companies: A case study of companies Listed in the Nairobi stock exchange.* Unpublished MBA Project, University of Nairobi.

Hall, W. K. (1978). 'SBUs: hot, new topic in the management of diversification. *Business horizons , 21*, 17-25.

Hamel, G., & Prahalad, C. K. (1994). *Competing for the future.* Harvard Business School Press.

Johnson, G. (1988). Re-thinking incrementalism. *Strategic Management Journal* , pp. 75-91.

Johnson, G., & Scholes, K. (2002). *Exploring Corporate Strategy.* Prentice Hall.

Johnson, G., Scholes, K., & Whittington, R. (2006). *Exploring Corporate Strategy* (7th ed.). Prentice Hall, Financial Times.

Kees, H., & Wiley, J. (2004). *The art of strategic conversion.* The business idea is developed in scenarios.

Kenya National Economic and Social Council. (2008). *Kenya Vision 2030.* Nairobi: Government of Kenya.

Kobia, M. &. (2006). *The Kenyan Experience With Performance Contracting.* Arusha, Tanzania: Annual Round Table Conference.

Kothari, C. R. (1990). *Research Methodology: Methods and Techniques* (2nd ed.). Wishira Prakshan.

Kurt, L. (1958). *Force Field analysis-Lewin, Kurt.* Retrieved from Value Based Management.net: http://www.valuebasedmanagement.net/methods_lewin_force_field_analysis.html

Kurt, L. (1952). *Group decision and social change.* New York: Henry Holt.

Kurt, L. (1958). *Readings in Social Psychology.* Holt, Reinhart and Winston.

Management Papers. (2011). *http://www.management-papers.com/the-implementation-of-strategic-change.html*. Retrieved April 24, 2011, from http://www.management-papers.com.

Maneno, J., Oloo, A., & Kireria, A. (1998). *Malaria control in Kenya: Priorities and strategies. Interdisciplinary Rapid Assessment Mission.* World Bank, WHO, UNICEF.

McGee, J., & Thomas, H. (1986). Strategic groups, theory, research and taxonomy. *Strategic Management Jornal , 7*, 141-160.

MOH. (2000). *National Malaria Strategy 2000-2010.* Nairobi: Ministry of Health.

MOPHS. (2008). *Ministry of Public Health and Sanitation Strategic Plan 2008–2012.* Naitrobi: Ministry of Public Health and Sanitaion.

MOPHS. (2009). *National Malaria Strategy 2009-2017.* Nairobi: Ministry of Public Health and Sanitation.

MPND. (2003). *Economic Recovery Strategy for Wealth and Employment Creation 2003–2007.* Nairobi: Ministry of Planning and National Development.

Mugenda, O. M., & Mugenda, A. G. (1999). *Research Methods: Quantitative and Qualitative Approaches.* Acts Press.

Newton, J. (2003). Receptivity of Change in a general medical practice. *British Journal of Management , 14*, pp. 143-153.

Noor, A. M. (2009). *Malaria endemicity map.* Nairobi: Kenya Medical Research Institute.

Office of the Prime Minister. (2008). *First Medium-Term Plan.* Ministry of State for Planning, National Development and Vision.

Ogwora, E. (2003). *Strategic Change management at the National Cereals and Produce Board.* Unpublished MBA Project, University of Nairobi.

Ongaro, K. (2004). *Strategic change management practices in Kenyatta National Hospital.* Unpublished MBA Project, University of Nairobi.

Peters, T. (1970).

Porter, M. (1985). *Competitive Advantage.* Free Press.

Porter, M. (1980). *Competitive Strategy: Techniques for analysing industries and competitors.* Free Press.

Rutherford, D. (1995). *Routledge Dictionary of Economics* (2nd ed.). Routledge.

Sharp, B., & Dawes, J. (2001). 'What is differentiation and how does it work?'. *Journal of Marketing Management , 17*, 739-759.

Snow, R. (1998). Models to predict the intensity of Plasmodium falciparum transmission: applications to the burden of disease in Kenya. *Transactions of Royal Society of Tropical Medicine & Hygiene* , 92: 601-606.

Thomas, J. (2011). *Reference for Business.* Retrieved 2011, from Encyclopedia for Business: http://www.referenceforbusiness.com/management/Sc-Str/Strategy-Levels.html

Todd, A. (1999). Managing Radical Change. *Journal of Long Range Planning* , 32. 2. 237-244.

Todd, D. J., & Maury, A. P. (2003). *Managing change* (2nd ed.). Mc Graw Hill.

Wedel, M. (2001). *Is segmentation history?* (Vol. 13). Marketing Research.

Worthington, & Britton, C. (2003). *The business environment.* FT/Prentice Hall.

Annex 1 Interview Guide

1. What was the malaria environment/situation like before the change of the strategy
2. How did you envision the DOMC after the new strategy?
3. What were the key drivers of change towards a new malaria strategy?
4. What were the constraints you anticipated in changing to the new strategy
5. What were the opportunities of changing to the new strategy
6. What were the threats of not changing to the new strategy
7. How can you define the process of changing to the new strategy?
8. Who were some of the key change agents you needed in the change to the new strategy?
9. What are the strengths the DOMC possessed ahead of the strategic change process?
10. What are some of the weaknesses the DOMC possessed ahead of the strategic change process?
11. Who were some of your allies in the strategic change process?
12. How did you come up with the vision, mission and objectives of the new strategy?
13. What plans did you put in place ahead of changing from the old to the new strategy?
14. How did you estimate the overall resource requirements for implementing the new strategy?
15. In your own opinion how prepared was DOMC for the change from the old to the new strategy?