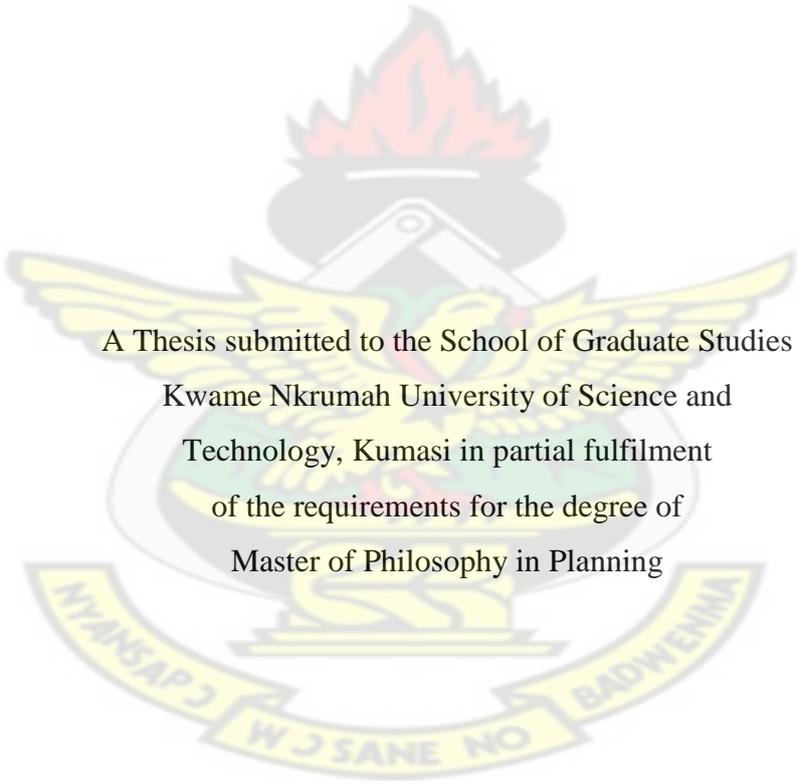


DECENTRALISED PREMIX FUEL MANAGEMENT AND THE  
DEVELOPMENT OF COASTAL COMMUNITIES IN THE KOMENDA-EDINA-  
EGUAFO-ABIREM MUNICIPALITY

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A Thesis submitted to the School of Graduate Studies  
Kwame Nkrumah University of Science and  
Technology, Kumasi in partial fulfilment  
of the requirements for the degree of  
Master of Philosophy in Planning

October, 2014

**DECLARATION**

I hereby declare that this submission is my own work towards the MPHIL Planning and, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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## ABSTRACT

Community development can be promoted through the decentralised Premix fuel Management policy. However, irregular supply of premix fuel was identified by government as a major hindrance to fishing activities in the Komenda-Edina-Eguafo-Abirem Municipality. The short supply of premix fuel led to low catch of fish as well as low income levels for fishermen and fishing was steadily becoming a less attractive means of livelihood. In the quest to curb the challenge of irregular supply of premix fuel and its associated problems, the government in 2001 formulated and implemented the decentralised Premix Fuel Management policy. The study sought to examine the contribution of the decentralised Premix Fuel Management policy to infrastructural development and access to premix in the Komenda-Edina-Eguafo-Abirem Municipality. It also assessed the levels of stakeholder participation and accountability in decentralised premix fuel management.

The study adopted the descriptive and explanatory study designs to examine the contribution of the decentralised Premix Fuel Management policy to community development. Both simple random sampling and purposive sampling techniques were used to select the sample for the study. An interview schedule and interview guides were employed for the primary data collection.

The main findings of the study were that the decentralised Premix Fuel Management policy has led to an increase in the supply of premix fuel since its passing in 2001 and the sale of premix fuel is managed by the community members themselves instead of private individuals whose major motive is profit maximization. The study also found that the decentralised premix fuel has led to the implementation of developmental projects such as construction of a shed for fishermen and fishmongers at the landing beach, and construction of a clinic and conference hall complex. Other projects financed from the money earned from selling premix fuel are purchase of fishing nets for 150 fishermen and distribution of 450 basins to fishmongers to promote their economic activities.

Despite the implementation of these projects, the community members are not pleased with the rewards because they feel the rewards do not reflect their needs, and most

especially do not match up with the profits accrued from selling premix fuel. The study again found that Stakeholder participation and accountability in PFM are low.

The study recommends that government through the National Premix Committee should formulate and enforce laws to ensure that the Landing Beach Committees do not violate the rules and regulations guiding the decentralised Premix Fuel Management policy so as to attain the set goals and objectives.

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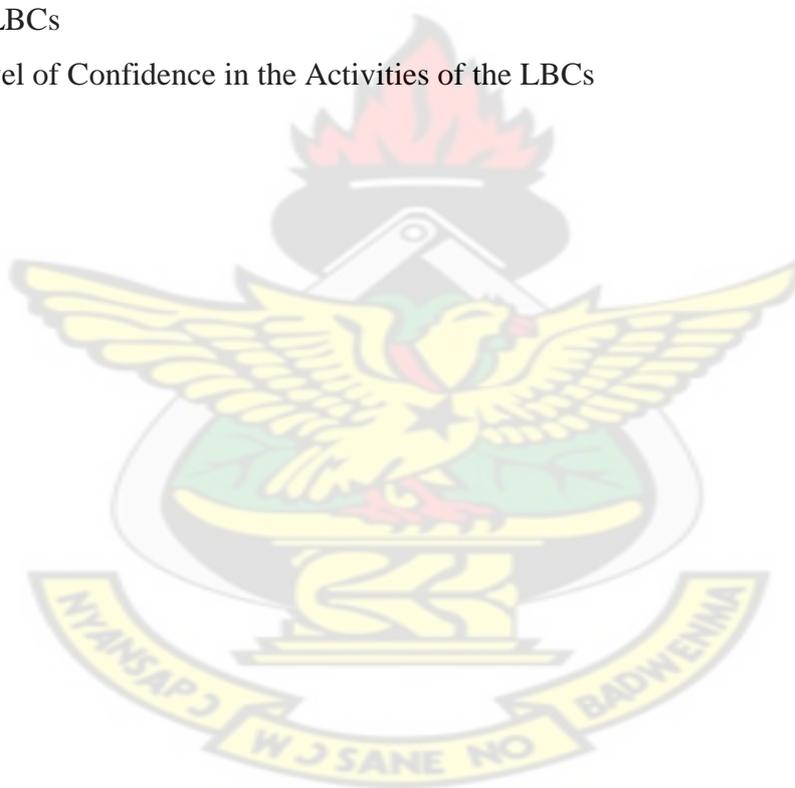
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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>Abbreviation</b>	<b>Meaning</b>
ADM	Area Development Management
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
hp	Horsepower
IFAC	International Federation of Accountants
KEEA	Komenda-Edina-Eguafo-Abirem
KM	Kilometres
LBC	Landing Beach Committee
LBCs	Landing Beach Committees
LI	Legislative Instrument
MA	Municipal Assembly
MCE	Municipal Chief Executive
MDG	Millennium Development Goal
MDGs	Millennium Development Goals
MMDAs	Metropolitan, Municipal, and District Assemblies
MMDCE	Metropolitan/Municipal/District Chief Executive
MMDCEs	Metropolitan/Municipal/District Chief Executives
MoFA	Ministry of Food and Agriculture
MT	Metric Tonnes
NAFAG	National Fisheries Association of Ghana
NGOs	Non-Governmental Organisations
NPA	National Petroleum Authority
NPC	National Premix Committee
OECD	Organisation for Economic Cooperation and Development
OMC	Oil Marketing Company
OMCs	Oil Marketing Companies
PFM	Premix Fuel Management
SLIM	Social Learning for Integrated Management
TOR	Tema Oil Refinery
UN	United Nations
US	United States

# CHAPTER ONE

## GENERAL INTRODUCTION

### 1.1 Background of the Study

Development is a multi-dimensional and complex concept. It encapsulates human capital, growth, freedom, poverty reduction, environmental sustainability and social inclusion (Chambers, 2004). Nixson (2005) has argued that development in its simplest form can be conceived as a process of transformation of people, societies and economies to improve quality of life. The quest to develop has been the concern and primary preoccupation of all governments and global institutions such as the United Nations Organisation (UNO), World Bank and the International Monetary Fund (IMF).

Millennium Development Goals (MDGs) are a related set of objectives that represent a rational solution to the problem of development (Hall, 2005). It expresses the shared commitment made by the Global community to fight poverty. The World Fish Centre believes that fisheries and aquaculture sector is an important contribution to achieving these goals (World Fish Centre, 2005).

Fishing in developing countries contributes to the development of societies and the achievement of the MDGs, principally through jobs, income and human nutrition. Many of the world's poorest people depend on fish to help meet their basic needs. Fish are a key dietary staple for over one billion people, providing up to 70 percent of animal protein in some countries. Similarly, millions of families rely on catching, processing and trading fish to provide their main source of cash income (World Fish Centre, 2005). These benefits go a long way towards reducing hunger and poverty, which is the first MDG – reducing extreme hunger and poverty. Again, fishery as a source of income and a means to increase one's income is likely to help improve school attendance, which is MDG two (achieving universal primary education) (Ockiya, 2000; Hall, 2005). Most women in developing countries are very active in artisanal fisheries, especially the processing and marketing of fish (Ockiya, 2000; Kingdom et al., 2008). Women empowerment through trading in fish has a direct impact on their continued access to fish for food and income, and the wider well-being of their families, consequently contributing to MDG three – promoting gender equality and empowering women (Kingdom et al., 2008). Fish as an excellent source

of high-quality protein and other nutrients such as iron, calcium, potassium, vitamin A and iodine which are vital to good health helps to reduce child mortality and improve maternal health, that is, MDGs four and five respectively (Kingdom et al., 2008). Properly managed fisheries ensure that environmental capital and services are preserved for future generations, promoting the achievement of MDG seven, that is, ensuring environmental sustainability (Ockiya, 2000; Kingdom et al., 2008). The achievement of these MDGs is a very important component of community development (Hall, 2005).

Community development combines the idea of “community” with “development”. Kumar (2005) defines community as a social structure in which people organise for a common purpose. To Kumar, a community is a homogeneous social structure with harmonious and territory-bound unit. Development, to Chambers refers to “all efforts to offer welfare programs, aids, and resources toward alleviating poverty, transforming rural areas, and provision of the basic needs of the poor to ensure continuous survival of their race through posterity” (Chambers, 2004:3). Community development, thus, is when a community engages itself in a process aimed at improving the social, economic, political, institutional and environmental situation of the community. The community is both the means and the end of community development. Community development improves the ability of communities to collectively make better decisions about the use of resources such as infrastructure, labour and knowledge (Maser, 1997). Biggs (1999) suggests that community development is a process where people are united with those of governmental authorities to improve the economic, social and cultural conditions of communities, and communities are integrated into the life of the nation, thereby enabling them to contribute fully to national progress.

In addition, the World Bank (2004a) establishes the fact that community-based and community-driven development projects have become an important form of development assistance, with the World Bank’s portfolio alone approximating seven billion US dollars. A review of their conceptual foundations and evidence on their effectiveness shows that projects that rely on community participation have not been particularly effective at targeting the poor. There is some evidence that such projects create effective community infrastructure. Most of such projects are dominated by

elites, and both targeting and project quality tend to be markedly worse in more unequal communities (World Bank, 2004a). The sustainability of community-based initiatives depends crucially on an enabling institutional environment, which requires government commitment. Sustainability also depends on the accountability of leaders to their community to avoid “supply-driven and demand-driven” development. The naive application of complex contextual concepts like participation, social capital and empowerment is endemic among project implementers and contributes to poor design and implementation. This suggests that community-based and -driven development projects are best undertaken in a context-specific manner, with a long time horizon and with careful and well-designed monitoring and evaluation systems (World Bank, 2004a).

Despite the benefits and efforts directed at undertaking community-driven and -based projects in coastal communities, coastal communities face increasing demographic and economic pressure (World Bank, 2000). They experience the impacts of urban sprawl due to the increasing growth of the population and lack of effective planning. The sustainable development of coastal communities has also been of great concern to many governments and international institutions. This is because activities in such communities have direct effects on both the local and international environment. The World Bank (2000) reports that the development of coastal communities could help check the excessive pollution of beaches in developing countries, protect aquatic lives and improve eco-tourism as well as increase yield of coastal fishing activities. In view of this, the World Bank in 2011 approved a total investment cost estimated at US\$53.8 million to promote good governance and sustainable management of Ghana’s fisheries, reduce illegal fishing, increase the contribution of fish resources to the national economy and facilitate aquaculture development in Ghana.

In Africa, several attempts have been made by governments and environmental organisations to facilitate development in coastal communities. Some of the approaches are providing physical infrastructure (such as silos and toilet facilities) to reduce not only waste during bumper harvest but also environmental pollution; establishing environmental and sanitation teams to promote environmental cleanliness; and upgrading other development facilities such as schools, health facilities and water to enhance human development.

In Ghana, for instance, the Ministry of Water Resources and Works and Housing through its Department of Hydrology undertook the Keta Sea Defence Project in the Volta Region, New Takoradi Sea Defence Project in the Western Region and Cape Coast Coastal Protection Works in the Central Region. These works entailed sea defence works to limit the erosion of shorefronts; they included the construction of sea defence structures and beach nourishment. The projects have helped in protecting beaches and their environs against encroachment by the sea, arresting environmental deterioration as well as mitigating the negative social and economic consequences of beach erosion. The projects strengthened the economic and productive base of the areas through enhanced tourist, industrial, fishery and commercial activities (National Fisheries Association of Ghana (NAFAG), 2005).

These projects have improved the importance of the fishery sector in Ghana. The fishery sector of Ghana plays an important role in contributing significantly to national economic development objectives related to employment, livelihood support, poverty reduction, food security, foreign exchange earnings and resource sustainability. According to the Ministry of Food and Agriculture (MoFA) (2011), fish is the country's most important non-traditional export commodity as the fisheries sub-sector accounts for about four percent of the agricultural Gross Domestic Product (GDP) in Ghana and export earnings from fish and fishery products on average account for approximately 60 million US Dollars annually.

The main economic activity of people in coastal communities in Ghana is fishing. Hand-dug canoes have been used as the main fishing vessel for fishing activities in Ghana. In the past, the movement of the canoes on the sea was done by paddling. With the advent of the outboard motor in 1950, many fishermen have subscribed to its use. The outboard motor with engine power of up to 40 horsepower (hp) is powered using premix fuel. The introduction of outboard motors has improved the efficiency in the fishing industry, since it eases and fast-tracks movement over the sea and increases turnover. However, since its inception in 1990, the allocation, distribution and sale of premix fuel, a heavily subsidised product, has been challenged by numerous problems. The original idea was to ensure the timely availability of the premix fuel to the fishers at an affordable price. It was also to empower the fisher

groups to run the premix fuel sale points at the landing beaches. Many fishermen complain about the high prices and irregular supply of premix fuel (MoFA, 2011).

In recognition of the importance of the fishing industry to the economy of Ghana, the government formed a team of experts with deep knowledge and understanding of the fishing industry and the premix fuel situation to reconstitute the National Premix Committee (NPC). The NPC was tasked to do the following: restructure premix fuel allocation, distribution and sale situation; identify problems bedevilling the premix fuel delivery system; and suggest ways of ensuring that the fishermen are the core beneficiaries in terms of receiving the product on time, in sufficient quantities and at approved National Petroleum Authority (NPA) prices (MoFA, 2011).

In an attempt to offset these development challenges in coastal communities, the government in 2001 enacted the decentralised Premix Fuel Management (PFM) policy to ensure smooth and reliable delivery of premix fuel to the fisher folk. This was because there were disturbing developments relating to the price and supply of premix fuel to fishermen (MoFA, 2011). Additionally, the government subsidised the price of premix fuel for the fisher folk with the hope that it will help increase their incomes and eventually transform the coastal communities. This notwithstanding, many coastal communities in Ghana still exhibit the characteristics of slums – with no proper community layout, inadequate and poor physical infrastructure, poor sanitation, low literacy levels and a high school drop-out rate (Amarfio, 2010).

The decentralised PFM policy gave birth to premix fuel committees in fishing communities. These committees established to manage the sale of premix fuel were known as the Landing Beach Committees (LBCs). The policy charged LBCs with the sole responsibility of selling premix fuel to only canoe owners and fishermen, managing revenue accruing from additional taxes levied on the sale of premix fuel and deciding on developmental projects in consultation with the fishing community and the Metropolitan, Municipal, and District Assemblies (MMDAs). This was to ensure the timely availability of premix fuel to fishermen at an affordable price. It was also to empower the fisher groups to run the premix fuel sale points at the landing beaches and use the proceeds to develop their communities. Thus, 53 percent of the profit that accrues from the sale of premix fuel is to be used for development activities

in the communities, 12 percent goes to the chief fisherman, 18 percent goes to other members of the LBC, seven percent goes to the pump attendants and 10 percent goes to the secretary of the LBC (MoFA, 2011).

The fishing communities therefore play a major role in the utilisation of the premix revenue for development. That is, without the consent of the communities, the LBCs and MMDAs do not have the right to expend the revenue on any development project in the community. However, Crawford (2004) indicates that poor and weak community structures and corruption among the elites are likely to influence the effective utilisation of revenue accruing from premix fuel for development. Weak community structures and corruption are likely to influence and limit the ability of the fishing community to plan, implement and monitor their own development.

The Komenda-Edina-Eguafo-Abirem (KEEA) Municipality represents one of the major fishing Municipalities of Ghana where premix fuel is used. The Municipality has 15 active fishing communities. Some of the important fishing communities are Elmina, Komenda and Kissi.

## **1.2 Problem Statement**

Enacting a policy is one thing and guaranteeing proper implementation is another. In 1991, the central government identified erratic supply of premix fuel as a major threat to fishing activities in the coastal communities (Mensah et al., 2006). The erratic supply of premix fuel resulted in a low catch of fish, low household income and low community development (MoFA, 2011). Fishing was gradually becoming less attractive as a medium to eliminate household poverty (Amarfio, 2010). As a result, the government subsidised 100 percent of the price of premix fuel. The high price difference between the premix fuel for the outboard engines and the petrol for automobiles led to gross abuses which led to the withdrawal of the subsidy. Later in 1996, the government reintroduced the subsidy and established a ministerial committee for premix fuel administration and distribution to ensure the efficient supply of the premix fuel. The fuel was sold on commission basis by fisheries associations (Mensah et al., 2006).

By the end of year 2000, the original idea of government to ensure availability of premix fuel to fishing communities at an affordable price had been diluted to the extent that there was an explosion of premix fuel sale points owned by individuals rather than the fisher groups; premix fuel sale points grew from 128 in 1990 to about 900 in 2000. There was uncontrollable corruption in the premix fuel administration and uncontrolled diversion of the product from the intended destinations particularly to fuel stations to be sold to motorists as petrol. To worsen the case, there were frequent shortages to the disadvantage of the fishers, creating general dissatisfaction among them (MoFA, 2011).

In response to the situation, government enacted the decentralised PFM policy in 2001. The introduction of the decentralised PFM policy was perceived to be an effective antidote to poverty in coastal fishing communities. It aims at ensuring regular supply of premix fuel to the fisher folk to promote continuity in fishing, improving household income and investment, reducing the price of premix fuel to fishermen to further reduce cost of operations, and empowering coastal communities to plan, implement and manage their own development. In line with this aim, the proceeds earned from selling premix fuel are to be used to provide infrastructural facilities for the coastal communities. The policy was also to ensure stakeholder participation and accountability in the management of premix fuel (MoFA, 2011). After a decade of the implementation of the policy, how has its key tenets in terms of participation and accountability been upheld to promote local development?

The Komenda-Edina-Eguafo-Abirem Municipality is one of the major fishing hubs in Ghana. Management of premix fuel in KEEA is very crucial for successful fishing activities. In line with the implementation of the decentralised Premix Fuel Management policy, eight premix fuel committees were formed in KEEA Municipality to ensure regular and adequate supply of premix fuel to canoe owners and fishermen. These committees also use the fishing community's share of the proceeds gained to promote infrastructural development in KEEA.

However, are challenges such as weak community structures, corruption among local elites and poor accountability of local institutions not likely to influence the effectiveness of the PFM concept in transforming coastal communities? In addition,

few empirical findings exist to show how the decentralised PFM policy is contributing to the development of coastal communities. The existing findings from studies such as ‘Addressing the Challenges in the Fishing Industry in Ghana’ by Amarfiio (2010) focus basically on the challenges and prospects of the fishing industry in Ghana with little or no attention given to issues of premix fuel management. The study therefore aimed at examining the contribution of the decentralised PFM policy to the development of coastal communities.

### **1.3 Research Questions**

The study sought to assess the contribution of premix fuel to community development in coastal communities. More specifically, it sought to address the following questions:

1. Do relevant stakeholders in the Komenda-Edina-Eguafo-Abirem Municipality participate in the management of premix fuel following the introduction of the decentralised PFM policy?
2. What is the level of accountability in the management of premix fuel in the Komenda-Edina-Eguafo-Abirem Municipality?
3. Has the decentralised PFM policy resulted in improved access to premix fuel in the coastal communities in the Komenda-Edina-Eguafo-Abirem Municipality?
4. Has the policy contributed to infrastructural development in coastal communities within the Komenda-Edina-Eguafo-Abirem Municipality?
5. What challenges do the stakeholders face in the management of premix fuel?

### **1.4 Objectives of the Study**

The study sought to examine the contribution of the decentralised PFM policy to the development of coastal communities in the KEEA Municipality. Specifically, the study sought to:

1. examine the level of stakeholder participation in the management of the premix fuel in the Komenda-Edina-Eguafo-Abirem Municipality following the introduction of the decentralised PFM policy;
2. assess the level of accountability in the management of premix fuel in the Komenda-Edina-Eguafo-Abirem Municipality under the decentralised PFM policy;

3. explore whether the decentralised PFM policy has resulted in improved access to premix fuel in the Komenda-Edina-Eguafo-Abirem Municipality;
4. assess the contribution of the decentralised PFM policy to infrastructural development in the Komenda-Edina-Eguafo-Abirem Municipality;
5. examine any challenges associated with the implementation of the decentralised PFM policy.

### **1.5 Hypotheses of the Study**

The hypotheses of the study were:

- ✓  $H_0$  = there is no significant association in participation among fishermen, canoe owners and fishmongers in premix fuel management
- ✓  $H_1$  = there is significant association in participation among fishermen, canoe owners and fishmongers in premix fuel management
- ✓  $H_0$  = there is no accountability in premix fuel management
- ✓  $H_1$  = there is accountability in premix fuel management
- ✓  $H_0$  = PFM has not significantly increased the infrastructural base of fishing communities
- ✓  $H_1$  = PFM has significantly increased the infrastructural base of fishing communities

### **1.6 Scope of the study**

Geographically, the study covered one fishing community with landing beaches in KEEA Municipality in the Central Region, Ghana. The major fishing community in KEEA with landing beaches is Elmina (4 landing beaches). The study also covered the two LBCs (two landing beaches) in Elmina in KEEA Municipal Assembly.

Contextually, the study examined the level of contribution of the decentralised PFM policy to community development in KEEA. It assessed the contribution of the policy to infrastructural development and to access to premix fuel in KEEA Municipality. The study assessed the participation of stakeholders in PFM in the KEEA Municipality. The focus was on fishing communities with landing beaches since they have LBCs which manage the sale and supply of premix fuel. Participation in PFM

was measured under eight levels of participation that are non-mutually exclusive. These are manipulation, therapy, information sharing, consultation, placation, partnership, delegated power and citizen control. Community participation in PFM in the study refers to the process through which people living in the fishing communities with landing beaches influence decisions over the management of premix fuel. The study, again, covered accountability in PFM in KEEA Municipal Assembly specifically addressing issues of answerability and enforcement in PFM.

### **1.7 Relevance of the Study**

The study sought to examine the extent of contribution of profits accrued from the sale of premix fuel to community development. It would serve as a policy guide to improve PFM and fishing activities effectively in Ghana. It would show the level of commitment of Ghana to reducing poverty, particularly in fishing communities.

The study would also be important for coastal communities to identify some of the challenges the LBCs face in their quest to manage the sale and supply of premix fuel. It would again help LBCs to identify some of the practices adopted by others to address the challenges they face with managing the supply and revenues accrued from the sale of premix fuel.

Additionally, the study would assist the government and Non-Governmental Organisations (NGOs) which are interested in the development of coastal communities to identify some of the issues influencing the effective management of the revenues accruing from the sale of premix fuel for community development. Finally, the study would serve as a reference point for other academic works and further research on PFM.

### **1.8 Organisation of the Study**

The study has been divided into six chapters. The first chapter, which is the general introduction, covered the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, scope of the study, and organisation of the study. The second chapter contained the review of relevant literature on the theoretical framework on PFM, concept and indicators of community participation, concept and indicators of accountability, socio-economic

importance of the fishing sector, and stakeholder responsibilities in the management of premix fuel. Furthermore, it presented the conceptual framework for the study.

Subsequently, chapter three which presented the contextual issues of decentralized Premix Fuel Management policy in the Komenda-Edina-Eguafo-Abirem Municipality followed. Chapter four dealt with the methodology of the study, study design, data sources, sample and sampling procedure, data collection method, research instruments, fieldwork, fieldwork challenges and data management, whilst chapter five focused on the results of and discussion on the research findings. The last part of the study, chapter six, presented the findings, recommendations and conclusion of the study.



## **CHAPTER TWO**

### **PREMIX FUEL MANAGEMENT AND COMMUNITY DEVELOPMENT**

#### **2.1 Introduction**

This chapter covers the review of relevant literature and the theoretical framework of the study, including fishing in Ghana, community participation, public accountability and community development. Additionally, it covers stakeholders and their responsibilities, and presents a conceptual framework of the study.

#### **2.2 Importance of the Fishing Industry**

Marine fisheries are very important to the economy and welfare of coastal communities, providing food security, job opportunities, income and livelihoods as well as traditional cultural identity. Globally, marine fisheries produced 80 million tonnes of fish in 2009 and directly employed 34 million people in fishing operations in 2008 (Food and Agriculture Organisation (FAO), 2011). Therefore, maintaining the long-term prosperity and sustainability of marine fisheries is not only of political and social significance but also of economic and ecological importance.

The world's fisheries sector has gone through a dramatic development in the last 60 years, and there have been large increases in its production. Total world fish production was only 19.3 million tonnes in 1950, but it increased dramatically to 163 million tonnes in 2009, showing a percentage increase of 745 (FAO, 2011).

Fisheries are of great importance, especially to developing countries. They provide an important source of revenue for many developing countries. Fish is the most widely traded foodstuff in the world as 37 percent of fish produced is traded internationally (FAO, 2009). In 2006, exports of fish were worth a total of US\$85.9 billion (FAO, 2009), more than half of which originated in developing countries (Paquette and Lem, 2008). In 2002, net exports of fish amounted to US\$17.4 billion foreign exchange earnings for developing countries more than rice, coffee, sugar, and tea combined (World Bank, 2005). In Mozambique, for example, fisheries account for 28 percent of total merchandise exports (FAO, 2004).

Additionally, fish is central to food security of many of the world's poor, especially in coastal communities. One third of the world's population (2.6 billion people) rely on

fish and other aquatic products for at least 20 percent of their protein intake (Dulvy and Allison, 2009; FAO, 2011) and fish provides more than 50 percent of all the protein and minerals consumed by 400 million of the world's poorest people (Multi-Agency Brief, 2009). Fish accounts for 20 percent of animal protein consumed in Africa (Prein and Ahmed, 2000; FAO, 2009).

Fisheries play a vital role in the lives of millions of people around the world. They serve as a major source of employment, livelihood and a way of life not only for the coastal sector but also for the inland and aquaculture sectors. About 520 million livelihoods depend on fisheries and aquaculture (FAO, 2009), out of which 98 percent live in developing countries (World Bank, 2005). World Bank (2005) indicates that the number of fishers in the world has grown by 400 percent since 1950, compared with a 35 percent increase in the number of agricultural workers over the same period. Fisheries provide a source of food, employment and income (FAO, 2011).

### **2.3 Community Participation**

Participation, a rich concept increasingly in popular usage, like the concept of 'community', has a multiplicity of meanings which vary with its application. The concept of community participation is not a new endeavour in development dialogue. Over the past 30 years, community participation has not only produced decisions that were responsive to community interests and values but also helped resolve user conflicts, build trust, and educate the public about the environment (Beierle and Cayford, 2002). From the late 1980s, participatory approaches emerged as a key notion in development planning on the backdrop of shortcomings of top-down, donor-driven, outsider-led development (Cooke and Kothari, 2001) and to seek sustainability, effectiveness and equity, particularly for the rural poor.

The importance of community participation to the success of community-based projects, particularly through the use of local knowledge to develop locally appropriate solutions, has also been emphasized by Carr and Halvorsen (2001). Thwala (2010) reveals that the rationale for participation is to ensure empowerment, build beneficiary capacity, increase project effectiveness, improve project efficiency, project cost sharing and ultimately for the success of development projects.

Stiefel and Wolfe (1994) define it as people achieving a greater capacity to advance their own interests and control their own livelihoods and becoming a voice in the shaping of development. This would imply the involvement of a significant number of persons in situations or actions that enhance their well-being in terms of income, security, or self-esteem.

The World Bank (2004b) also defines participation as a process through which stakeholders influence and share control over development initiatives as well as the decisions and resources which affect them. Participation therefore refers to different mechanisms for the public to express opinions and ideally exert influence regarding political, economic and environmental decisions. It is therefore more than the number of meetings attended but commitment. Often, the meaning of participation is modified with adjectives, resulting in terms such as public participation, popular participation, people's participation, and community participation, the last to be mentioned being the focus of this study.

The need for increased community participation emerged out of the need to decentralise the management of premix fuel to the fishing communities to make fishing issues more responsive to local need as opposed to state agencies having unique capacity to manage the resources. Community participation in programmes is likely to ensure community ownership of a project, suit local circumstances, and increase a project's sustainability (Aref and Ma'rof, 2008). It stimulates community members to support and contribute towards programme sustainability.

Rifkin and Pridmore (2001) posit that community participation is one of the key ingredients of an empowered community if rightly followed. An empowered community is able to take decisions on its own to improve the quality of their lives. Evidently, communities that engage their citizens deeply in the work of community development raise more resources, achieve more results, and develop in a more holistic and more beneficial way (Adams and Hulme, 2001).

Community participation denotes people's involvement in the implementation of targeted projects or programmes, even though it does not truly reflect the spirit and depth of community participation. Thwala (2010) emphasizes that getting people

involved in a project is not a task but the pillar of social development. The World Bank also uses several definitions for community participation but the one most commonly approved and widely used is a process through which people spend efforts to influence decision-making process that affects them (World Bank, 2004c).

However, this definition has been criticised by Beckley et al. (2005) based on the definition by the Joint Food and Agriculture Organisation/United Nations Economic Commission for Europe/International Labour Organisation Committee (2000). The Joint Committee defines community participation as various forms of direct public involvement where people, individually or groups, can exchange information, express opinions, articulate interests, and have the potential to influence decisions or outcomes of management issues. Community participation is, thus, more than a set of tools or a mechanical process.

Community participation is conceptualised as both a means of accomplishing other goals and an end in itself. The former is a technical concept, while the latter indicates a political concept. Where it is interpreted as a means, it essentially involves a process of involvement to achieve a development programme or described as an input into project (Lasker et al., 2001). As a means, community participation taps into physical, social, economic and environmental resources of grassroots populations in order to achieve set development objectives or goals. Here, the results of the participation in the shape of the predetermined targets are more important than the act of participation. Nikkhah and Redzuan (2009) specify that participation as a means contributes to the processes of democratisation and collaboration which cause local populations to benefit more from development initiatives.

As an end in itself, community participation is referred to as a process with the outcome of meaningful participation (Lasker et al., 2001). Participation as an end presupposes the building-up of influence or involvement from the bottom upwards. Nikkhah and Redzuan (2009) posit that participation as an end in itself focuses on the process in which people are directly involved in shaping, deciding and taking part in the development process from the bottom-up perspective. The main issue here is the process whose outcome is an increasingly meaningful participation in the development process which builds up people's confidence, competence, and solidarity

among rural people, but the development goal is of secondary importance. Thus, the centrality of participation as an end in itself is citizen empowerment, while the outcomes become less significant than the process.

In this study, community participation refers to the collective efforts of people who live in fishing communities to exercise control over the sustainable use and management of premix fuel. The people are integrated economically, ecologically, socially and culturally to manage premix fuel and share in its benefits. These include identifying problems, developing actions, putting them in place, and following through to ensure sustainability (Cheetham, 2002).

Following the diverse interpretations of participation, various typologies and indicators of community participation have also been devised, depending on the nature of the activity as well as the responsibilities of the people involved. However, the specific degree of participation of different stakeholders is determined through a negotiation process. According to the European Commission (2004), participatory approaches to premix fuel management should aim at empowering community members and building their capacity. This implies putting the beneficiaries at the centre of the management process to drive and adjust according to their own learning processes and needs.

Starting with an early example, Biggs (1989) identifies four levels of community participation regarding agricultural development and research. The first is contract participation which is where farmers' land or services are hired. The second is consultative where researchers consult farmers, diagnose their problems and try to find solutions to them. The third is collaborative where researchers and farmers are partners in the research process, sustaining their interaction in evaluation. The final category is collegiate where attempts are made to actively strengthen farmers' informal research. This has more in common with Stiefel and Wolfe's (1994) definition of participation.

Drijver (1992), among other writers, relates four levels of community participation with environmental projects. He describes the first level as participatory approach which means local communities have a decisive say in the project design and

implementation. The second is centralistic approach and involves consultation which emphasizes participation as a means to achieve successful outcomes. However, he sees the third and fourth levels as a combination of the participatory and centralistic approaches to participation.

Other writers like Kaliba and Norman (2004) summarize indicators of participation in water supply project into seven. These are communication of community preferences, information sharing, willingness in participation, representation, responsibility, authority, and decision-making. Kaliba and Norman believe that these indicators help to assess conditions relating to sustainability and effective use of water supply. However, according to the European Commission (2004), community participation in premix fuel management should undergo four levels of participation that are non-mutually exclusive. These are information sharing, consultation, decision-making, and initiating action.

Information sharing is the minimal level of participation and often consists of little more than keeping people informed about decisions on projects. It is a one-way flow of information or a unilateral announcement of procedures or outcomes from the proponent of the development project to the public without listening to the people's responses. The proponent is to provide sufficient relevant information about the project such as the benefits, costs of implementation, and possible risk factors of the project to the beneficiaries. Nonetheless, stakeholders do not have the opportunity to influence procedures or outcomes.

Consultation is a two-way flow of information between the proponent and the public but may not necessarily impact on decision-making. It involves inviting people's views on the proposed actions and engaging them in a dialogue. Depending on the project, Thwala (2010) indicates that various methods used during consultation include public hearings, public meetings, public displays, field trips, site visits, letter requests for comments, material for mass media, and response to public inquiries. In view of the people's responses, problems and solutions may be modified.

Decision-making is a higher level of participation where individuals or groups have the authority and duty to take part in making decisions. The project should encourage

a maximum number of people in the participation of development projects. Such involvement should give the participants, whether individuals, people or groups, full inclusion in designing, organising, and implementing activities and workshops in order to create consensus, ownership and action in support of environmental change in specific areas.

Finally, initiating action is the highest level of participation where people take it on themselves to initiate new actions. Participation is also seen as an organised effort within institutions and organisations to increase stakeholder access and control over resources and related decision-making that contributes to sustainable livelihood. Participation is further viewed as an iterative process involving the continuous re-adjustment of relationships between different stakeholders in a society in order to increase stakeholder control over development initiatives that affect their lives. The first two categories exercise influence and are referred to as low participation, while the latter two exercise control and are referred to as high participation.

#### **2.4 Stakeholders and their Responsibilities**

There is a difference of opinion over whom or what exactly stakeholders are (Rowley and Moldoveanu, 2003). According to Ramírez (1999), the word “stakeholder” originates from the 17<sup>th</sup> Century, where it was used to describe a third party entrusted with the stakes of a bet. Some stakeholder theories propose a narrower and more instrumental definition of stakeholders as those groups or individuals “without whose support the organisation would cease to exist” (Bowie, 1988:109). Others hold a broader and more normative view of stakeholders as any naturally occurring entity that is affected by organisational performance (Hubacek and Mauerhofer, 2008). This may include living and non-living entities, or even mental-emotional constructs, such as respect for past generations or the well-being of future generations (Starik, 1995; Hubacek and Mauerhofer, 2008).

Freeman et al. (2004) define stakeholders as those groups and individuals who can affect, or are affected by, the achievement of an organisation’s purpose. The definition of stakeholders used was “individuals, groups, or sectors with an interest in or involved in or impacted by the use of local natural resources, or with responsibility for resource management”. Some add that stakeholders have legitimate claims on

organisations (Hillman and Keim, 2001), are susceptible to financial or human risks from corporate activities (Clarkson, 1995), and/or can influence organisational decision-making or activity (Carroll, 1993). Stakeholders could either be internal, for example, stockholders and employees, including executive officers, other managers, and board members (Hillman and Keim, 2001) or external, for example, customers, suppliers, governments, unions, local communities, and the general public (Hillman and Keim, 2001).

The debate in literature on the definition of stakeholders is in part due to the problem of defining what constitutes a legitimate stake. Friedman and Miles (2002, 2004) suggest that much of the literature makes implicit assumptions about the legitimacy of stakeholders without explaining the difference between legitimate and illegitimate stakeholders.

Stakeholders can be regarded as part of a network, being linked to one another through the same basis of premix fuel management. In these stakeholder networks, none of the stakeholders is generally powerful enough to realise its objectives without the support of others. Consequently, different stakeholders have to reach an agreement on the measures and arrangements to allocate and manage the premix fuel.

Premix fuel management involves various stakeholders with multiple objectives. In this context, stakeholders are considered to include all individuals, groups or organisations that have some interest (stake) in the use or the management of premix fuel and can affect or are affected by the management of premix fuel. This means that stakeholders include executives of LBC, secretaries and pump attendants of LBC, canoe owners, fishmongers, fishermen, Department of Fisheries (Ministry of Food and Agriculture), and the KEEA Municipal Assembly. This suggests that both the fishing community and government have interest in the management of premix fuel. The government's interest is depicted by the government agencies on different administrative levels that have an interest based on their official mandates. These stakeholders have to find ways to cope with the increasing complexity and to manage the competing demands for premix fuel.

Despite the involvement and contribution of traditional authorities and unit committees in community development, they are not involved in the management of premix fuel in Ghana, as stipulated in the guidelines for managing premix fuel. They are not recognised as stakeholders of premix fuel in Ghana and in KEEA Municipality.

## **2.5 Concept of Accountability**

Accountability is not a theoretical obligation but the answer to many of the problems of governing an institution or nation. It is the way to guarantee that governments are responsive to their citizens (Jones and Stewart, 2009). It is a vague concept that is difficult to define in precise terms. However, generally speaking, accountability exists when there is a relationship where an individual or body and the performance of tasks or functions by that individual or body are subject to another's oversight, direction or request that they provide information or justification for their actions (Stapenhurst and O'Brien, 2007).

Accountability originates from the practical need to delegate certain tasks to others and requiring those entrusted with these delegated duties to render an account of their actions. The concept of accountability involves two distinct stages: answerability and enforcement. Answerability refers to the call to account, which is required to provide information and explanation about decisions and actions and to justify them to those tasked with providing oversight. Enforcement refers to holding to account or being sanctioned and required to put into effect remedial measures if something has gone wrong. In addition, the concept of accountability may embrace recognition that sanctions may not be appropriate where public officials have sought to innovate and have tried to manage the associated risks as effectively as possible. Accountability may result in the allocation of praise or blame (Jones and Stewart, 2009). Jones and Stewart (2009) define accountability as the liability to give an account of what one has done, or not done, to another who has authority to assess the account and allocate praise or blame.

Lawson and Rakner (2005) additionally state that accountability denotes 'a relationship between a bearer of a right or a legitimate claim and the agents or agencies responsible for fulfilling or respecting that right.' It denotes the duty to be

accountable in return for the delegation of a task, power or a resource. Accountability involves someone being held responsible for something by somebody or something in a particular prescribed way (Stapenhurst and O'Brien, 2007). The concept of accountability is simply described as how those entrusted with the powers of the State are held responsible for their actions (Organisation for Economic Cooperation and Development (OECD), 2005).

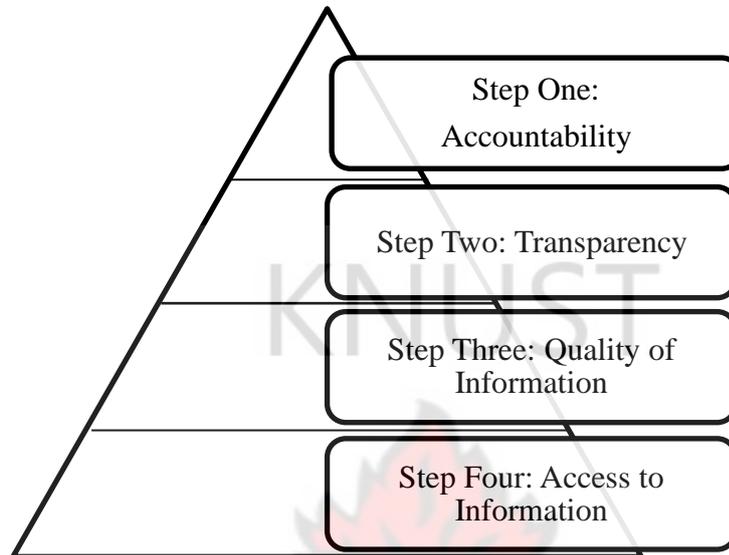
Accountability makes certain that actions and decisions taken by public officials are subject to oversight so as to guarantee that government initiatives meet their stated objectives and respond to the needs of the community they are meant to be benefiting, thereby contributing to better governance and poverty reduction. Assessing the continuing efficacy of public officials keeps them up to the task of performing their duties to their full potential, providing value for money in the provision of public services, instilling confidence in the government and being responsive to the community they are meant to be serving (Stapenhurst and O'Brien, 2007; OECD, 2005).

Accountability results from the basic argument that the electorate has a right to be informed on the activities and expenditure of resources by the executive and legislative. Based on the premise that citizens in the public sector do not have an option of taking advantage of public services, it is all the more important that they as 'stakeholders' should be able to make a well-informed assessment of the provision of services, as measured against the defined targets and goals. Accountability in the public sector must therefore contain reporting on the use of resources and services performed (Bastida and Benito, 2006; International Federation of Accountants (IFAC), 2001),

According to Hofstede (2003), there are four essential steps that have to be taken to fulfil the requirements for public accountability. Figure 2.1 illustrates the step-by-step approach to achieving accountability. Here, access to information, which is the lowest point, has to be guaranteed before having access to quality of information and transparency, which is step 2, being an important prerequisite for fulfilling the requirements of public accountability, which is step 1. This means that for there to be

public accountability, it is necessary to create transparency by having access to quality information.

**Figure 2.1 Phase Concept for Accountability**



Source: Hofstede, 2003

The concept of accountability can be classified according to the type of accountability exercised and/or the person, group or institution the public official answers to. These are horizontal and vertical accountability (Carrington et al., 2008).

Horizontal accountability refers to government organisation's power to review the conduct of its peer organisations to determine whether they are acting properly (Carrington, et al., 2008). Institutions of accountability such as parliament and the judiciary provide what is commonly called horizontal accountability. Horizontal accountability involves the network of relatively autonomous powers that can call into question and eventually punish improper ways of discharging the responsibilities of a given official. In simple terms, horizontal accountability is the capacity of State institutions to check abuses by other public agencies and branches of government (Stapenhurst and O'Brien, 2007).

Alternatively, vertical accountability is the means through which citizens and civil society seek to enforce standards of good performance on public officials. Citizens and civil society groups look forward to the support of elected representatives to

redress grievances and intervene in the case of inappropriate or inadequate action by government. This is done through the use of public hearings, committee investigations and public petitioning where citizens and civic groups can question government and seek sanctioning where appropriate (Stapenhurst and O'Brien, 2007; Carrington et al., 2008).

Another school of thought argues that types of accountability, that is horizontal and vertical accountability, are determined by the relationship between parties. In instances where there is a classic top-down relationship, whereby the top management delegates to the down subordinates, the subordinates are accountable to their direct superiors in the chain-of-command and this constitutes vertical accountability. A typical example of vertical accountability in this sense is when a public official answers to the department, the department answers to the minister, the minister answers to parliament, and parliament answers to citizens (Hofstede, 2003).

Proponents of this school of thought explain that the absence of the direct principal-agent relationship leads to horizontal accountability which is sometimes referred to as social accountability. In social or horizontal accountability, a hierarchical relationship is generally lacking between actor and forum, as are any formal obligations to render account. In this case, parliament becomes an agent and electorates become the principal who elects legislators to enact laws and oversee government actions on their behalf (Stapenhurst and O'Brien, 2007).

The general view of social accountability is that it is an approach towards building accountability that relies on local commitment, namely a situation whereby ordinary citizens and/or civil society organisations participate directly or indirectly in demanding accountability. Such accountability is sometimes referred to as society-driven horizontal accountability. Social accountability can be initiated and supported by the State, citizens or both, but very often they are demand-driven and operate from the bottom-up, even though this hierarchical relationship is generally accepted to be lacking (Stapenhurst and O'Brien, 2007).

Other types of accountability are political and diagonal accountability. Parliament and the judiciary act as horizontal constitutional checks on the power of the executive.

Parliament holds the executive politically accountable, whilst the judiciary holds the executive legally accountable. These classifications stem from the fact that parliament is a political institution, while the judiciary can only arbitrate on legal issues. Together with other institutions such as supreme audit institutions, anti-corruption commissions and human rights institutes, they provide constant oversight in order to keep the government accountable throughout its term in office (Hofstede, 2003; Stapenhurst and O'Brien, 2007).

Diagonal accountability seeks to engage citizens directly in the workings of horizontal accountability institutions. Diagonal accountability enables community advocates to participate in institutions of horizontal accountability rather than creating distinct and separate institutions of diagonal accountability. Additionally, community advocates are given an opportunity to access information about government agencies such as internal performance reviews (Stapenhurst and O'Brien, 2007).

The World Bank (2004b) argued that social accountability is broad enough to encompass mechanisms of diagonal accountability. It was argued that diagonal accountability mechanisms can also be considered a form of social accountability. Considering social accountability is not meant to refer to a specific type of accountability, but rather to a particular approach for exacting accountability; it might be a broader concept than diagonal accountability (Stapenhurst and O'Brien, 2007).

For the purpose of this study, accountability is defined as the right of community members to have access to quality information and transparent accounts of the use of resources for their well-being by public officials. Accountability in this study will refer to the right of fishermen, fishmongers, canoe owners and other community members to have access to quality information and transparent accounts relating to premix fuel management for their well-being by management officials such as executives of LBC and MCE.

## **2.6 Community Development**

The term 'community development' combines the idea of 'community' and 'development'. Taking 'community' in isolation, a number of competing definitions have emerged. Writers like Hill and Press (1994) have focused on community as a

loose synonym for a group of people living in a geographical area or a small spatial unit. Others refer to it as a homogenous social structure (Strum, 1994), and still others see it as an area of shared norms and common life (Ascher, 1995). Agrawal and Gibson (1999) have defined community as common interests and shared norms rather than self-interest. This makes resource management successful as norms prohibit some negative actions and promote cooperative decision-making within a community. Reid (2000) also defines community as five core elements, namely locus, sharing, action, ties, and diversity. Reid's definition relates community to a group of people, with diverse characteristics, who are linked by social ties, share common perspectives, and engage in joint action in geographical settings.

In its most generic sense, Kumar (2005) defines community as a social structure in which people organise for a common purpose. To Kumar, a community is a homogeneous social structure with a harmonious and territory-bound unit. Community refers generally to a group of people sharing a common purpose, who are interdependent for the fulfilment of certain needs, who live in close proximity and interact on a regular basis. There are shared expectations for all members of the group and responsibility taken for those expectations. The group is respectful and considerate of the individuality of other persons within the community. In a community, there is a sense of community which is defined as the feelings of cooperation, of commitment to the group welfare, of willingness to communicate openly, and of responsibility to and for others as well as to oneself (Kumar, 2005). Most importantly, there exists community leaders who are responsible for the success of any community event, depending on the needs of the community and the individual's own feelings. The community leaders are individuals who strive to influence others to take responsibility for their actions, their achievements, and the community welfare.

Fraser (2005) expresses a community as a value. That is, community is used to bring together a number of elements such as solidarity, commitment, mutuality, and trust. Fraser's definition indicates more than a geographical area, bounded social or geographic units, and homogeneous entities with single or agreed interests. Kumar (2005) has, therefore, argued that the challenges with respect to aggregating a conceptualising community make the task of defining community far from simple.

For the purpose of this study, community is defined as a group of people who, regardless of the diversity of their backgrounds, live in one locality and have been able to accept and transcend their differences. This enables them to communicate effectively and openly, and work together towards goals identified as being for their common good or with same or similar interests. The term is, therefore, used to evoke a sense of collectivism.

Development has been taken to mean different things at different times, in different places, and by different people in different professions and organisations (Chambers, 2004). The United Nations Development Programme (UNDP) and the World Bank have followed a long tradition of listing policies and actions to make the world a better place, especially for the poor (Chamber, 2004). They see development as an eternal challenge to do better by identifying policies, programmes and projects. Coetzee et al. (2001) also mention that most definitions of development, whether they are of the modernisation theory or dependency theory, refer to action plans, strategies and programmes aimed at improving the situation of the so-called less developed or underdeveloped countries.

Development, according to Todaro and Smith (2012), is a multidimensional process involving major changes in social structures, popular attitude, and national institutions, as well as acceleration of economic growth, the reduction of inequality, and poverty. They emphasize that development, in its essence, must represent the whole gamut of changes by which an entire social system, tuned to the diverse basic needs and desires of individuals and social groups within that system, moves towards a condition of life regarded as materially and spiritually better. However, Nixon (2005) has argued that development can be described as a process of transformation of people, societies and economies to improve quality of life. Notwithstanding the many definitions of the term ‘development’, the central theme remains the same. Development implies the socio-economic upliftment of a people within a particular geographical area. Development is not economic well-being alone, but includes social and political well-being of people as well.

Throughout its history, “community development” is sometimes ambiguous and its definitions vary between sources. Thus, it is difficult to attain a common definition

universally agreed upon (De Beer and Swanepoel, 1998). The reason is that community development is both a process and a product. However, it is generally defined as a process that brings about positive change in communities for the well-being of that community. De Beer and Swanepoel (1998) state that community development is an idea that evolved and developed, considering that the concept of community development has no firm, precise and generally agreed upon meaning; it can be used arbitrarily to indicate a number of policies or programmes. Community development can also be said to have the aim of establishing community organisation in order to promote better living, better farming, more education, more happiness, and better citizenship. This aim can be regarded as a method of stimulating community organisation to communicate the needs and wishes of communities to the administration.

Community development refers to initiatives undertaken by community with partnership with external organisations or corporations to empower individuals and groups of people by providing these groups with the skills they need to effect change in their own communities. These skills are often concentrated around making use of local resources and building political power through the formation of large social groups working for a common agenda. Community developers must understand both how to work with individuals and how to affect communities' positions within the context of larger social institutions. Community development is the process of developing active and sustainable communities based on social justice and mutual respect. It is about influencing power structures to remove the barriers that prevent people from participating in the issues that affect their lives (Federation for Community Development Learning, 2009). Community workers facilitate the participation of people in this process. They enable linkages to be made between communities and the development of wider policies and programmes. Community development expresses values of fairness, equality, accountability, opportunity, choice, participation, mutuality, reciprocity, and continuous learning. Educating, enabling and empowering are at the core of community development (Federation for Community Development Learning, 2009).

Compared to economic development which is the marketing of a community's potential for growth followed by local efforts to act on opportunities, community

development is the combined processes, programmes, strategies, and activities that make a community sustainable. The entire set of approaches to community development practice may be considered a specialised form of addressing, coordinating and building the social infrastructure at a location. Community development may be defined as a process of challenging the undesirable and unacceptable disparity of conditions and infrastructure that negatively affect the quality of life in a place where people live and work. It functions best as a process in locations where all strata of society and citizenry are engaged with a sense of community solidarity. (Brophy and Shabecoff, 2001)

The widely used meaning of community development is the one given by the United Nations (UN) (United Nations, 2007) in which community development is an organised effort of individuals in a community conducted in such a way that it helps solve community problems with minimum help from external organisations. External organisations include government and non-government organisations, and corporations of various types and sizes such as small and medium enterprises (SMEs) and multinational corporations (MNCs). The implication of UN's definition of community development is, therefore, emphasizing creativity and self-reliance in the community for short-term and long-term goals, but not to defy the corporate social responsibility roles of the various types of business firms. In relation to the people, the definition of community development is essentially both an educational and organisational process.

The UN also designates community development as a process by which the efforts of the people themselves are united with those of governmental authorities to improve the economic, social and cultural conditions of communities and to enable them to contribute fully to national progress (Groenewald, 1989). Here, emphasis is placed on the combined efforts of both the community and the government as contributing partners during the process.

Other definitions place emphasis on development of professionals brought together with the community and the government authorities to form partnerships to improve quality of life. In line with this, Sites (1998:60) notes that "community development initiatives are efforts made by professionals and community residents to enhance the

social bonds among members of the community, motivate the citizens for self-help, develop responsible local leadership, and create or revitalise local institutions”. The fundamental aim of community development is to offer support to communities in need of revitalisation. However, community development is discrete in its holistic approach to development, adopting strategies that target social problems in a community.

Jones and Silva (1991) argued that community development involves problem solving, community building, and systems interaction. They explained that a truly integrated approach of community development assesses the problem, goes on to build community capacity, and most importantly addresses the problem. Community development relies on interaction between people and joint action rather than individual activity (Flora and Flora, 1993).

Community development, according to Brophy and Shabecoff (2001), has three goals: to change the economy of the neighbourhood; to improve the physical nature of the neighbourhood; and to strengthen social bonds among people in the neighbourhood. Community development is a process conducted by community members. It is a process where local people can not only create more jobs, income and infrastructure but also help their community become fundamentally better able to manage change. The concrete benefits of community development such as employment and infrastructure come through local people changing attitudes, mobilising existing skills, improving networks, thinking differently about problems, and using community assets in new ways. Community development improves the situation of a community not just economically but also as a strong functioning community in itself. It builds the five capitals of a community, namely physical, financial, human, social, and environmental.

At the core of community development is an understanding of and a commitment to empowerment and participation. Combat Poverty Agency (2000) defines community development as enabling or empowering people to actively work for social change which will improve the quality of their lives, the communities in which they live and/or the society of which they are a part. It is a collective process that recognises the interdependence of people. It helps people to identify and articulate their needs,

and influence the decision-making processes and structures that affect them, their communities and society as a whole.

There are several benefits to community development approach. Firstly, community development is seen to address a deficit in democratic access affecting marginalised groups in a society. Area Development Management (ADM) (2003:59) argues that ‘the starting point for achieving inclusion and equality for excluded groups must be the excluded themselves’.

Secondly, since community development is both a process and an outcome, wider participation which is an important process variable in community development should lead to better outcomes. This is because more focused or local understanding is brought into the development system and decisions are thus better informed about the specific conditions and needs of a community. Fung and Wright (2001) explain that participatory structures should lead to more effective outcomes in community development approach because:

1. they convene and empower individuals close to points of action who possess knowledge about relevant situations in the community;
2. they create the possibility of generating better solutions over more hierarchical and less reflective aggregation procedures, thereby heightening commitment because they are not imposed from above;
3. they shorten the feedback cycle between decision, action, effect, observation and reconsideration.

The essence of community development is well captured in the Budapest Declaration which emphasizes strengthening civil society, empowerment and an agenda of social change. The Budapest Declaration made in 2004 quotes “Community development is a way of strengthening civil society by prioritising the actions of communities, and their perspectives in the development of social, economic and environmental policy” (ADM, 2003:60). It seeks the empowerment of local communities, taken to mean geographical communities, communities of interest or identity, and communities organising around specific themes or policy initiatives. It strengthens not only the capacity of people as active citizens through their community groups, organisations and networks but also the capacity of institutions and agencies (public, private and

non-governmental) to work in dialogue with citizens to shape and determine change in their communities. It plays a crucial role in supporting active democratic life by promoting the autonomous voice of disadvantaged and vulnerable communities (ADM, 2003).

It is through participation in communities that people rethink problems and expand contacts and networks, thereby building social capital. They learn new skills and in this way build human capital. They develop new economic options, consequently building physical and financial capital. They can improve their environment as well.

For the purpose of this study, community development is defined as a process by which the efforts of the members of a community are united with those of governmental authorities to improve the economic, social and cultural conditions of the community.

## **2.7 Review of Relevant Theories**

### **2.7.1 The Ladder of Citizen Participation**

Figure 2.2 shows the eight rungs on the ladder of citizen participation propounded by Arnstein in 1969. The eight increasing involvement and power-sharing as one moves up the ladder of participation are classified into three groups. These are non-participation, tokenism and citizen power.

Participation has become a key consideration in the discourses and practices of policy-making at both local and international levels. As it becomes a social expectation, the form, meaning and purpose of participation are also diversified. The study adopted the ladder of citizen participation by Arnstein (1969) to explain stakeholder participation in the management of premix fuel in KEEA. The theory sets out to distinguish different levels of participation in relation to levels of, or access to, power. The theory refers to a graded movement upwards through eight steps (rungs) from manipulation of citizens (1); therapy (2); information (3); consultation (4); placation (5); partnership (6); delegated power (7) to citizen control (8). The ladder describes eight steps of increasing involvement and power-sharing where its bottom rungs indicate lower levels of participation and power distribution and they increase as we move up the ladder.

### Manipulation

Manipulation is the first non-participatory level in the ring of participation. Stakeholders at this level of participation do not have any input in the decisions made or in the information that is fed to them or that they are asked to feed to the public. They are often packaged as ambassadors of the groups they represent but, in fact, they are just public relation tools or puppets representing the interest of the power-holders, be it the government or the corporation. According to Arnstein, this is possible in circumstances where the stakeholder groups perceive themselves to be powerless and the organisations, in this case government, to be powerful. It does not really matter that the stakeholder groups have powers that they could exercise. Such approaches deprive stakeholders of their voice and usually lead to outcomes most probably of no benefit to the stakeholders.

### Therapy

Arnstein describes this level as both arrogant and dishonest. It is the next level of non-participation. Here, instead of addressing the grievances or demands of stakeholders, they are subjected to a mass therapy in the supposed aim of curing them of their misconception. Arnstein describes this level of participation as so invidious that citizens are engaged in extensive activity, but the focus of it is on curing them of their “pathology” rather than “changing” (Arnstein, 1969:5) the situation against which they are complaining. They are made to feel inadequate and are required to “adjust their values and attitudes” (Arnstein, 1969:7).

### Informing

Although it initially involves one-way traffic of information from company to stakeholders, there is an opportunity for feedback or negotiation. For informed stakeholders, any information may prove useful in canvassing for their interest. However, Arnstein (1969) had suggested that in many cases power-holders give information late or by one way medium in order to limit the power of stakeholders. Listed media include radio announcements, newspaper adverts or television commercials.

### Consultation

This level is higher because it is constructed with the intent of reflecting the concerns of the stakeholders in the end result of the engagement process. This is the case, for instance, where a community is consulted before a structure such as a new factory is located within the community. A consultation with the locals when considered and integrated into planning may mean that the factory is built in an area that may be less detrimental to the community.

### Placation

Placation occurs when citizens are hand-picked to serve on a board or committee designed to participate in policy decisions. This level of participation gives stakeholders some voice in deciding their interest. It is, however, usually ad-hoc and reactionary. As the name suggests, this level is used to assuage or control stakeholders when serious concerns are raised. What happens at this level is that power-holders allow stakeholders to supposedly participate in decision-making, while withholding the power of final decision. For instance, they may be consulted and later overruled (Arnstein, 1969; Cumming and Worley, 2008) by the power-holders who have the advantage and ability to deprive the stakeholders of needed technical expertise to articulate their interests and priority properly. This is the case when companies deal with people from rural communities with little or no education. They deliberately shroud issues in technicalities and complexities.

### Partnership

At this rung of the ladder, power is, in fact, redistributed through negotiation between citizens and power-holders. They agree to share planning and decision-making responsibilities through such structures as joint policy boards, planning committees and mechanisms for resolving an impasse. After the ground rules have been established through some form of give-and-take, they are not subject to unilateral change. Partnership can work most effectively in the following instances: when there is an organised power-base in the community to which the citizen leaders are accountable; when the citizens group has the financial resources to pay its leaders reasonable honoraria for their time-consuming efforts; and when the group has the resources to hire (and fire) its own technicians, lawyers, and community organisers.

With these ingredients, citizens have some genuine bargaining influence over the outcome of the plan (as long as both parties find it useful to maintain the partnership).

#### Delegated power

This level of participation operates by devolution of power to stakeholders in either of two ways:

(a) When specific tasks or projects are delegated to the stakeholders and they are given majority power to decide on it. They could be made directly responsible and have the power to demand and enforce accountability for the project. They do not necessarily have to carry out the project as they may lack the requisite skills, but they would have the power to decide which project to embark on and can also ensure that the necessary logistics for its success are provided. Such delegation will be very appropriate when dealing with local issues that require local knowledge or no particular technical expertise e.g. construction of school blocks in rural areas.

(b) When there are separate but parallel groups of stakeholders and power-holders who can decide over a project. Here, the stakeholders retain the power to veto any decision where differences cannot be resolved by negotiation. For instance, in the above example, the community may veto the school project if it does not benefit them or if they have a more pressing priority for which resources are needed.

#### Citizen control

This exists where the stakeholders have “that degree of power (or control) which guarantees that participants or residents can govern a program or an institution, be in full charge of policy and managerial aspects, and be able to negotiate the conditions under which ‘outsiders’ may change them” (Arnstein, 1969:14). What this effectively means is that there is no intermediary between the stakeholders and the source of fund or power and, thus, they can make and carry out decisions without being unduly restricted. However, this does not mean absolute control. Because for it to be a democratic process and to avoid reverse oppression, there should always be some mutually negotiated limits, regulations or framework within which this power is exercised. Stakeholder control has its limitations, one of which being that it is open to abuse by either party and may amount to duplication of task and waste of resources. Abuse may occur where the representatives of the stakeholders use their positions to treat their constituencies poorly.

For Arnstein, the bottom two rungs of this ladder represent levels of non-participation that have been contrived by some to substitute for genuine participation. Their real objective is not to enable people to participate, but to enable power-holders to educate participants. Arnstein designated the third to fifth steps (informing, consultation and placation) as degree of tokenism. These steps allow people to hear and to have a voice in management. When they are proffered by power-holders as the total extent of participation, citizens may indeed hear and be heard. But under these conditions they lack the power to insure that their views will be heeded by the powerful. When participation is restricted to these levels, there is no follow through, hence any assurance of changing the status quo. Placation, the fifth stage, is simply a higher level of tokenism because the ground rules allow citizens to give advice, but the right to decide is retained for the power-holders. Arnstein classified the sixth to eighth steps as degree of citizen power. Here, citizens have increasing degrees of decision-making power. Each group of steps corresponds to changes in degrees of citizen engagement, ranging from non-involvement through tokenism to citizen power. Arnstein's concept describes government-citizens relationship, especially between governments and local fishing communities. The type of participation observed from the field will be linked to the eight steps of the model.

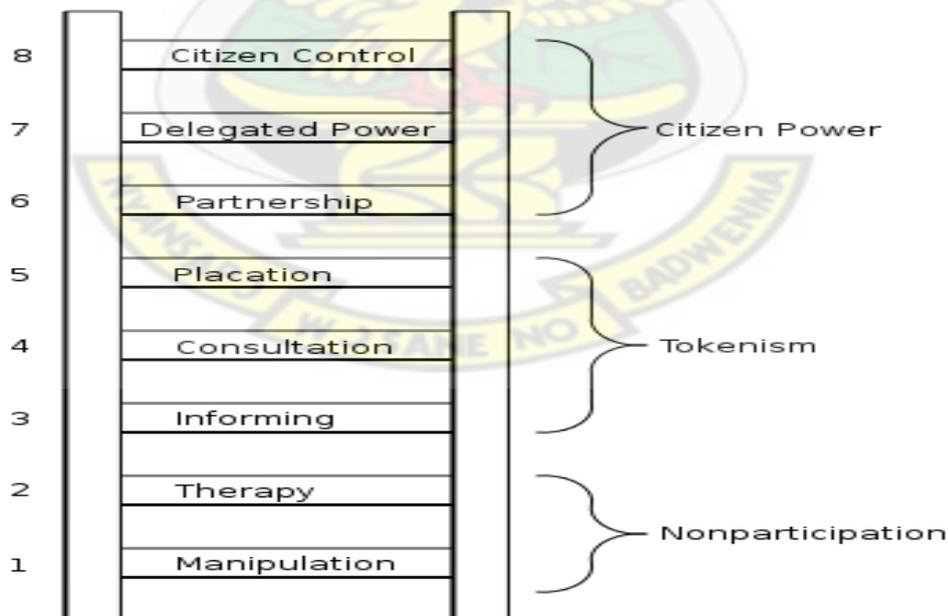
Arnstein did a great job in ranking these steps of citizens' participation but each of the steps represents a very broad category within which there are likely to be a wide range of experiences and activities. For example, at the level of 'informing', there could be significant differences in the type and quality of the information being conveyed. Realistically therefore, levels of participation are likely to reflex a more complex continuum than a simple series of steps. The use of a ladder also implies that more control is always better than less control. However, increased control may not always be desired by the community and increased control without the necessary support may result in failure.

The theory of ladder of participation has been criticised by Tritter and McCallum (2006), first, on the grounds that participation as described by Arnstein is assumed to be hierarchical in nature with citizen control held up at the eighth rung as the 'ultimate goal' of participation – an assumption that does not always align with participants' own reasons for engaging in decision-making processes.

The linear relationship between non-participation (first rung of the ladder) and citizen control (eighth rung of the ladder) denotes that the policy problem remains constant, only the approach of the actors varying from level to level (Bishop and Davis, 2002). It was suggested that it is in the process of participation that the nature of the policy issue is determined, thus shaping the nature of the participation process itself (Bishop and Davis, 2002; Social Learning for Integrated Management (SLIM), 2004).

Another criticism is in relation to the roles and responsibilities of the individuals, communities and authorities involved in participation. Arnstein's ladder suggests that the roles and responsibilities of stakeholders change only in relation to changing levels of power. This overlooks the more complex set of relationships which exist in many ongoing participatory situations where roles are less easy to define and responsibilities emerge during, and as a consequence of, the participatory process itself. It is argued that the roles and responsibilities of individuals, communities and authorities are based on the construction of their interest in the situation (SLIM, 2004; Tritter and McCallum, 2006).

**Figure 2.2 The Ladder of Citizen Participation**



Source: Arnstein, 1969

### 2.7.2 Agency theory

Agency theory is the dominant philosophical base behind the relationships between financial markets and organisations. It is a supposition that explains the relationship between principals and agents in business. It is concerned with resolving problems that can exist in agency relationships; that is, between principals (such as shareholders) and agents of the principals (for example, company executives). Principals, in this study, refer to the executives of the LBCs, and the agents refer to the other stakeholders such as fishermen, fishmongers and canoe owners. The agency theory explains the relationship that exists between the executives of the LBCs and the fishermen, fishmongers and canoe owners in accountability. The theory was developed in the financial economics literature (Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976) and has attracted organisation theorists and strategic management scholars, thereby resulting in a large number of studies over the last three decades.

Agency theory assumes that, due to the separation of ownership and control in modern corporations, there is often a divergence of interests between the parties involved – the principal and the agent (Hoskisson et al., 1999). According to Blair (1995), the theory rests on the assumption that the role of organisations is to maximise the wealth of their owners or shareholders. Conflicts arise when an organisation's owners perceive the professional managers not to be managing the firm in the best interests of the owners. This is because Donaldson and Davis (1991) argue that managers will not act to maximise returns to shareholders unless appropriate governance structures are implemented to safeguard the interests of shareholders.

Jensen and Meckling (1976) identify the executives of the LBCs as the principals who are employed by the government to work for maximising the returns to the fishermen, fishmongers and canoe owners, who are the agents. Principals manage the sale of premix fuel and the utilisation of the profits earned to maximise utility. Jensen (1983) assumes that as principals do not own the community's resources, they may commit 'moral hazards' (such as shirking duties to enjoy leisure and hiding inefficiency to avoid loss of rewards) merely to enhance their own personal wealth at the cost of their agents.

In agency theory terms, the executives of the LBCs are principals and the fishermen, fishmongers and canoe owners are agents and there is an agency loss which is the extent to which returns to the community fall below what they would be if the agents, the owners, exercised direct control of the management of premix fuel (Jensen & Meckling, 1976). Eisenhardt (1989) stresses that agency theory specifies mechanisms which reduce agency loss.

To minimise the potential for such agency problems, Jensen (1983) recognises two important steps: first, the principal-agent risk-bearing mechanism must be designed efficiently; and second, the design must be monitored through the nexus of organisations and contracts. The first step examines how much of risks each party should assume in return for their respective gains. The principal must transfer some rights to the agent who, in turn, must accept to carry out the duties enshrined in the rights. The second step, which Jensen identifies as the 'positive agency theory', clarifies how firms use contractual monitoring and bonding to bear upon the structure designed in the first step and derive potential solutions to the agency problems. The inevitable loss of firm value that arises with the agency problems, along with the costs of contractual monitoring and bonding, are defined as agency costs (Jensen & Meckling, 1976).

In summary, the theory addresses two problems: (1) the problems that arise when the desires or goals of the principal and the agent are in conflict and the principal is unable to verify (because it is difficult and/or expensive to do so) what the agent is actually doing; and (2) the problems that arise when the principal and the agent have different attitudes towards risk. For the reason that there are different risk tolerances, the principal and the agent may each be inclined to take different actions.

### 2.7.3 Merton's social theory

The study adopted the social theory of Matthew effect propounded by Merton in 1968. The theory captures an important insight into the workings of the social world. It is an integral part of a complex network of ideas and their relationships. In many spheres of life, we observe that initial advantage tends to beget further advantage, and disadvantage further disadvantage, among individuals and groups through time, creating widening gaps between those who have more and those who have less. The

distinguished sociologist Robert K. Merton called this phenomenon the Matthew effect, from a verse in the Gospel of Matthew (13:12) which observes that “for whosoever hath, to him shall be given, and he shall have more abundance; but whosoever hath not, from him shall be taken away even that he hath” (Merton, 1968).

Merton’s social theory or Mertonian theory emphasizes that social actions often have unintended consequences. In a retrospective essay, Merton described the phenomenon of unintended consequences as an "enduring interest" in his intellectual life and a “core idea” from which other important concepts emanated. As a theorist in the functionalist tradition, Merton was interested not only in the subjective motives and intentions of social actors but also in the objective functions or consequences of their actions for the sustainability of the social or cultural systems within which they occur (Merton, 1968; 1982).

Merton’s concept of opportunity structure is another essential key to understanding the Matthew effect. Merton defines opportunity structure as the scale and distribution of conditions that provide various probabilities for acting individuals and groups to achieve specifiable outcomes. Opportunities are not distributed randomly in social systems except perhaps in the rare case of universal lotteries; they are distributed in ways that favour some over others. Thus, those who are variously located in the social structure have varying degrees of access to the things they aspire to – aspirations which may include, but are not limited to economic advantage and social mobility (Merton, 1968;1982;1988).

This theory can be associated with the decentralised Premix Fuel Management policy and community development. That is, communities which benefit from the premix fuel policy will generate more profit from its sale for infrastructural development. Merton further indicates that among the communities which have benefitted from the policy, the communities with greater access to premix fuel will have more revenue generated to support more infrastructural development than communities with less access. However, communities which have not benefitted from the premix fuel policy may have limited infrastructural growth. The Matthew effect produces growing or widening inequalities within social systems. It is concerned with how these inequalities persist and grow through time. It explores the mechanisms or processes

through which inequalities, once they come into existence, become self-perpetuating and self-amplifying in the absence of intervention, widening the gap between those who have more and those who have less (Merton, 1988).

Absolute Matthew effect is when the rich get absolutely richer, while the poor get absolutely poorer and eventually go bankrupt. Absolute Matthew effect occurs between communities which have landing beaches and communities which do not have the landing beach sites. This is because communities with landing sites continue to benefit socio-economically from the decentralised Premix Fuel Management policy while communities which do not enjoy the policy do not have the opportunity of enjoying such benefits socio-economically. However, Merton also speaks of relative Matthew effect which occurs when the rich and the poor both get richer, but the rich get richer by a larger margin, creating a widening gap between themselves and the poor. Relative Matthew effect occurs between communities with landing beaches in KEEA. Relative Matthew effect shows that communities which have more landing sites benefit more from the decentralised Premix Fuel Management policy than communities with less landing sites. They both grow at the same time but not at the same rate because one gains on a larger scale, thereby widening the gap between them over time (Merton, 1982).

The Matthew effect theory has been criticised based on the fact that there is limitation of resources or capacity to expand societies, which affects the living standards of people. Besides, external factors and government interventions (redistribution) affect the status of the poor and the rich. Matthew effect fails to identify those who are poor as a result of government interventions and through no fault of theirs (Rigney, 2010).

#### 2.7.4 Social Exchange Theory

The study was guided by the social exchange theory to explain the relationship between PFM and stakeholder participation. Social exchange theory was promulgated by scholars like Homans (1961), Emerson (1969) and Blau (1964) to originally explain the motivation behind the attitudes and behaviours exchanged between individuals. Homans (1961) reports that the key tenet of social exchange theory is that human behaviour are in essence an exchange, particularly of rewards or resources of primarily material character (wealth) and secondarily of symbolic attributes. He

further explained that social exchange theory is based on the premise that human behaviour or social interaction is an exchange of activity, tangible and intangible, particularly of rewards and costs (Homans, 1961).

The social exchange perspective argues that people calculate the overall worth of a particular relationship by subtracting its costs from the rewards it provides (Emerson, 1969). The theory suggests that human beings make social decisions based on perceived costs and benefits (rewards). This hypothesis asserts that people evaluate all social relationships to determine the benefits they will get out of them. It also suggests that people will typically leave a relationship if they perceive that their effort, or cost of it, outweighs any perceived advantages. Social exchange theory examines the processes which establish and sustain reciprocity in social relations, or the mutual gratifications between individuals. The basic assumption of exchange theory is that individuals establish and continue social relations on the basis of their expectations that such relations will be mutually advantageous (Blau, 1994).

The motivational process of social exchange theory shows that stakeholders' participation in PFM is derived from their perceptions of the benefits they receive from PFM (Eisenberger et al., 1990). The authors propose and establish that the theory of social exchange explains aspects of the relationship between an organisation and its employees; thus, the social exchange theory explains the relationship between the LBCs and other stakeholders involved in PFM.

According to the theory, people consciously and unconsciously evaluate every social situation in terms of what they will have to put into it and relate this to the benefits they think they may get out of it. The greater the potential benefit, the greater the personal investment an individual may make in a relationship (Eisenberger et al., 1986). People make these decisions based on their individual satisfaction level within the relationship. Individuals typically have a high level of happiness if they perceive that they are receiving more than they are giving to a relationship. If, on the other hand, individuals feel that they are giving more than they are receiving, they may decide that the connection is not fulfilling their needs.

Exchange is also defined as social interaction that is characterised by reciprocal stimuli or mutual reinforcements. Exchange relations or transactions are by definition reciprocal and if this reciprocity is broken, the relations or transactions tend to discontinue eventually or over time (Emerson, 1969). It is proposed that perceived stakeholder support to PFM would be significantly related to a variety of stakeholder attitudes and behaviours, including commitment and trust of the LBC. Stakeholders' participation in PFM would be significantly related to their perceptions of the LBCs' commitment to them (perceived stakeholder support) as they reciprocate their perceptions of the LBCs' actions in their own extent of participation (Standford, 2008).

The theory explains the nature and extent of interaction between the LBCs and the other stakeholders involved in PFM. Stakeholders in PFM will seek to maintain their involvement if they continue to receive the benefits that they wanted initially. Stakeholders seek to experience a sense of reciprocation through their involvement in PFM; that is, they seek to receive something for their involvement that is approximately equal to their contribution to PFM activities.

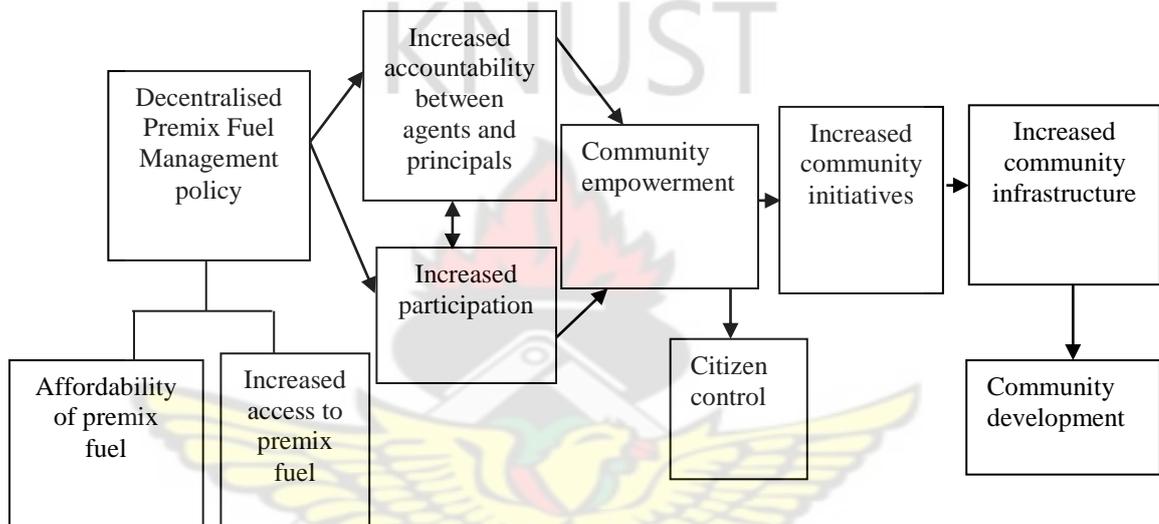
Critics of the social exchange theory assert that despite the usefulness of the social exchange theory, there are some problems associated with the theory. Miller (2005) argues that the social exchange theory limits human interaction to an entirely rational process that begins from economic theory and puts relationships in a linear structure, when some relationships might skip steps or go backwards in terms of intimacy. Miller further explains that the social exchange theory assumes that the ultimate goal of any interaction is intimacy, when this might not necessarily be the case. People interact for different reasons that may not necessarily be for closeness or understanding (Miller, 2005).

Cropanzano and Mitchell (2005) also criticised the social exchange theory by assessing the availability of information on the various exchange rules and interaction. Reciprocity is a major exchange rule discussed by the theory, but Cropanzano and Mitchell (2005) argue that the theory would be better understood if assumptions were made based on other rules of exchange such as altruism, group gain, status consistency, and competition.

## 2.8 Conceptual Framework

The conceptual framework presents an overview of ideas and concepts that established how the decentralised Premix Fuel Management policy influences community development. Figure 2.3 shows the conceptual framework for premix fuel management and community development on which the study will be based.

**Figure 2.3 Conceptual Framework for Premix Fuel Management and Community Development**



Source: Author's construct, 2013

The main principles for the decentralised premix fuel management were to ensure affordability and increased access to premix fuel. According to Crawford (2004), any action or step to decentralise certain functions at the national level aims at enhancing local participation and accountability. Decentralisation of PFM is expected to enhance stakeholder (fishermen, canoe owners, fishmongers, among others) participation in decision-making enveloping the sale and use of profitability on premix fuel. The decentralisation of PFM was aimed at increasing people's access to the commodity to enhance fishing activities in the country. Government intended to entrust the management of premix fuel into the hands of the people who depend on it for their economic activities. The aim was that people who depended on premix fuel could help eliminate the erratic supply of the commodity and the associated difficulties people in the fishing industry encounter. Decentralised PFM policy will increase

access to premix fuel thereby promoting community development. The social exchange theory, however, explains that the extent of community participation in PFM activities would depend on the ability of the entire premix fuel management system to provide their needs. Nevertheless, the government instituted measures to guide the operations of the decentralised PFM policy.

Decentralisation of PFM is also expected to increase accountability over the use of premix fuel profitability in the form of activities profits are spent on and the importance of such activities to the overall development of the fishing industry. With the involvement of the fisher folk in decision-making about premix fuel, it is expected that the agents (local fisher folk) could hold the principals (local PFM leaders) accountable. It is perceived that there is an iterated relationship between participation and accountability. Thus, increased participation is expected to increase accountability, and vice versa.

Zimmerman (2000) explains that increased participation and accountability to communities help empower individuals and groups of people by providing these groups with the skills they need to effect change in their own communities. Arnstein (1969) indicates that community empowerment exists where stakeholders have that degree of power (or control) which guarantees that participants or residents can govern a program or an institution by initiating, implementing, financing and managing their own development. The Federation for Community Development Learning (2009) expresses community empowerment in the form of increased citizen control and increased community initiatives. In other words, empowered community takes charge of their own development by initiating development activities. Such actions help increase and improve community infrastructure. The interaction between community members and the infrastructure helps improve their quality of lives by improving access to quality services. The Federation also indicated that community empowerment leads to community development when communities use their control over resources to implement decisions and projects that aim at improving the living conditions of all members in a fair and transparent manner.

**CHAPTER THREE**  
**CONTEXTUAL ISSUES OF DECENTRALISED PREMIX FUEL**  
**MANAGEMENT IN THE KOMENDA-EDINA-EGUAFO-ABIREM**  
**MUNICIPALITY**

**3.1 Introduction**

This chapter indicates the contextual issues relating to premix fuel management in the KEEA Municipality. It presents a description of the KEEA Municipality as well as details on premix fuel management in Ghana.

**3.2 The Fishing Industry in Ghana**

Ghana has been a fishing nation with an extended tradition of a very active fishing industry dating back to as early as the 1700s and 1800s when Fante fishermen embarked on ocean fishing along the coast of Ghana (Bank of Ghana, 2008; Atta-Mills et al., 2004). Bounded on the south by the Gulf of Guinea, Ghana has a 550 kilometre coastline stretching from Aflao in the East to Half Assini in the West and a total continental shelf area of about 24,300 square kilometres to support a vibrant marine fishing industry (Bank of Ghana, 2008).

Fish caught were mainly to meet domestic demand, especially in the towns and cities. There were limited exports to neighbouring West African countries. Upon the achievement of political independence in 1957, the importance of fishing was recognised, as the fishing sector was included in the Ten-Year Development Plan. Fishing was mainly done using paddling dugout canoes. Later in the 1950s, canoes with outboard motors powered by premix fuel were introduced. The use of these canoes can be found in almost all 300 landing sites in 200 fishing villages along the Ghanaian coastline, as shown in Figure 3.1 (Bank of Ghana, 2008).

The types of fisheries in Ghana can be classified into marine fisheries, aquaculture, and inland fisheries (MoFA, 2011). Marine fisheries comprise artisanal fisheries (canoe fishing), inshore fisheries and industrial fisheries. There are about 10,000 canoes and 123,000 fishers that operate from 304 landing beaches in 189 fishing villages located along the coast of Ghana in the artisanal fisheries. The sub-sector is responsible for 80 percent of the total annual catch of small pelagic species of fish (sardines and mackerels) in the country. The artisanal sector provides over 70 percent

of the total fish requirements, and consequently the bulk of the country's protein requirements. The sector also employs over 60 percent workers and links with other sectors in providing raw materials, especially the food processing companies and the hospitality industry, while employing the services and products of other sectors to operate (MoFA, 2011).

The inshore fleet consists of approximately 230 locally built wooden vessels fitted with inboard engines of up to 400 hp. The vessels are multipurpose and are used for bottom trawling. They target the sardinellas, chub mackerel and other Carangidae species. They fish in the same coastal waters as the artisanal fleet during the upwelling seasons. The semi-industrial vessels use ice for preserving fish at sea and usually stay three to five days on sea (MoFA, 2011).

The industrial fisheries consist of 48 trawlers, seven pair trawlers, two shrimpers, 26 tuna bait boats and 10 tuna purse seiners. The vessels operate from Tema and Takoradi where there are deepwater ports. The Fisheries Act 625 2002 requires that these deep-sea trawlers operate in waters deeper than 30 metres depth. The industrial fleet has freezing facilities for preserving fish at sea and can stay for months at sea (MoFA, 2011).

Aquaculture was adopted as an assured way of meeting the shortage in Ghana's fish demands. The aquaculture fisheries comprise mainly small-scale subsistence farmers who use earthen ponds for their activities. It is mainly used to produce tilapia (MoFA, 2011).

The inland fisheries include the Lake Volta, reservoirs associated with irrigation and potable water projects, and fishponds which are the main sources of freshwater fish in Ghana. Fishing in the Volta Lake (with a surface area of 8,480 km<sup>2</sup> and 5,200 km of shoreline) contributes about 90 percent of the total inland fishery production in Ghana, which is around 90,000 metric tonnes (MT). It employs 80,000 fishers and 20,000 fish processors and traders. The fishers use 17,500 canoes for their activities (MoFA, 2011).

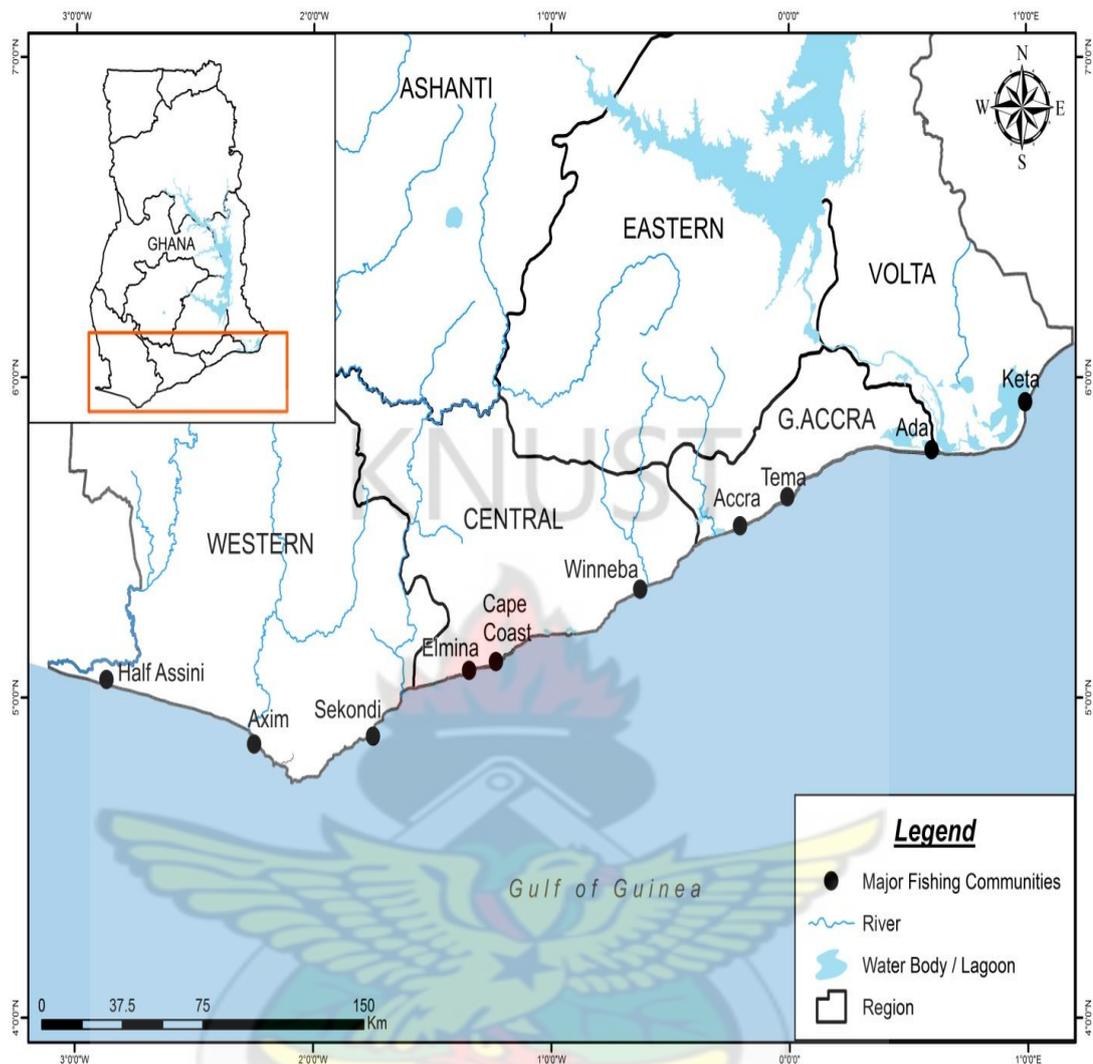
The significance of the fisheries sector in the socio-economic development of Ghana cannot be overemphasised. The fishing industry provides employment for many rural and urban people in Ghana. It has been estimated that about 10 percent of the population involved in the fishing industry is from both urban and rural areas and that women are key players in post-harvest activities (Bank of Ghana, 2008). It is estimated that a total of 500,000 fishermen, fish processors, traders and boat builders are employed in the fisheries sector. These people, together with their dependants, account for about 10 percent of the population (Bank of Ghana, 2008).

Fisheries have gradually become Ghana's most important non-traditional export sector, accounting for over 50 percent of earnings from non-traditional exports (Bank of Ghana, 2008). In 2006, about 60,000 MT of raw and processed fish were exported, earning the country over US\$80 million (Bank of Ghana, 2008). Export earnings from fish and fish products are a source of foreign exchange and revenue for the government (Bank of Ghana, 2008).

The fishing industry plays an important part in sustaining livelihood and reducing poverty in Ghana (Bank of Ghana, 2008). Fish is recognised as the most important source of animal protein in Ghana and is consumed by most people in all regions of the country from the rural poor to the urban rich. It provides the consumer with about 60 percent of his or her animal protein intake. Fish has remained the preferred and cheapest source of animal protein in Ghana with about 75 percent of total annual production being consumed locally (Bank of Ghana, 2008; MoFA, 2011).

The role of the fishing sector in poverty reduction is enormous. Many poor and vulnerable people rely on the fisheries sector, either directly or indirectly, for their livelihood. Fishing and post-harvest fisheries activities clearly provide a wide range of full-time and seasonal livelihood opportunities to many vulnerable people.

**Figure 3.1 Major Water bodies used for fishing in Ghana**



Source: Department of Geography and Regional Planning, 2013

### **3.3 The Decentralised Premix Fuel Management Policy**

Premix fuel is an in-country (Ghana) blend of fuel made for use by the fishing industry. It has similar properties to petrol but with an octane number of 82. It is dyed blue to differentiate it from other fuels (Mensah et al., 2006).

Premix fuel was introduced in 1990 to the fishing industry in Ghana and the government subsidised 100 percent of the price following persistent petitions from the fisheries associations in 1992/93. The high price difference between premix fuel for outboard engines and petrol for automobiles led to gross abuses which led to the withdrawal of the subsidy. Later in 1996, the government reintroduced the subsidy and established a ministerial committee for premix fuel administration and

distribution to ensure the efficient supply of the premix fuel. The fuel was sold on commission basis by fisheries associations. The quantities of premix fuel sold between 1996 and 2000 were over 183 million litres with an average of 36 million litres per annum (Mensah et al., 2006).

By the end of year 2000, the original idea of government to ensure availability of premix fuel to fishing communities at an affordable price had been diluted to the extent that there was an explosion of premix fuel sale points owned by individuals rather than the fisher groups. Premix fuel sale points grew from 128 in 1990 to about 900 in 2000, representing a percentage increase of 603 (MoFA, 2011). There was uncontrollable corruption in premix fuel administration and uncontrolled diversion of the product from the intended destinations to fuel stations in particular to be sold to motorists as petrol. To worsen the case, there were frequent shortages to the disadvantage of the fishers, creating general dissatisfaction among them (MoFA, 2011).

Consequently, the government set up a team of experts with detailed knowledge and understanding of the fishing industry and the premix fuel situation to examine premix fuel allocation, distribution and sale (MoFA, 2011). Based on suggestions made by the team of expert sub-committee, the National Premix Committee (NPC) was reconstituted to consist of the following members:

1. The sector Ministry (MoFA);
2. Ministry of Energy (MoE);
3. Fisheries Commission;
4. National Inland Canoe Fishermen Council (NICFC);
5. Ghana National Canoe Fishermen Council (GNCFC);
6. National Fisheries Association of Ghana (NAFAG);
7. Industry Coordinator of the Association of Oil Marketing Companies (AOMC);
8. Two other nominees appointed by Minister of Food and Agriculture.

The functions of the NPC, as stipulated by the committee, were to:

1. review all existing premix fuel sale points in the country;

2. set up procedures for receiving and approving applications and for the establishment of new premix fuel sale points;
3. examine all licences given for the purpose of selling premix fuel and determine their relevance;
4. set out guidelines and modalities for the establishment of premix fuel sale points, purchasing procedures, transportation of premix fuel to sale points and sale to beneficiaries in consultation with stakeholders;
5. determine the minimum and maximum quantities to be supplied, depending on the need of fishers and the season;
6. determine the price build-up of premix fuel in consultation with the NPA;
7. present quarterly and annual reports of activities of the NPC to the Minister of Food and Agriculture.

Additionally, the team recommended the provision of an operational secretariat for the NPC in the country. Their functions, among others, included:

1. categorise the Landing Beach Committees (LBCs) into groups and estimate what their lifting should be;
2. monitor, evaluate and reconcile premix fuel requested by the NPC, supplied by Tema Oil Refinery (TOR) and lifted by Oil Marketing Companies (OMCs) with fuel received by LBCs;
3. perform all daily technical and administrative activities dealing with premix fuel;
4. serve as a link among the NPC, OMCs and other stakeholders;
5. undertake all financial transactions, report to and advise the NPC on all matters concerning premix fuel administration;
6. arrange for an annual financial audit by an external auditor and an annual technical audit.

Based on deliberations and recommendations by the team of experts on how to effectively and efficiently manage premix fuel in Ghana, a new policy was introduced to decentralise the management of premix fuel to the fisher folk. In 2001, the government established the decentralised Premix Fuel Management policy to make premix fuel more accessible to fishing communities and for the profits to be used to develop the fishing communities (MoFA, 2011). To ensure efficient sale of premix to

deserving fishers, LBCs were set up at NPC-approved landing beaches. The formation of LBCs was facilitated by the Metropolitan/Municipal/District Chief Executives (MMDCEs) concerned in consultation with the NPC. However, the MMDCEs concerned were to thereafter not interfere with the administration and sale of premix fuel at the landing beaches. It was established that only LBCs were mandated to sell premix fuel and to only fishers (MoFA, 2011). Each LBC was made up of the following members:

- Chief fisherman (Chairman of the committee)
- Representative of canoe owners
- Representative of fishmongers
- One fisherman to be nominated by Ministry of Food and Agriculture (MoFA) in consultation with the MMDCE
- One other person representing the MMDCE.

Traditional authorities play a vital role in a community by working in consultation with the Municipal Assembly to ensure community development. Besides, unit committees in Ghana liaise with traditional leaders and other local authorities to plan and implement development activities. In spite of the involvement and contribution of traditional authorities and unit committees to community development, they are not involved in the management of premix fuel in Ghana, as stipulated in the guidelines for managing premix fuel.

Each LBC is to employ a pump attendant whose duties are to sell premix fuel, regularly gauge fuel stock, estimate demands and keep storage tanks clean. The pump attendant was to be paid by the LBC. Again, each LBC is to engage a secretary who will be responsible for initiating orders for supply of premix fuel to the NPC and keep accurate records on supply and sales of premix fuel. The secretary was to be paid by the LBC. Despite their important roles in the management of premix fuel, the pump attendant and the secretary are not members of the LBC and therefore have no voting rights (MoFA, 2011).

LBCs are to pay the cost of premix fuel to the selected OMC within ten (10) days of receipt of the product. Each LBC is supplied with the product by only one OMC of its

choice. The breakdown of the premix fuel margins after paying the OMC as instructed by NPC are given as follows: the chief fisherman who is the chairman of the committee gets 12 percent, other members of the LBC share 18 percent, 10 percent goes to the secretary, seven percent goes to the pump attendant and the remaining 53 percent goes to the fishing community. The proportion of the proceeds given to the fishing community is to be used for developmental projects by the LBCs in consultation with the fishing community and the MMDAs. Each LBC is required to have a bank account with a minimum of two signatories where the 53 percent for the fishing community is deposited. These signatories should be members of the LBC and/or the secretary of the LBC and on no account should the MMDCE be a signatory to the account. However, MMDCEs should institute an annual financial audit of the accounts of LBCs under their jurisdiction. Stakeholders are permitted to make a request for information on liftings from the Premix Secretariat, and vice versa (MoFA, 2011).

Currently, the Ghana government subsidises premix fuel by 73 percent. The government spends about GH¢150 million annually as subsidy for premix fuel. This subsidy refers to the effort by government to pay for the difference between the price of premix fuel at the pump station and the actual cost of the product. So, by paying the difference, government enables premix fuel to be sold at a lower and affordable price to fishing communities. The government supplies 120 tankers of premix fuel per week to fishing communities in Ghana. Each tanker contains 3,000 gallons or 13,500 litres of premix fuel. That is, 1,620,000 litres or 36,000 gallons of premix fuel is supplied to the fishing industry in Ghana per week. Currently, the price of premix fuel in Ghana is 80.14 Ghana pesewas per litre or GH¢ 3.80 per gallon (MoFA, 2011).

### **3.4 The KEEA Municipality**

The Komenda-Edina-Eguafo-Abirem Municipality, which is the study area, was carved out of now Cape Coast Metropolitan Assembly in 1988 under Legislative Instrument (LI) 1377 and elevated to a Municipality in 2008 in accordance with LI 1857. It is made up of four distinct traditional areas, namely Komenda, Edina, Eguafo, and Abirem. It is in the Central Region of Ghana and has a total land area of 372.45 square kilometres (919.95 square miles) and 200 communities with Elmina as its capital. It is located between longitudes 1°20'W and 1°40'W and latitudes 5°05'N and

5°15' N. The Municipality is bounded on the south by the Atlantic Ocean (Gulf of Guinea), the east by the Cape Coast Metropolis, the north by the Twifo-Hemang-Lower Denkyira District and the west by the Mponor-Wassa East District, as shown in Figure 3.2 (KEEA Municipal Assembly, 2010).

The area is a plain with isolated hills of uniformly low heights of between 250 and 300 metres above sea level. Along the coast are a series of lagoons and marshy areas into which a number of rivers and streams draining the area flow. The Municipality lies partly in the dry equatorial zone and partly in the west semi-equatorial zone. It has a mean annual temperature of about 29°C from March to July and 24°C from August to February. KEEA enjoys double maxima rainfall. The main season of rainfall is between May and July, and the minor season is from September to October (KEEA Municipal Assembly, 2010).

According to the Ghana Statistical Service (2012), the Municipality had a population of 144,705 made up of 69,665 males and 75,040 females in 2010 and an inter-censal growth rate of 3.1 percent between 2000 and 2010. KEEA's share of the total population of the Central Regional is 6.6 percent. There are 35,403 households in KEEA with an average household size of 3.9 (Ghana Statistical Service, 2012).

The marine resources in the KEEA Municipality include the sea, beaches, lagoons, rivers, and mangrove swamps. Apart from the fish, crabs and oysters that the sea provides, the beach offers opportunities for recreation. Some of the rivers in KEEA are Benya River and Surowi River (Sweet River) (KEEA Municipal Assembly, 2010).

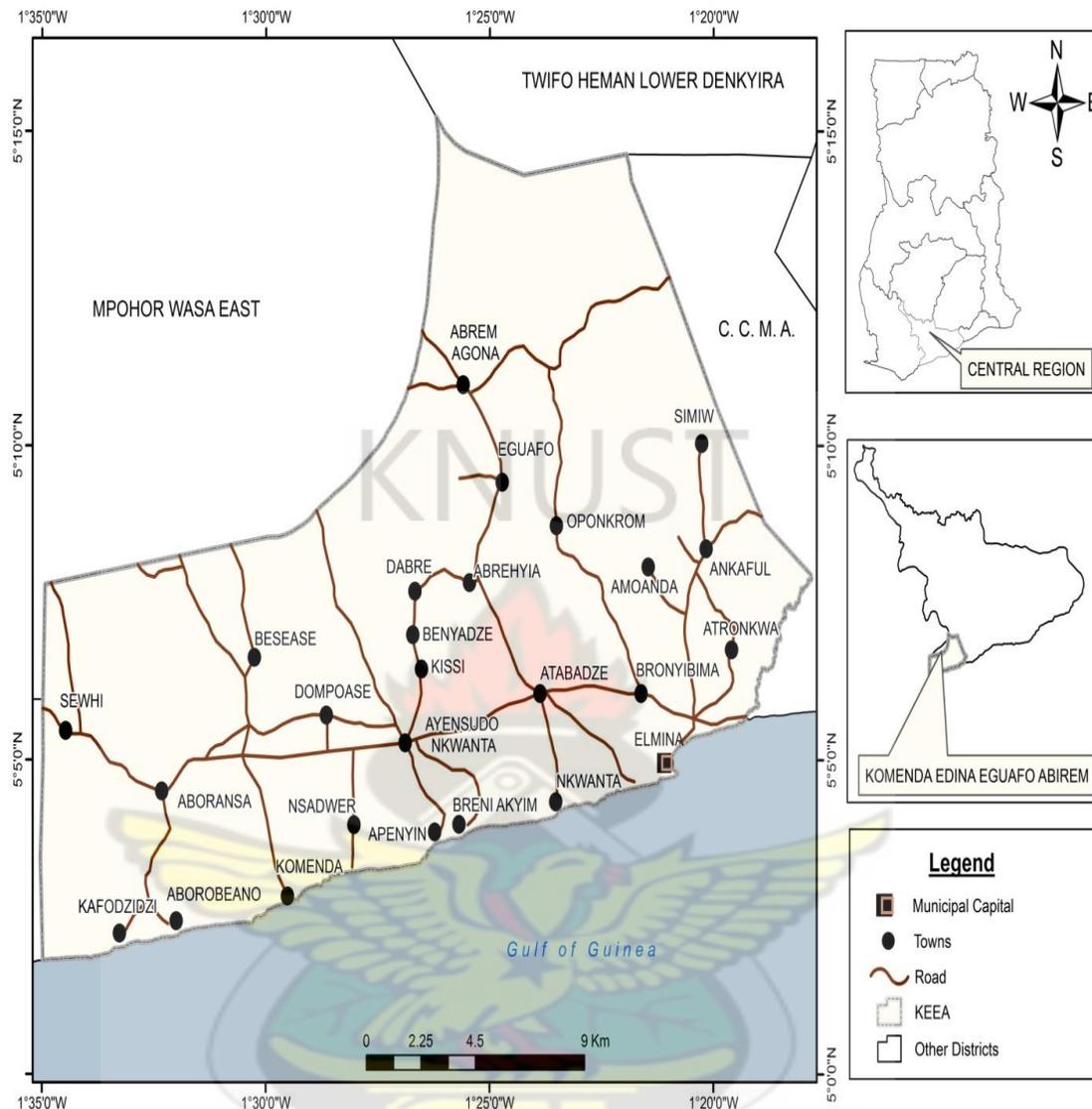
The main economic activity in the KEEA Municipality is fishing. Other economic activities undertaken in KEEA are farming and livestock rearing. The fishing sector engages 14,871 fishermen using 924 canoes and 60 in-shore vessels for fishing in the KEEA Municipality (KEEA Municipal Assembly, 2010). In addition, 53 percent of the labour force of the Municipality perform jobs which are directly and indirectly associated with fishing such as selling fish, smoking fish and mending fishing nets. The Municipality contributes about 20 percent of Ghana's total fish output (MoFA, 2011). There are two main types of fishing practised in the KEEA Municipality. These are marine and inland (fresh water) fishing. Inland fishing is done on a limited

scale by fish farmers who usually combine it with their normal farming activities. From official records, only two (2) active fish farmers are known in the Municipality although other unregistered fish farmers exist. Marine fishing is predominant in the KEEA Municipality. In marine fishing, there are two groups of fishing fleet which have a total of 875 canoes and fishing vessels in the municipal area (KEEA Municipal Assembly, 2010). The first group operate from nine fishing villages and towns with a fleet of 735 wooden dugout canoes, half of them motorised. The second fleet comprise vessels of particular type which only operate from Elmina. This is a fleet of about 49 diesel engine inshore vessels using mainly light bottom trawl and purse seine nets (KEEA Municipal Assembly, 2010).

The peak season for fishing lies between June and September. The importance of fishing in the Municipality has prompted programmes like the 'Fishing Continuation School' for first cycle school graduates and the establishment of the Paul Isert Centre in Elmina to give up-to-date information on fishing technology.

Fishing is done every day of the week with the exception of Tuesdays. The variety of fishing gears used in both marine and inland fishing and trawl for motor fishing vessels are as follows: motorised fishing vessels and canoes; drag-net for large canoes; set net for small and medium-sized canoes; and Beach seine manual used in both inland and marine fishing. The type of net and gear used for fishing determines the local organisation of canoe fishermen in KEEA. There are 215 Ali Poli Watsa net groups, 79 set net groups and 30 hook and line groups. All the 60 inshore motorised vessels of KEEA are stationed in Elmina town. Fish caught in the KEEA Municipality is mainly landed in Elmina (KEEA Municipal Assembly, 2010).

**Figure 3.2 Map of KEEA Municipality**



Source: Department of Geography and Regional Planning, 2013

### 3.5 Characteristics of Elmina

Elmina, the study community, is the capital of the KEEA Municipality, as shown in Figure 3.2. Fishing is the major economic activity in Elmina. Seventy-five percent of the labour force of Elmina perform jobs which are directly and indirectly associated with fishing (KEEA Municipal Assembly, 2010). Elmina fishing harbour is the third largest fish landing site in Ghana, after Tema and Sekondi harbours, and the major landing site in the Municipality (KEEA Municipal Assembly, 2010). There are four fish landing beaches in Elmina namely Bantuma, Benya Lagoon, Asamanpowmu, and Esselmu. The study concentrated on the Benya Lagoon and Bantuma Landing beaches, as showed in Figure 3.3. Despite the artisanal nature of fisheries activities in

Elmina, it contributes about 15 percent of the country's total fish output (KEEA Municipal Assembly, 2010). Therefore, Elmina significantly contributes not only to the local livelihood and economy of Elmina but also to the national fisheries' GDP. There are 9,669 fishermen and 564 big and small canoes operating in Elmina. An annual catch of 130,000 tonnes of fish is landed at Elmina, the major landing site in KEEA (KEEA, 2003; KEEA Municipal Assembly, 2010).

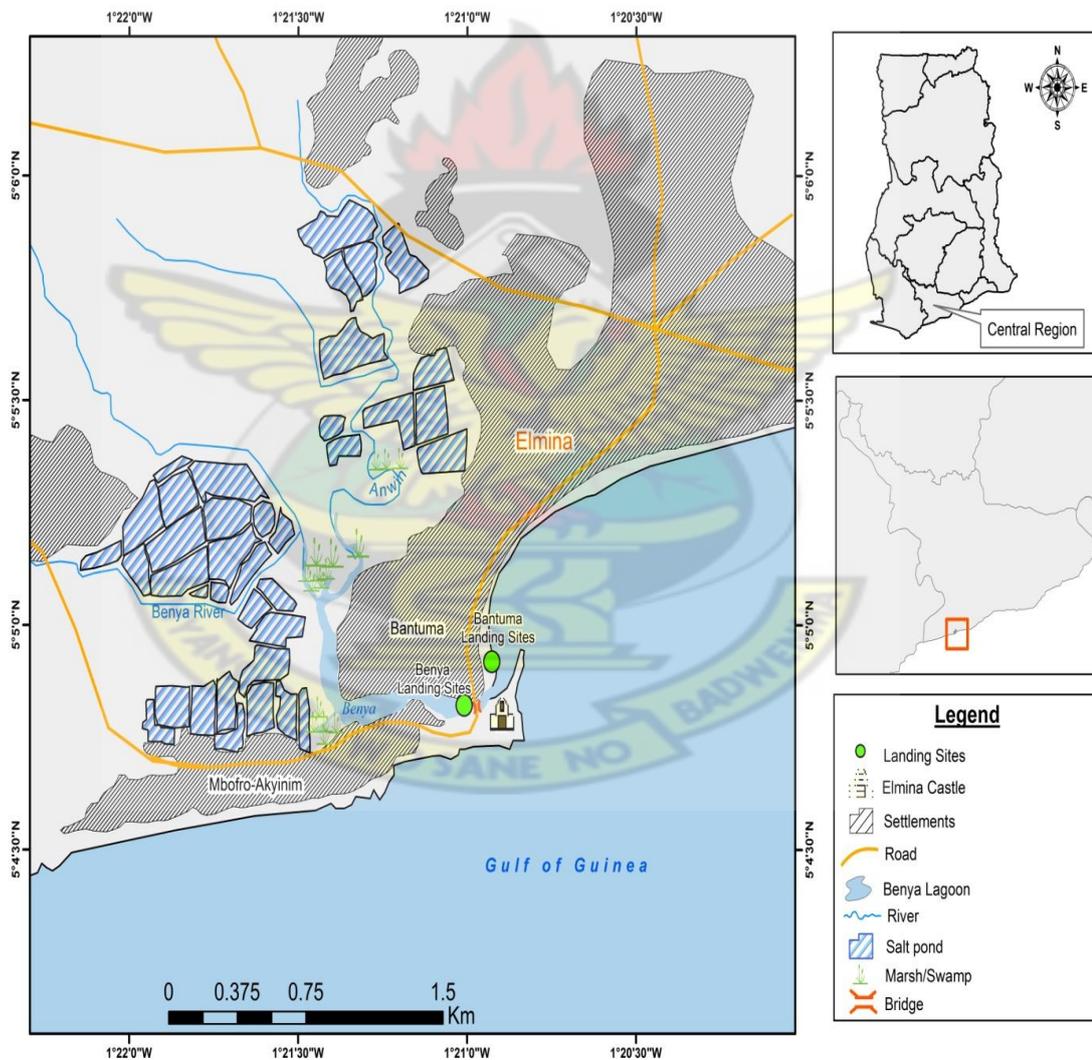
Fish landed by the canoes and inshore fleet at Elmina is sold to the fishmongers, who smoke the bulk of it with the rest being sun-dried or salted. Some of the fish is also sold directly to consumers at the landing sites. Among the types of fish landed in Elmina are burrito, round and flat sardines, cassava fish, tuna, scad mackerel, sea breams, red fish, ribrin fish, barracuda, lobsters, prawns, and crabs. Each landing site has a chief fisherman referred to as Apofohene. The chief fishermen elect from among themselves an overall leader of all the fishermen. There are advisors to help them in their duties. The Apofohene and the advisors make regulations about fishing in KEEA Municipal Area, receive non-citizen (or guest) fishermen and settle disputes. To support their duties, each vessel makes a financial contribution for the running of the governing body. The Apofohene is not only a spokesman for the fishermen but also interacts with other agencies to make it easier for fishermen to acquire fishing assets and capital. Similarly, women who buy the fish from the fishermen and either process or market it have a 'queen mother' called 'Konkohenmaa'. Together with her advisors, she sets the rules for fish trading and settles misunderstandings. Both the Apofohene and Konkohenmaa are channels through which communication, information, and education pass to the fishermen and fish traders (KEEA Municipal Assembly, 2010).

Fish processing is done mainly through smoking by using the traditional round mud ovens and the "Chokor Smoker". The traditional method of smoking contributes greatly to air pollution along the coastal zone due to inefficient biomass combustion which generates large volumes of smoke.

In the fishing industry at Elmina and in the Municipality at large, capital goods and assets are to a large extent privately owned. Fishermen are employed by owners of fishing equipment and they share the profits with the owners after deduction of

amortisation amounts for the vessel or canoe, the outboard motor, nets, and fuel. The gear owner takes a greater proportion of the profit and the rest is shared among the fishermen. Especially during the lean season, catches sometimes do not cover the cost of fuel used for each fishing trip. Debts accumulate and make the fishermen poor. During the major fishing season, there are often bumper catches, but lower prices do not make the fishermen any better off. New approaches are emerging to the financing of fishing. Fishmongers have been trying to come together to purchase the gear for the fishermen. In so doing, the fishmongers reserve the right to first choice or first purchase of the fish wholesale from such vessels before retailing it.

**Figure 3.3 Map of Elmina**



Source: Department of Geography and Regional Planning, 2013

## **CHAPTER FOUR**

### **METHODOLOGY**

#### **4.1 Introduction**

This chapter presents the methodology of the study. It deals with the presentation of the procedure and techniques to be used for data collection for the research. It includes the study design, study population, sample and sampling procedure, data collection method, instrument design, pre-test, ethical considerations, fieldwork, field challenges, and data management.

#### **4.2 Research Approach**

According to Trochim (2000), a research design provides the glue that holds the research together. He explains that the design is used to structure the research, thereby showing how all the major parts of the research work together to address the central research question. Nwadinigwe (2005:33) also emphasized the importance of design to research, reiterating that “basically, research design, as an important aspect of research, must be the most appropriate to approximately measure what is being measured and obtain the data that will validly lead to a conclusion that is also valid”.

The study is partly descriptive and explanatory. The study adopted the descriptive study design, a type of design that can be explained as the process of gathering data in order to answer research questions or test hypothesis which concerns the existing status of a phenomenon and determine relationships between variables. This type of research design provides an accurate and objective description of a picture of an ongoing situation or real-life situation (Awoyemi and Quartey, 2002).

The descriptive study design was ideal because the study required the researcher to describe the existing situation of the decentralised PFM policy in KEEA Municipal Assembly. This design enabled the researcher to describe the existing situation pertaining to stakeholder participation, accountability and challenges stakeholders face in PFM. This allowed the use of an open theory to guide the collection of data and analysis of data.

According to Sarantakos (2005), a descriptive study design is used to describe what conditions exist. It involves the use of both qualitative and quantitative techniques to

describe, record, analyse, and interpret conditions that exist. Thus, quantitative methods such as frequencies, percentages, means and standard deviations were used to describe the demographic characteristics of the respondents, quantum of premix fuel received in a week, and the profit margins. Participation was analysed qualitatively using interest analysis. Analysis of the levels of participation of the stakeholders and of accountability in the management of premix fuel in the Municipality was qualitative. Direct quotations from the respondents and deductions from such statements were also used as qualitative methods to support the findings. A descriptive study design also involves contrast and attempts to discover relationships between existing variables. As a descriptive study, it was designed to obtain pertinent and precise information concerning the contribution of decentralised PFM policy and development of coastal communities.

This does not mean that the descriptive study design is not without weakness. Marczyk, et al. (2005) observe that descriptive designs, like all non-experimental designs, no matter how convincing the data may be, cannot rule out extraneous variables as the cause of what is being observed. This is because descriptive survey designs do not have control over the variables and the environment that they study. This means that findings from survey are most often influenced by factors other than those attributed by the researcher.

The study also adopted the explanatory (causal) research design to establish the relationship between the decentralised PFM policy and access to premix fuel as well as between the decentralised PFM policy and infrastructural development. For the purpose of this study, a causal research design was adopted to establish possible causal relationships in PFM through the use of field experiments. The explanatory study design was adopted because it is appropriate to examine the relationship between the decentralised PFM policy and infrastructural development and also between the decentralised PFM Policy and access to premix. The study sought to assess whether or not the PFM policy has led to improved access to premix fuel as well as infrastructural development. It sought to establish the existence or otherwise of a causal link between the PFM policy and access to both premix fuel and infrastructural development.

### **4.3 Justification for Selection of Study Area**

The selected study area is KEEA Municipality which is shown in Figure 3.2. This is because, first of all, KEEA Municipality is an important fishing district in Ghana that has 53 percent of its labour force directly and indirectly associated with fishing activities. The Municipality contributes about 15 percent of Ghana's total fish output (MoFA, 2011).

The study took place in Elmina, the capital of KEEA, as shown in Figure 3.3, based on the fact that it is the major fishing community within the Municipality and has four landing beach facilities, namely Benya landing beach, Bantuma landing beach, Asamanpowmu landing beach, and Esselmu landing beach. There are two landing beach committees that manage premix fuel in Elmina. These LBCs are the main ones located in the KEEA Municipality and they serve as the headquarters for all other LBCs in the Municipality. Elmina was, thus, chosen as the fishing community for the study. Furthermore, the natural strategic location of Elmina makes it an important focal point for fishing in the Central Region and indeed, an examination of the effects of premix fuel management on the community will go a long way towards developing the Municipality's fishing industry.

### **4.4 Selection of Variables**

The key issues to be studied are community development in relation to infrastructural development, participation, access to premix fuel, accountability and challenges in managing the sale of premix fuel and the proceeds. The kinds of variables in relation to each research question and the sources of data used for the study are detailed in Table 4.1.

**Table 4.1 Summary of data variables studied**

<b>Research Questions</b>	<b>Data Variable</b>	<b>Sources of Data</b>
1. How do relevant stakeholders participate in the management of premix fuel following the introduction of the decentralised PFM policy?	<ul style="list-style-type: none"> <li>• Stakeholder Interaction</li> <li>• Stakeholder Interest</li> <li>• Roles of stakeholders</li> <li>• The use of by-laws</li> <li>• Methods used for stakeholder participation</li> </ul>	Fisheries Department KEEA Municipal Assembly Executives of LBC Secretaries of LBC Pump attendants Fishermen Fishmongers Canoe owners
2. What is the level of accountability in the management of premix fuel following the introduction of the decentralised PFM policy?	<ul style="list-style-type: none"> <li>• Answerability of LBCs to other stakeholders</li> <li>• Satisfaction of stakeholders</li> <li>• Enforcement of the rules of engagement</li> </ul>	Fisheries Department KEEA Municipal Assembly Executives of LBC Secretaries of LBC Pump attendants Fishermen Fishmongers Canoe owners
3. How has the decentralised PFM policy resulted in improved access to premix fuel in the coastal communities?	<ul style="list-style-type: none"> <li>• Supply per week before PFM policy</li> <li>• Supply per week after PFM policy</li> <li>• Frequency of supply</li> <li>• Adequacy of supply</li> <li>• Availability of premix fuel</li> <li>• Impact of supply on fishing activities</li> <li>• Impact of supply on community development</li> </ul>	Fisheries Department KEEA Municipal Assembly Executives of LBC Secretaries of LBC Pump attendants Fishermen
4. How has the policy contributed to infrastructural development in the coastal communities?	<ul style="list-style-type: none"> <li>• Cost of infrastructure</li> <li>• Type of infrastructure</li> <li>• Location of infrastructure</li> <li>• Impact of the infrastructure</li> </ul>	Fisheries Department KEEA Municipal Assembly Executives of LBC Secretaries of LBC Pump attendants Fishermen Fishmongers Canoe owners
5. What challenges do the stakeholders face in the management of premix fuel?	<ul style="list-style-type: none"> <li>• Challenges faced by various stakeholders</li> <li>• Challenges in supply of premix fuel</li> <li>• Challenges in community development</li> <li>• Management challenges</li> </ul>	Fisheries Department KEEA Municipal Assembly Executives of LBC Secretaries of LBC Pump attendants Fishermen Fishmongers Canoe owners

Source: Author's construct, 2013

#### **4.5 Data Sources**

The respondents for the study consisted of fishermen, fishmongers, canoe owners, chief fishermen, pump attendants at landing beaches, secretaries of landing beach committees, Municipal Planning Officer, and Head of KEEA Fisheries Department. According to Table 4.1, fishermen, fishmongers and canoe owners responded to data variables such as stakeholder interest, stakeholder interaction, satisfaction of stakeholders in PFM, adequacy and availability of premix fuel, and challenges faced in PFM. The LBCs, KEEA Municipal Assembly and Department of Fisheries were interviewed about issues like cost and type of infrastructure, supply of premix, sale of premix fuel, and challenges faced by stakeholders in PFM, as shown in Table 4.1.

#### **4.6 Sample size and sampling procedure**

There are four landing beaches in Elmina. They are Benya, Bantuma, Asamanpowmu and Esselmu landing beaches. There are two LBCs in Elmina that is Benya LBC and Bantuma LBC. Each LBC sees to the administration and management of two landing beach areas. Benya LBC manages the Benya and Esselmu landing beaches and Bantuma LBC manages the Bantuma and Asamanpowmu landing beaches. One landing beach area was randomly selected under each premix fuel committee for the study – Benya landing beach and Bantuma landing beach to be precise. These two were selected because they are the only two LBCs in Elmina.

The populations from which the samples were selected comprised fishermen (9,669) in Elmina, canoe owners (328), fishmongers (4100), executives of the premix fuel committees (10), pump attendants (2), secretaries of the Landing Beach Committees (LBCs) (2), KEEA Municipal Assembly staff (3), and KEEA Fishery Department staff (17). The sampling frame for the study consisted of fishermen, fishmongers and canoe owners in the landing areas in Elmina. Fishermen in the study refer to persons (especially men) who engage in fishing as an occupation. Canoe owners in the study refer to men and women who own canoes that are used for fishing at Elmina. Some of these canoe owners are fishermen, others are fishmongers, and still a number of them engage in other economic activities such as teaching, banking, and farming. Fishmongers in the study refer to women who buy fish directly from the fishermen at the landing beaches. These women are directly and indirectly affected by the activities of premix fuel management. The fishmongers buy the fish from the fishermen when

they return from sea and sell it at the landing beach to consumers as well as other women who take the fish to market to sell. They also sell to women who smoke and salt the fish.

The two LBCs in Elmina – Benya Lagoon LBC and Bantuma LBC – that are responsible for managing affairs at the four landing beaches were purposively selected for the study. The sample size for the study was selected from Benya and Bantuma landing beach areas in Elmina. Fishermen, canoe owners and fishmongers were interviewed in Benya and Bantuma landing beaches. The sampling techniques used in the study were simple random and purposive sampling.

There are 7,349 fishermen, 257 canoe owners and 3,348 fishmongers in Benya and Bantuma landing beaches, which gives a total population of 10,954, as shown in Table 4.2. According to Krejcie and Morgan (1970), a population of 10,954 requires a sample size of 372 to ensure representativeness. Proportionally, 209 respondents, made up of fishermen, canoe owners and fishmongers were sampled from Benya landing beach. Similarly, using the proportion of Bantuma’s population, 163 respondents (fishermen, canoe owners and fishmongers) were sampled.

**Table 4.2 Population for Fishermen, Canoe Owners and Fishmongers**

<b>Respondents</b>	<b>Benya (%)</b>	<b>Bantuma (%)</b>	<b>Total Population</b>
Population of fishermen	3965	3384	7349
Population of canoe owners	163	94	257
Population of fishmongers	2025	1323	3348
<b>Total</b>	<b>6153 (56)</b>	<b>4801 (44)</b>	<b>10954</b>

Source: Author’s construct, 2013

The sample sizes were calculated for the categories of respondents – fishermen, canoe owners and fishmongers in both Benya and Bantuma landing beaches. The researcher intuitively used equal representations to divide the sample size of 372 among the categories of respondents. This was because the use of proportionate sampling led to small sample size for categories such as canoe owners, which may not depict the true characteristics of the population. Therefore, the sample size (372) was divided equally among fishermen, canoe owners and fishmongers to ensure representativeness of the population. However, fishermen and fishmongers at Benya landing beach had larger

sample sizes than canoe owners because the sample size for Benya landing beach was not divisible by three, and also since their respective population is larger than that of canoe owners, the remainder was shared between fishermen and fishmongers. Additionally, as the population of fishermen at the Bantuma landing beach was larger than that of the fishmongers and canoe owners, and also because the sample size for Bantuma landing beach was not divisible by three, the remainder was added to the sample of fishermen, resulting in fishermen having a larger sample size. The sample sizes for fishermen, canoe owners and fishmongers used for the study are shown in Table 4.3.

**Table 4.3 Sample Sizes for Benya and Bantuma Landing Beaches**

Respondents	Benya		Bantuma		Total Sample Size
	Population	Sample	Population	Sample	
Fishermen	3965	70	3384	55	<b>125</b>
Canoe Owners	163	69	94	54	<b>123</b>
Fishmongers	2025	70	1323	54	<b>124</b>
<b>Total</b>	<b>6153</b>	<b>209</b>	<b>4801</b>	<b>163</b>	<b>372</b>

Source: Author's construct, 2013

Microsoft Excel 2010 Professional Edition was used to randomly sample the fishermen, fishmongers and canoe owners of the Benya and Bantuma landing areas in Elmina. The names of the fishermen and canoe owners in each landing beach area were obtained from the LBC (premix fuel committee) and the Municipal's Fisheries Department. The list of the fishmongers was obtained from the fishmongers' association in Elmina. The names in each area were entered into Microsoft Excel. Random numbers were generated for the names. The random numbers were used to shuffle the names and the first names that corresponded to the sample size of the areas were selected for the study. The aim was to give every member an equal chance of getting selected into the sample.

Fishing communities are homogeneous in characteristics such as culture, values and economic activities, but nothing is self-evident in research so it could not be concluded that their responses during the data collection would also be skewed towards the same direction. Therefore, a reconnaissance survey was undertaken to

determine the variability in responses and reliability of the instruments used for the study.

Institutions such as the LBCs, Department of Fisheries and KEEA Municipal Assembly were also surveyed for the study. The two LBCs in Elmina, that is, the Benya Lagoon and Bantuma LBCs, were interviewed. Each LBC is made up of the following executives:

1. Chief fisherman (Chairman of the committee)
2. Representative of canoe owners
3. Representative of fishmongers
4. One fisherman to be nominated by Ministry of Food and Agriculture (MoFA) in consultation with the Municipal Chief Executive (MCE)
5. One other person representing the MCE.

The chief fishermen, who act as Chairmen of the committees, representatives of canoe owners and representatives of fishmongers on the committees, were purposively sampled for the study.

The pump attendants and secretaries of various LBCs are not part of the executives of the LBCs, but their services are engaged by the LBCs in the management of the sale of premix fuel. However, the pump attendant and the secretary of each LBC were purposively sampled for the study. This is because it is the duty of the pump attendant to sell premix fuel, regularly gauge fuel stock, estimate demands and keep storage tanks clean. The secretary is also responsible for initiating orders for supply of premix fuel to the National Premix Committee (NPC) and keeps accurate records on supply and sales of premix fuel. They both, therefore, play an important role in the management of premix fuel in KEEA Municipality. The Municipal Planning Officer and the head of the KEEA Fisheries Department were also purposively sampled.

#### **4.7 Data collection tools and techniques**

Data were collected from both primary and secondary sources. Primary data was collected from the members of the fishing communities which include fishermen, fishmongers, canoe owners, KEEA Municipal Assembly, KEEA Fisheries Department, Executives of LBCs, secretaries, and pump attendants. The study

employed the use of interviews with tools such as interview schedules and interview guides to collect the primary data.

According to Biemer and Lyberg (2003), survey method is used to study the sample of individuals from a population with a view to make statistical inferences about the population using the sample. Creswell (2002) indicated that survey studies are conducted to collect a detailed description of existing phenomenon with the intent of employing data to justify current conditions and practices or make more intelligent plans for improving them. He further explained that it has an advantage of producing a good amount of responses from a wide range of people. Survey method was used because the study sampled part of the population to make deductions and conclusions concerning the contribution of PFM policy to community development in KEEA Municipal Assembly. This method was appropriate because it was impossible to undertake a census to examine the phenomenon under study, hence the need to use a sample to represent the population. The use of survey method was useful in describing the characteristics of the various categories of population in order to draw conclusions and make important decisions in relation to PFM. It was also appropriate as the study required the collection of a broad range of data such as data on opinions and factual issues.

However, De Leeuw (2005) argues that the survey method for collecting data relies too much on participants' perceptions rather than reality of the phenomenon. There was, therefore, the need to use secondary data to validate the primary data that was collected for the study.

The study also involved the review of materials in the form of project appraisal reports and data from the KEEA Municipal Planning Unit, KEEA Fisheries Department, and LBCs. Data such as characteristics of Elmina and KEEA Municipal Assembly were obtained from the KEEA Municipal Medium-Term Development Plan from 2008 to 2012. Information on supply and sale of premix fuel, cost and type of infrastructure and roles of LBC executives were obtained from project reports and minutes from the LBCs. Monitoring and evaluation reports from the KEEA Fisheries Department and the KEEA Municipal Assembly also served as a source of data for example, providing data on implementation of infrastructure and accountability.

Observational method of collecting data was also used to observe and collect data on the various infrastructural projects that had been undertaken in the study area and their locations. Observation was used to collect data on the various activities relating to the fishing industry as well. These include activities such as mending and fixing nets for fishing and selling fish at the landing beaches. Finally, the observational method of collecting data was used to study the activities involved in management of premix fuel such as selling premix fuel to canoe owners and fishermen.

#### **4.8 Instrument design**

The study adopted interview schedules and guides in collecting data on the contribution of premix fuel to community development. The instruments used both open-ended and close-ended questions. The interview guides were used to solicit information from the KEEA Municipal Assembly, KEEA Fisheries Department, and LBCs.

The interview guides were organised under four sections. These were the socio-economic contribution of premix fuel to community development, the involvement of relevant stakeholders in PFM, how accountable the stakeholders are in PFM, and the challenges they face in PFM.

The interview schedule was used for collecting data from fishermen, fishmongers and canoe owners. It was divided into five sections. The first section was on the background characteristics of the respondents, which covered gender, age and occupation of respondents. This helped in making useful analysis, interpretation and generalisation of issues. The second up to the fifth sections constituted the socio-economic contribution of premix fuel to community development, the involvement of relevant stakeholders in PFM, how accountable the stakeholders are in PFM, and the challenges they face in PFM respectively.

Bluman (1998) argues that interview surveys are advantageous in obtaining in-depth responses to questions, ensuring high response rate, soliciting information from individuals who do not have the ability to read or write, and guaranteeing the completeness of the interview. Their flexibility enables the interviewer to formulate questions as they come to mind. According to Yin (2003), the use of interviews

targets and focuses directly on the research topic and provides perceived causal inferences. He further explained that interviews are an essential source of case study evidence when studying about human affairs. This use of interview guides and schedules provided an insight into the study topic and also allowed a reasonable approach to corroborate interview data with information from other sources.

#### **4.9 Pre-test**

A pre-test exercise was carried out in Elmina which is a major fishing community in October 2013. This helped to assess the clarity of questions, responses and challenges likely to be faced during the actual data collection exercise. It also assessed both face and content validity of the instruments used. A reliability test was carried out to find out the extent to which the data collection instruments explained the issues involved in the study. This also helped in the review of the instruments before the actual data collection. A cronbach alpha value of 0.81 was obtained, implying that the questions could explain 81 percent of the variables. This implies that the instrument used was reliable. However, questions that seemed unclear were restructured before the actual data collection exercise was carried out.

#### **4.10 Data management**

Data gathered from the field were thoroughly edited, coded and verified for grammatical errors and consistency. Descriptive statistics such as frequencies, charts and percentages were used. Chi square test of independence was used to test the hypothesis. An alpha value of 0.05 was used for all inferential analysis. Interest analysis was also performed to analyse the interests of the various stakeholders, role of each stakeholder in PFM and community development, conflicting interests and how such conflicting interests could be harmonised for sustainable PFM. Finally, the study made use of qualitative analysis and direct quotations of respondents to examine the contribution of PFM to community development in the KEEA Municipality.

## CHAPTER FIVE

### ANALYSIS OF THE IMPLEMENTATION OF THE DECENTRALISED PREMIX FUEL MANAGEMENT POLICY IN ELMINA

#### 5.1 Introduction

This chapter presents the analysis and discussion of the field data. It has been categorised into background characteristics of respondents, level of stakeholder participation in PFM, level of accountability in PFM, contribution of the decentralised PFM policy to infrastructural development, and challenges stakeholders face in ensuring PFM. The study found that the issues, benefits and perceptions of Benya Lagoon and Bantuma LBC were common to each other. Consequently, responses from the respondents in the two LBCs were put together for the analysis.

#### 5.2 Characteristics of Fishermen, Canoe Owners and Fishmongers

A key element in ensuring effectiveness of PFM for community development is to acknowledge the socio-economic characteristics of the people involved. Datta and Sarkar (2010) acknowledge that the socio-economic composition of a community is important in assessing the quality of community participation in PFM. This, in turn, determines the level of benefits obtained by different segments of the population from PFM. The background characteristics of the fisher folk that are fishermen, canoe owners and fishmongers who were considered are sex, age and level of education. The results are presented in Table 5.1.

**Table 5.1 Characteristics of Fisher Folk**

Characteristic	Categories	Fishermen		Canoe Owners		Fishmongers		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
Sex	Male	125	100	112	91.1	-	-	237	63.7
	Female	-	-	11	8.9	124	100	135	36.3
<b>Total</b>		<b>125</b>	<b>100</b>	<b>123</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>372</b>	<b>100</b>
Age	Below 30	18	14.0	1	0.8	15	12	34	9.1
	31 – 40	63	50.5	49	39.9	61	49	173	46.5
	41 – 50	31	25.0	34	27.6	31	25	96	25.8
	51 – 60	10	8.0	29	23.6	12	10	51	13.7
	Above 60	3	2.5	10	8.1	5	4	18	4.9
<b>Total</b>		<b>125</b>	<b>100</b>	<b>123</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>372</b>	<b>100</b>
Education	None	44	34.9	29	23	47	37.9	120	32.3
	Basic	65	52.1	56	45	73	58.9	194	52.2
	SHS	13	10.2	21	17	4	3.2	38	10.2
	Tertiary	3	2.8	18	15	-	-	21	5.3
<b>Total</b>		<b>125</b>	<b>100</b>	<b>123</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>372</b>	<b>100</b>

Source: Field survey, 2013

### Sex of Fisher Folk

Table 5.1 shows that a majority (63.7%) of the fisher folk were males, whilst 36.3 percent were females. All the fishermen sampled were males and 91.1 percent of the canoe owners were also males. Nonetheless, none of the fishmongers were males. This is so because it was realised that there were no females involved in fishing activity itself, that is, going to sea to catch fish. They were indirectly involved in the fishing industry – buying and selling fish. Fishmongers represented a percentage of 91.9 of the women sampled. Out of the proportion of males, fishermen formed a majority of 52.7 percent the remaining 47.3 percent being canoe owners. On the other hand, it was noted that men do not engage in selling fish, which agrees with a statement in the 2010 Medium-Term Development Plan of the KEEA Municipality that the various activities in the fishing business are gender defined. Out of the proportion of women, only 8.1 percent are canoe owners, the rest of the canoe owners being men. It also indicates that more men are involved in the issues of PFM than women. The gender proportions are critical to the success of the PFM exercise as men and women have different roles in PFM and community development. Both men and women are important stakeholders in PFM policies since they are directly and indirectly affected by premix fuel activities. Gupte (2004), and Datta and Sarkar (2010) pointed out that active participation by both sexes is critical in a successful PFM programme. This may be attributed to the physical nature of fishing activities. According to Aning-Agyei (2011), some activities are gender sensitive, depending on the physical demands on people.

### Age of Fisher Folk

From Table 5.1, it is indicated that a majority (46.5%) of the fishermen, canoe owners and fishmongers interviewed were between 31 and 40 years of age, whereas 4.9 percent were above 60 years of age. The implication is that a majority of the fisher folk were within the work age cohort. About half (50.5%) of the fishermen and also about half (49%) of the fishmongers were between the working ages of 31 and 40. The age ranged between 21 and 67 years. This implies that the study combined views from both the young and the aged to draw its conclusions. The mean age of the fishermen was 38.8, while the mean ages of canoe owners and fishmongers were 45.2 and 39.9 respectively. Both fishermen and fishmongers had a sample standard deviation of 1.7 each from their mean ages. Canoe owners had a sample standard

deviation of 1.6 from their mean age of 45.2. These results show the extent of variations in the ages of the categories of respondents – fishermen, canoe owners and fishmongers.

#### Educational background of Fisher Folk

Educational attainment is widely believed to be an important determinant of stakeholder participation in PFM. From Table 5.1, about half (52.1%) of the fishermen had basic education as their highest level of educational attainment, while 34.9 percent of the fishermen had no form of formal education. In furtherance of this, the majority (58.9%) of the fishmongers had only received education up to the basic level while as much as 37.9 percent of them had not gone through any kind of formal education. The results show that a majority (68%) of the fishermen, canoe owners and fishmongers have received formal education. This is likely to enhance the management of premix fuel and accountability issues. Thus, educated people are more likely to be abreast of proper accounting principles to manage organisational funds as well as demand proper accountability from management.

#### Occupational background of Fisher Folk

The occupational characteristics of the fishing community members could inform their willingness to participate in PFM. Out of the fisher folk sampled for the study, a majority (33.6%) were fishermen, while 33.1 percent were canoe owners and the remaining 33.3 percent were fishmongers, as shown in Table 5.1. The canoe owners are neither fishermen nor fishmongers; they are into other types of economic activities such as teaching, trading, banking, and dressmaking. Out of the percentage of canoe owners, 55 percent were involved in trading activities, 23 percent were into teaching, 13 percent were involved in dressmaking and the remaining nine percent were engaged in banking. The results show that the fisher folk were highly engaged in fishing-related activities. This confirms the finding of the 2006 Medium-Term Development Plan of the KEEA Municipality that the Municipality is fishing-oriented. The great dependence of the fisher folk on fishing implies the necessity of premix fuel and its management in KEEA. This is likely to influence the commitment of the people towards a successful PFM exercise, as explained by Datta and Sarkar (2010) that the degree of one's reliance on premix fuel affects his or her commitment to PFM.

### **5.3 Stakeholder participation in PFM**

This section examines the level at which the fishing communities participate in PFM. It includes stakeholder interaction in PFM, and stakeholders' interest analysis (interest and role) in PFM.

#### **Stakeholder interaction in PFM**

Stakeholder interaction is essential to ensure successful PFM. Stakeholders in the PFM exercise that were identified in the study include the executives of LBC, secretaries and pump attendants of LBC, canoe owners, fishmongers, fishermen, Department of Fisheries, and the KEEA Municipal Assembly. According to the PFM guidelines given by MoFA, the stakeholders involved in PFM must meet quarterly to review the profits accrued and the sharing of benefits from sale of the premix fuel as well as plan development activities in the communities.

From the study, both secretaries at Benya and Bantuma landing beaches indicated that such review meetings are held semi-annually instead of quarterly, as demanded by the guidelines. The pump attendant at Bantuma explained, "Review meetings are held semi-annually because the committee would have to raise enough revenue for projects as well as clear all its debt for proper accountability." The chief fisherman at the Benya landing beach also added that "Having semi-annual meetings enables the committee to prepare adequately for the members." However, a majority (74.7%) of the fishermen as well as majority (82%) of the canoe owners indicated that such general meetings are not held regularly. Besides, 94 percent of the fishmongers explained that general meetings were not regularly held by the LBCs and that they had no knowledge of such meetings. The implication is that review meetings are fixed at the convenience of the committees. This is likely to affect transparency issues since committee members may find it difficult to demand certain information outside the review meetings. In other words, the infrequent meetings may prevent stakeholders from demanding more accountability from the executives.

All the fishermen, canoe owners and fishmongers admitted that everybody was free to seek for any information from the executives of LBCs during general meetings. However, a majority (53.2% and 64.9%) of the fishermen and canoe owners respectively reported that they were not satisfied with responses from the executives.

The study further examined the agenda for holding semi-annual review meetings among stakeholders. This was imperative because the importance attached to the agenda motivates people to attend such meetings. The fishermen, canoe owners and fishmongers were interviewed on the agenda discussed at semi-annual review meetings to determine whether or not issues discussed at meetings relate to PFM and the implementation of the decentralised PFM policy. Results on the agenda for the semi-annual review meetings are presented in Table 5.2.

**Table 5.2 Agenda Discussed at Semi-annual Review Meetings**

Response	Fishermen		Canoe Owners		Fishmongers	
	Freq.	%	Freq.	%	Freq.	%
Do not know	-	-	-	-	124	100
Discuss mode of sharing fuel	110	88	123	100	-	-
Address concerns of stakeholders	77	61.6	61	49.6	-	-
<b>Total</b>	<b>*187</b>	<b>-</b>	<b>*184</b>	<b>-</b>	<b>124</b>	<b>-</b>

Source: Field survey, 2013

\*n = multiple response

Table 5.2 shows that 88 percent of the fishermen and all the canoe owners posited that such meetings were used to discuss mode of sharing premix fuel among members. Thus, such meetings could help improve transparency and accountability in the premix fuel management system. However, 100 percent of the fishmongers did not know any agenda for the semi-annual review meetings. To be precise, all the respondents who did not know any agenda about the review meetings were fishmongers. The queen of fishmongers at Bantuma stated that fishmongers are not invited to premix review meetings because they were considered as outsiders in the premix fuel management system. Having clear agenda for the general meetings is likely to encourage more people to attend.

Another form of stakeholder interaction was between the executives of the LBCs and the Fisheries Department. It was revealed that stakeholders interacted through meetings that were held as and when the need arose to address arising issues. Such meetings were either between the executives of LBC and Fisheries Department or between executives of LBC and the pump attendants and secretaries. These meetings afforded the stakeholders opportunity to interact.

## Stakeholder interest analysis in PFM

This section examines the interests and roles of the various stakeholders in PFM. It includes interest analysis of the various stakeholders in PFM and the role of each stakeholder in PFM. If the interests of the various stakeholders are undertaken, it will have impact on PFM. That is, if the roles are well undertaken, it will have positive impacts on PFM, and vice versa. Table 5.3 shows the interest analysis of the various stakeholders. It shows the ideal impact of the interests of the stakeholders and how these impacts can be managed to ensure successful and sustainable PFM.



**Table 5.3 Interest Analysis in Premix Fuel Management**

<b>Stakeholder</b>	<b>Interest in PFM</b>	<b>Impact of interest on PFM</b>	<b>Managing impact for sustainable PFM</b>
Fisheries Department	<ul style="list-style-type: none"> <li>• Proper accountability from sale of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Constant supply of premix fuel</li> <li>• Effective utilisation of premix fuel funds for development</li> </ul>	<ul style="list-style-type: none"> <li>• Embarking on more community development projects</li> <li>• Prompt payment of premix fuel supply</li> </ul>
KEEA Municipal Assembly	<ul style="list-style-type: none"> <li>• Proper accountability from sale of premix fuel</li> <li>• The use of community's share of the profit for infrastructural development</li> </ul>	<ul style="list-style-type: none"> <li>• Constant supply of premix fuel</li> <li>• Effective utilisation of premix fuel funds for development</li> </ul>	<ul style="list-style-type: none"> <li>• Embarking on more community development projects</li> <li>• Prompt payment of premix fuel supply</li> </ul>
Executives of LBC	<ul style="list-style-type: none"> <li>• High sales from premix fuel</li> <li>• Proper use of premix fuel fund</li> </ul>	<ul style="list-style-type: none"> <li>• Increased profitability from premix fuel management</li> <li>• Constant supply of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Prompt payment of premix fuel supply</li> <li>• Timely ordering of premix fuel</li> </ul>
Secretaries of LBC	<ul style="list-style-type: none"> <li>• Records on sale of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Improved transparency in premix fuel management</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring proper record-keeping system</li> </ul>
Pump attendants	<ul style="list-style-type: none"> <li>• Fairness in distribution of premix fuel</li> <li>• High sales from premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Constant supply of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Prompt payment of premix fuel supply</li> <li>• Timely ordering of premix fuel</li> </ul>
Fishermen	<ul style="list-style-type: none"> <li>• Affordable premix fuel</li> <li>• Proper accountability from sale of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced profitability from sales of premix fuel</li> <li>• Constant supply of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Fixing realistic price for premix fuel</li> <li>• Prompt payment of premix fuel supply</li> <li>• Timely ordering of premix fuel</li> </ul>
Fishmongers	<ul style="list-style-type: none"> <li>• Affordable premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced profitability from sales of premix fuel</li> <li>• Constant supply of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Fixing realistic price for premix fuel</li> <li>• Prompt payment of premix fuel supply</li> <li>• Timely ordering of premix fuel</li> </ul>
Canoe owners	<ul style="list-style-type: none"> <li>• Affordable premix fuel</li> <li>• Proper accountability from sale of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced profitability from sales of premix fuel</li> <li>• Constant supply of premix fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Fixing realistic price for premix fuel</li> <li>• Prompt payment of premix fuel supply</li> <li>• Timely ordering of premix fuel</li> </ul>

Source: Field survey, 2013

## The role of Fisheries Department in PFM

There is the need to define and sensitise all stakeholders on their roles in ensuring effective PFM (Padgee et al., 2006). From the study, the Head of the Municipal's Fisheries Department stated, "The Fisheries Department is responsible for the conservation and management of marine resources, particularly fish for sustainable development". Thus, the interest of the Department in the PFM programme is to ensure sustainable fish production and monitor benefits from the sale of premix fuel for community development. The Head further indicated that the Department has an interest in knowing what the 53 percent of profits from selling premix fuel is used for in the fishing community. Synchronising the interests of the Fisheries Department with the principles of PFM implies that there should be prompt payment for premix fuel to ensure constant supply for effective development. On the contrary, despite the roles played by the Fisheries Department in PFM as stipulated by the PFM guidelines, it has been excluded from PFM activities due to political reasons. The Fisheries Department is included in PFM only when the ruling chief fisherman and the executives of the LBC are of the same political party as the Head of the Fisheries Department. Currently, the Fisheries Department has been excluded from PFM activities for five years. The roles the Fisheries Department has played in PFM since its inception in 2001 up to their exclusion are discussed below.

As part of effort to ensure sustainable fishing in the Municipality, the Head of the Fisheries Department indicated that the Department helps in the formation of LBCs in the fishing communities, the registration of fishermen, and the appointment of chief fishermen to help guard the marine resources against illegal activities. According to the Head, such efforts are used to ensure responsible fishing at the landing beaches, make community members understand the need for PFM, and help control illegal fishing activities. The study found that the advisory role of the Department provides feedback on the effectiveness of the PFM policies and by-laws.

Another important role of the Department is ensuring the availability of equipment and tools used by the fishermen in their day-to-day activities. From the study, the Head of the

Department stated that the outfit supplies fishing nets and outboard motors to the fishermen at subsidised prices to promote fishing in the communities. However, a majority (58.3%) of the fishermen admitted that they have not benefitted from such activities. A fisherman stated, “The provision of subsidised fishing gears has been heavily politicised and, as a result, most people do not benefit from such activities”. It was realised from the study that during the supply of fishing nets and outboard motors, priority is given to party members rather than worthy fishermen who truly need the equipment. The implication of this is that the involvement of politics in the execution of the role of the Fisheries Department is limiting its effectiveness in the fishing industry.

From the study, the Fisheries Department helps the LBCs to select one Oil Marketing Company (OMC), as stipulated by the PFM guidelines, to supply premix fuel to the community. The Department facilitates the premix fuel order from the LBC to the OMC and the NPC. The Department also ensures that each LBC in the community deals with only one OMC. They make sure that no fuel selling station dealing in regular petroleum products engages in the sale of premix fuel and that no private individual is allowed to deal in the sale of premix fuel. Thus, the Department supports the LBCs by regulating the supply of premix fuel and ensuring constant supply of the product to the fisher folk.

However, a canoe owner indicated that the executives of the LBC have resorted to bypassing the Fisheries Department and making direct contact with the NPC. This is likely to affect the effectiveness of the oversight role of the Fisheries Department over the PFM committees. This was confirmed by the Head of the Fisheries Department who said that the outfit has not been consulted by the LBCs for the past five years. This attitude may limit the effectiveness of the Fisheries Department in the management of premix fuel for local development. It is also likely to affect some of the accountability and control measures instituted to guarantee effective local development through PFM. Thus, the Department is unable to perform its monitoring role over the LBCs to enhance transparency and ensure accountable governance in premix fuel management.

### The role of KEEA Municipal Assembly in PFM

According to the Planning Officer of KEEA, the main aim of the Municipal Assembly (MA) in PFM is to ensure that fishing communities obtain maximum benefits from the sale and management of premix fuel. Consequently, the Assembly aids to plan and implement all developmental projects in consultation with the executives of the LBCs. The study found that the MA has an appointed member on each of the LBCs. This is a constitutional mandate to improve information flow between the MA and the LBCs in the Municipality. The Planning Officer indicated that the Assembly plays an advisory role to the LBC in their negotiations with firms and contractors who are contracted to undertake development projects. In undertaking development projects, the Assembly guides the LBCs in the selection of contractors to help supervise such projects.

The Planning Officer further indicated that the Assembly has instituted an annual financial auditing into the accounts of the LBCs in order to ensure effective community development through an efficient premix fuel management system. This agrees with Baffoe (2007) that there must be a fair benefit-sharing system between communities and other stakeholders in a communal pool resource sharing. However, some of the canoe owners added that such a financial auditing system has not been effective because the reports are not thoroughly scrutinised and challenged by all stakeholders, and that no disciplinary measures are taken against the executives for misapplication or misappropriation of funds.

Furthermore, the Municipal Assembly, in consultation with the NPC, facilitates the formation of the LBCs. Despite their tremendous role in formation of the LBCs, the Municipal Assembly is demanded by MoFA not to interfere with the administration and sale of premix fuel at the landing beaches. Their role ends at the complete formation of the LBCs in the communities.

### The role of executives of LBC in PFM

The study found that executives of the LBCs hold and maintain the power to make decisions in PFM in the community. They were responsible for policy-making and

managing the affairs of PFM in Elmina. The chief fisherman stated that the main role of the LBC is to procure premix fuel for the fishing community and use the proceeds for infrastructural development in the community. The secretary of Benya LBC also indicated that the aim of the LBC is to ensure regular and available supply of premix fuel to fishermen at affordable prices. However, the majority (54.7%) of the canoe owners reported that the premix fuel is mostly in short supply because the executives do not place orders in time. The study found that the LBCs make arrangements for premix fuel to be sent to the community from the OMC specifically through the Champion Oil Company Limited. They also prepare and sign the documents for procurement. The LBC appoint a pump attendant who sells the premix fuel at the pumping station. The pump attendant ensures that the premix fuel is sold to canoe owners and fishermen according to their register. From the study, 48.3 percent of the canoe owners attested that the sale of premix fuel does not follow any order. A fisherman indicated that cronyism is used to sell premix fuel to fishermen. Thus, people who are not on good terms with the executives or not associated with the ruling party are mostly sidelined in the sale of premix fuel. In furtherance of this, 51.4 percent of the fishermen pointed out that premix fuel is sold based on political affiliations rather than according to the list of registered canoe owners and fishermen. One needs to be in the same political party with the pump attendants or executives of the LBC to acquire premix fuel. The Head of the Fisheries Department shared the same view with the fishermen and canoe owners that the sale of premix fuel was based on political affiliations and level of relationship with the pump attendants or the executives of the LBC. This affects regular access to premix fuel for effective fishing. The implication is that cronyism and delays in placing orders for premix fuel are contributing towards defeating the purpose of decentralising premix fuel management for constant supply of premix fuel for effective fishing.

The LBCs account for their activities and sales to the other stakeholders, including fishermen, KEEA Municipal Assembly and Fisheries Department. The secretary of the Bantuma LBC reported that the LBC organises semi-annual meetings with the other stakeholders to render account to them. These meetings, however, were supposed to be held quarterly with all stakeholders. Nonetheless, a majority (61.5%) of the fishermen

and 68.9 percent of the canoe owners indicated that premix accounts are rendered once a year. The study found that executives of the premix fuel management were responsible for sharing the benefits from the sale of the premix fuel between the community and eligible stakeholders. This is meant to ensure that every eligible stakeholder receives a fair share of the PFM benefits as well as inspire and increase the commitment of stakeholders in the PFM programme (Gibson et al., 2005).

A major aim for decentralising PFM was to undertake infrastructural projects in the fishing communities. As per the guidelines for the establishment of PFM, such community projects should be done in consultation with the fishing community and the MA. However, a canoe owner reported that both LBCs do not decide on developmental projects with the fishing communities. This is likely to reduce community participation in the implementation of such projects. One fisherman indicated that the community is only given information on the projects the LBC is going to implement in the community. This shows that the community is engaged at the information-sharing stage of the ladder of citizens' participation, which is likely to affect communal ownership of development projects initiated by the LBCs. According to Arnstein (1969), engaging community members at the lower rungs of the ladder of citizens' participation does not instil or promote a sense of ownership among them. The study also found that the LBCs only consult with the MA on developmental projects, which also implies that the MA participates at the consultation stage.

#### The role of secretaries of LBC in PFM

The study found that each of the LBCs has engaged the services of a secretary who is responsible for initiating orders for supply of premix fuel to the NPC and keeping records of the supply and sale of premix fuel. The secretary of the Benya LBC stated, "Secretaries were not part of the LBC and therefore do not have any voting rights". In addition, the secretary of the Bantuma LBC reported that the secretary is directly responsible for the supply of premix fuel and has the power to demand and enforce accountability for the supply of fuel to the landing beach. The secretary also ensures that all the necessary documents and logistics needed for smooth supply are available. The

study further found that the secretaries perform delegated functions from the chairmen of the committees. The chief fisherman stated that the secretary is paid by the LBC by receiving 10 percent of the profits from the sale of premix fuel. Nevertheless, the appointment of the secretary by the executives is likely to compromise accountability issues in premix fuel management since the executives may influence the secretaries on the type of records to be kept for accountability to members.

#### The role of pump attendants in PFM

The study found that both Benya Lagoon and Bantuma LBCs have engaged the services of a pump attendant whose duties were to sell the premix fuel, regularly gauge fuel stock, estimate demands and keep storage tanks clean. When the premix fuel arrives at the pumping station, it is the duty of the pump attendant to ensure that the stock is transferred into the tanks at the pumping station at the landing beach. The chairman of the Benya LBC indicated that the pump attendant is not part of the LBC and therefore does not have any voting rights. The chairman added that the pump attendant is paid by the LBC by receiving seven percent of the profits from the sale of premix fuel.

#### The role of fishermen in PFM

Fishermen in the communities were supposed to be the direct beneficiaries of premix fuel. From the study, all the fishermen and canoe owners attested that their role is to procure the premix fuel from the LBCs to ensure continuity and successful management of premix fuel. The premix fuel is used to fuel outboard motors for fishing. However, 43.9 percent of the fishermen and a majority (67%) of the canoe owners indicated that frequent shortage of premix at the premix stations compels people to buy expensive fuel from filling stations. This is likely to affect the commitment of the fisher folk in supporting the PFM to make effective contribution to the development of the community. All the fishermen also reported that they are to participate in general meetings to demand accountability from the executives of the LBCs. Nonetheless, 28.4 percent of the fishermen indicated that they do not attend general meetings because of poor accountability from the executives. The implication is that poor accountability of the executives to the members has negative implications on their participation. This disagrees

with the assertion of Crawford (2004) that any action to decentralise certain functions at the national level would help enhance participation and accountability. If proper measures are not installed and enforced at the local level to promote participation and effective accountability, decentralised functions would be an avenue for the local elite to exert their influence on others for their personal gains. The chief fisherman indicated the fishermen give the power to the executives on the development projects to be implemented in the communities.

However, 33.8 percent of the fishermen and canoe owners reported that decisions on projects to be implemented are taken by the executives and imposed on the members. This is very likely to affect effective participation and ownership by some of the fisher folk during project implementation and management. The non-involvement of some of the fishermen in decision-making was attributed to the absence of such items for discussion during general meetings. The study found that the general meetings were used to render accounts on the projects already executed by the LBCs and not to plan for projects to be implemented. As a result, the fisher folk do not take part in the planning of community projects. They are only informed of incoming projects. This could affect the general acceptability of the projects implemented by the LBCs. From the above facts, it can be deduced that the fishermen participate at the information-sharing stage in the premix fuel management system. This has disputed the main tenet of the decentralisation theory that when decision-making is brought close to the local people, who are the beneficiaries of such projects, it would promote higher levels of participation to ensure responsiveness of development projects. Plate 5.1 shows fishermen undertaking their daily duties at the landing beach.

**Plate 5.1 Fishermen at work**



Source: Field Survey, 2013

#### The role of fishmongers in PFM

The fishmongers buy the fish directly from the fishermen at the landing beach. They serve as the main customers for the fishermen when the latter return from sea. Their interest in PFM is high because the more regular and affordable premix fuel becomes for the fishermen, the cheaper fish becomes for them to buy. This helps them to make more profits in their sale. The fishmongers' representative on the LBC is their 'queen mother', traditionally called the 'konkohemmaa'. She serves as a liaison between the fishmongers and the other stakeholders in PFM. The konkohemmaa indicated that she attends general meetings held to render account of premix fuel, but fishmongers themselves are not invited to participate in such meetings. In spite of the requirement of PFM guidelines to include the konkohemmaa in the LBC, she stated, "I have been deprived of my position since 2009 based on political affiliations and discrimination". She further explained that she had been part of the committee since its establishment in 2001 and partook in its activities. During her time on the premix committee, she reported to have advocated the interest of fishmongers, particularly when it had to do with the availability and affordability of premix fuel. She also indicated that she was able to express her views on developmental projects and made sure that these decisions benefitted fishmongers and

women in general. The implication is that fishmongers are denied participating in decisions on development projects. This is most likely to affect their commitment in the implementation and management of development projects in the community.

The study found that the fishmongers have a seven-member committee called the Fishmongers' Committee. Appointment to the committee is based on experience and expertise. Priority is given to older fishmongers (between the ages of 35 and 60) who know the details and skill of their activities. It is made up of the following members:

- Konkohenmaa (Head of the committee)
- Kyeame (Vice-Konkohenmaa)
- Secretary
- The remaining four members of the committee are Committee Members

The Fishmongers' Committee meet once a month to discuss and deliberate on issues pertaining to rules and regulations on fish buying and selling. They also discuss the buying and selling prices of fish per pan at the landing beaches as and when the price of premix fuel changes. They resolve conflicts among fishmongers and between fishmongers and customers at the landing site.

#### The role of canoe owners in PFM

The canoe owners in the community and outside the community buy canoes and give them out to fishermen to fish. Some canoe owners are fishermen who also employ other fishermen to go fishing. All the canoe owners admitted to having a representative on the LBC. However, 11.7 percent of the canoe owners indicated that the representatives mostly seek their personal interest in premix fuel instead of the larger interest of the group. Such poor perception is very likely to affect the confidence members have in their leadership for effective management of premix fuel. The study found that the canoe owners play the same role as the fishermen in the PFM system.

## The role of laws and regulations in PFM

The by-laws that had been formulated to ensure successful PFM were identified in the study. The by-laws were formulated to ensure sustainable fishing and PFM. The chief fisherman reported that it is illegal for a private individual to sell premix fuel in the community. This was to give monopoly over the sale of premix fuel to the premix fuel committee to guarantee high profits for local development. It is also illegal for a fuel station dealing in regular petroleum products to engage in the sale of premix fuel. This was to ensure that only the LBC is responsible for selling premix fuel at the landing beaches. The secretary of the Bantuma LBC added that monopoly over the sale of premix fuel in the community has enabled the LBC to enjoy stable prices over the commodity.

The study further found that it was illegal for fishermen to fish in the community without being registered. This by-law was formulated to ensure that the Fisheries Department know the exact number of fishermen in the community to enable them to plan for the supply of outboard motors, nets and other fishing gears. It is also to help the LBCs to plan for adequate supply of premix fuel. The pump attendant at Benya LBC indicated that the by-law has enabled the committee to distribute the premix fuel equitably to fishermen and canoe owners in the community on rotational basis. In other words, registration of fishing canoes has helped to ensure fairness in the apportioning of premix fuel to fishermen for effective fishing and efficient management of the entire premix fuel system. Table 5.4 shows some of the reasons for upholding the by-law of registering fishing activities in the community.

**Table 5.4 Reasons for Registering Fishing Activities**

Reason	Fishermen		Canoe owners	
	Frequency	Percent	Frequency	Percent
Fear of not being supplied with premix fuel	86	68.8	97	78.8
Possibility of getting outboard motors	77	61.6	38	30.9
Securing fishing gears	104	83.2	65	52.8
Getting premix fuel	125	100	123	100
Avoid conflict with the LBC	27	21.6	44	35.8
<b>Total</b>	<b>*419</b>		<b>*367</b>	

Source: Field survey, 2013

\*n = multiple response

Table 5.4 shows that 78.8 percent and 68.8 percent of the sampled canoe owners and fishermen respectively registered their fishing activities due to fear of not being supplied with premix fuel, 83.2 percent of the fishermen did so to secure fishing gears from the Fisheries Department, whereas all the fishermen and canoe owners registered their fishing activities with the LBC to secure premix fuel for sustainable fishing. The results show that the canoe owners and the fishermen in the community abided by the by-law of registering their fishing activities because of the benefits they derive from the LBC. The implication is that as long as the LBCs remain necessary to the fisher folk, by-laws governing fishing activities in the communities would be upheld. The study found that those who disobey the by-law have their fishing equipment seized by the Fisheries Department and the LBCs to discourage free riding and promote collective action and benefits in PFM (Olson, 1965; Runge, 1986).

Another by-law for regulating fishing activities in the community was that it is illegal to go for fishing on Tuesdays. Traditionally, it is a taboo to go to sea on Tuesdays in most fishing communities in Ghana. It is believed that the gods rest on Tuesdays and therefore do not want any disturbances. The chief fisherman added that this by-law was to control the rate of human interferences in the ecosystem and to avoid any disturbances. Thus, it serves as a breeding period for the fishes. As a result of the ban on fishing on Tuesdays, the fishermen use the day to mend and fix their nets, and repair any spoilt motors and canoes. They also use Tuesdays as a period of maintenance and stocktaking. From the study, offenders of this by-law are taken to the traditional heads for sanctioning. The offenders are made to buy two bottles of schnapps and one fowl for sacrifice to pacify the gods.

Another by-law in PFM was the selling of premix fuel on a rotational basis according to the registered list of canoe owners and fishermen. This was because the number of canoes in the community was more than the quantity of premix fuel supplied per week to the community. As per the by-law, it is an offence to take premix fuel twice in the same cycle of distribution. People who fall victim to this by-law are to be sanctioned before the

chief fisherman and the chairman of the LBC for peace to be maintained. Offenders are first warned and subsequently banned from fishing in the community.

However, a majority (74.3%) of the canoe owners and 79 percent of the fishermen admitted that not all parties abide by this by-law. Some of the reasons for not abiding by this by-law are that people get more fuel than stipulated in the by-law, the executives do not go by the registered list, nobody punishes the other for breaking the by-law, and distribution of premix fuel is not rotated among registered members. This is very likely to affect fairness in the distribution of premix fuel among the registered members of the LBCs. One canoe owner under the Bantuma LBC stated,

*“Unfair distribution of premix fuel in the community sometimes leads to fight over the fuel, where some fisher folk seize the funnel for measuring fuel, and use abusive words on the pump attendants and the executives of the LBC”.*

The implication is that it becomes difficult to maintain the sanctity of a by-law when multiple stakeholders break the by-law. This is to say, deliberate or corporate effort to disregard a by-law flaws the purpose for its establishment and there is, therefore, the need to protect its sanctity. This may cause chaos to the use of a corporate or communal resource as no one would be accountable to the other.

The above results on by-laws show that by-laws were enacted as benchmarks of accountability. The by-laws were set to ensure responsible fishing, and to differentiate not only between acceptable and unacceptable conduct but also between the rewards and punishments associated with the upholding or breaking of the tenets of the by-laws.

#### Testing of hypothesis

Chi square test of independence was used to test for significance of the association in participation among fishermen, canoe owners and fishmongers in premix fuel management. The aim was to explore differences in the levels of satisfaction among the three key stakeholders in PFM at the community level. Table 5.5 shows the results for testing the hypothesis.

**Table 5.5 Association of participation among fishermen, canoe owners and fishmongers in their satisfaction with the levels of participation in PFM**

Stakeholders	Response				Total (%)
	Very satisfied (%)	Satisfied (%)	Dissatisfied (%)	Very dissatisfied (%)	
<b>Fishermen</b>	11 (9.2)	24 (19.0)	53 (42.2)	37 (29.6)	125 (33.6)
<b>Canoe owners</b>	9 (7.0)	18 (15.0)	53 (43.0)	43 (35.0)	123 (33.1)
<b>Fishmongers</b>	-	4 (3.2)	69 (55.7)	51 (41.1)	124 (33.3)
<b>Total</b>	20 (5.4)	46 (12.4)	175 (47.0)	131 (35.2)	372 (100)

Source: Author's construct      Pearson  $\chi^2 = 1.972$       p-value = 0.47      df = 11

A chi square test of independence used to explore the relationship among fishermen, canoe owners, and fishmongers gave a (probability value) p-value of 0.47 ( $\chi^2 = 1.972$ ; (degree of freedom) df = 11). Since the p-value was larger than the error margin of 0.05, it implies that the result is not significant. In other words, there is no significant association among fishermen, canoe owners and fishmongers in their levels of satisfaction with participation in premix fuel management. The implication is that all the three categories of stakeholders had similar levels of participation in the premix fuel management. This could be attributed to the less engagement of the various stakeholders by the management of LBCs in the premix fuel management exercise. The results show that the null hypothesis is not rejected at the alpha level of 0.05.

#### **5.4 Level of Accountability in PFM**

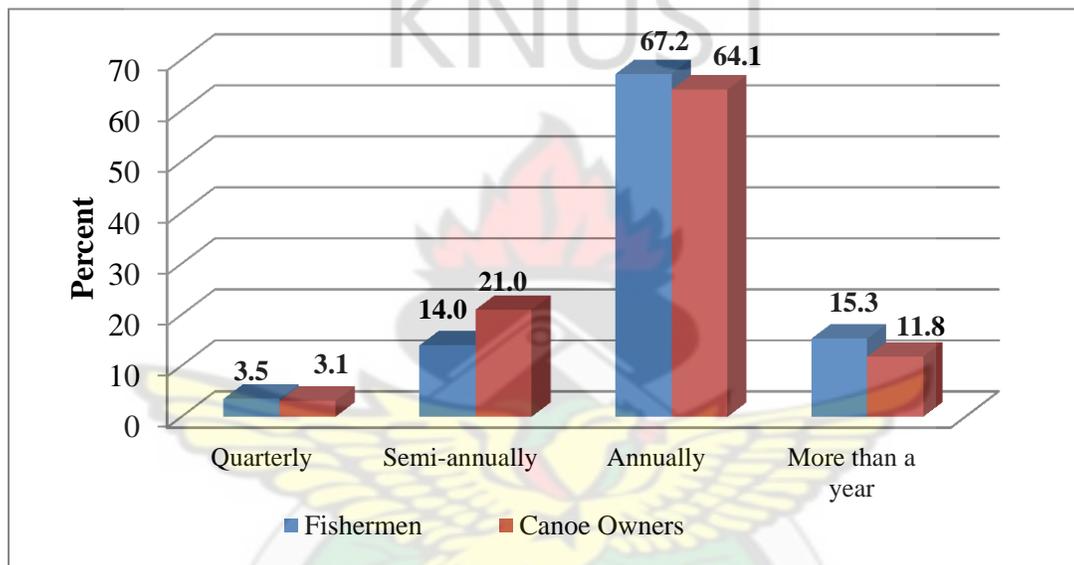
This section examines the level of accountability in the PFM exercise. The section is imperative because accountability in the management of public resources helps ensure that management are responsive to the needs of their subordinates. According to Jones and Stewart (2009), accountability involves two distinct stages, that is answerability and enforcement. The section is structured into answerability of the executives of the LBCs to other stakeholders in the PFM exercise and enforcement of the rules of engagement.

##### **Answerability of the LBCs to other stakeholders**

This section examines the effectiveness of the answerability mechanism in the PFM exercise. As per the guidelines that establish the LBCs, every LBC is supposed to

organise quarterly meetings with its members to explain the progress of work, deliberate on development projects to be implemented based on common community problems, and secure the support of other stakeholders on community development issues. The aim is to ensure maximum participation by the other stakeholders to promote transparency and also to enhance the responsiveness of development activities to the needs of the stakeholders. Figure 5.1 presents the regularity of meetings organised by the LBCs.

**Figure 5.1: Regularity of Meetings Organised by LBCs with Other Stakeholders**



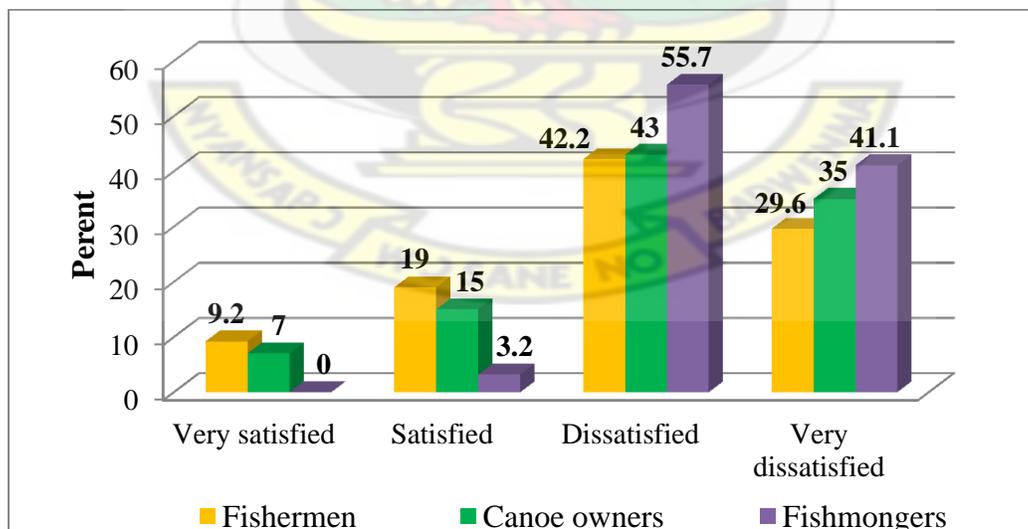
Source: Field Survey, 2013

Figure 5.1 shows that a majority (67.2%) of the fishermen and a majority (64.1%) of the canoe owners reported that the LBCs organise meetings with other stakeholders on an annual basis, 15.3 percent of the fishermen indicated that such meetings are organised at a more than one year interval, whereas 3.5 percent of the fishermen and 3.1 percent of the canoe owners stated that such meetings were organised quarterly. Additionally, the chief fisherman and the secretaries of both Benya and Bantuma LBCs indicated that meetings were organised semi-annually to review PFM activities over that period. The results show that the LBCs did not conform to the quarterly meetings on most occasions, as stipulated in the PFM guidelines. This is likely to affect clarity and transparency issues about the operations of the LBCs. Other stakeholders may not be able to effectively check or monitor the LBCs. Thus, other stakeholders may not be able to make effective input into

development projects as well as demand response on the efficient use of resources. This may have accounted for the low level of participation by the other stakeholders in the PFM exercise. In other words, the other stakeholders were not given adequate opportunities to contribute to the activities of the LBCs. The little engagement of the other stakeholders in the activities of the LBCs shows that there is poor horizontal accountability in the whole exercise of PFM. This is because frequent engagement of the other stakeholders was supposed to help monitor the activities of the LBCs. The low involvement of the other stakeholders also shows that the LBCs draw their own powers to implement activities without thorough consultations and deliberations with the other stakeholders. In other words, the executives are more answerable to themselves than to the other stakeholders.

The study further examined the level of satisfaction of the respondents with their level of engagement in the activities of the LBCs. This was essential because the level of satisfaction of the stakeholders also shows their level of satisfaction with accountability issues with the LBCs. The results are presented in Figure 5.2.

**Figure 5.2: Level of Satisfaction with the Level of Engagement in the Activities of LBCs**



Source: Field survey, 2013

Figure 5.2 shows that a majority (71.8%) of the fishermen were not satisfied with their level of engagement in the activities of the LBCs, while 28.2 percent were satisfied. Similarly, greater proportions (78%) of the canoe owners were not satisfied with their level of involvement in PFM activities. Also 55.7 percent of the fishmongers were dissatisfied with the level of their involvement in PFM. This shows that a majority of the fishermen, canoe owners and fishmongers were not satisfied with accountability issues in the operations of the LBCs. This could easily affect their commitment to the operations of the LBCs.

As part of the answerability mechanism of accountability, the LBCs were supposed to secure advice from the MA and the Fisheries Department. However, respondents from both institutions indicated that they are not frequently consulted in the activities. The implication is that the institutions which are supposed to monitor and enforce adherence to the guidelines of PFM are excluded from the activities of the LBCs. There was, therefore, weak vertical accountability in the PFM exercise.

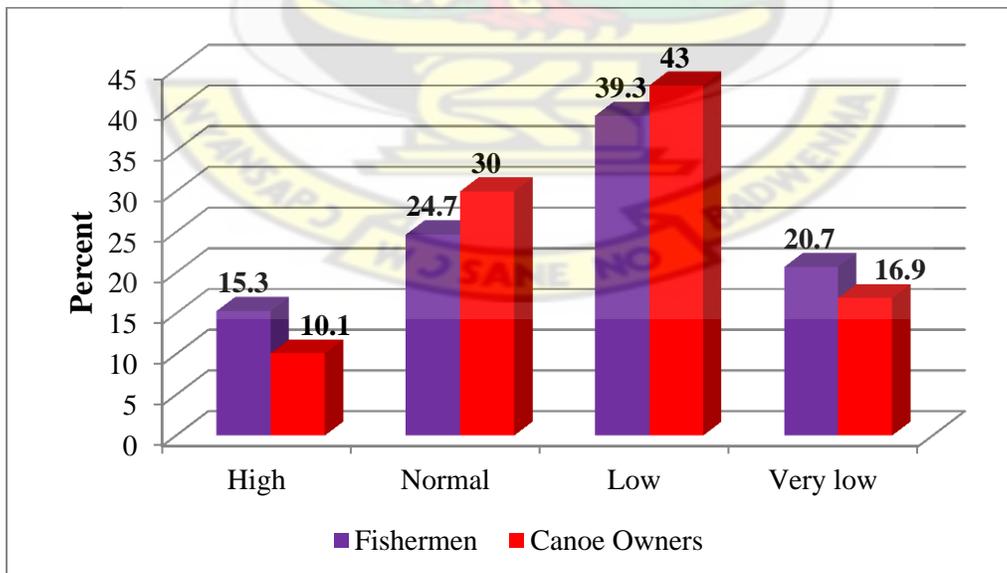
#### Enforcement of the rules of engagement

The extent to which other stakeholders in the PFM are able to enforce the rules of engagement governing the activities of the exercise is critical to the success and sustainability of the entire exercise. This is because such enforcement would help reward or punish some acts to ensure responsible leadership. The fishermen and canoe owners were asked to indicate how they were able to enforce sanctions on the executives of the LBCs. This is important because the level of enforcement of sanctions would enable the LBCs to conform to the established guidelines. From the study, 86.2 percent of the fishermen and 79.6 percent of the canoe owners admitted that they were unable to enforce sanctions on the executives of the LBCs. The study found that a majority of the respondents did not know any sanction that they can put on the executives when they fault. This lack of understanding about sanctions on the executives is contributing towards perpetuating their dominance over the other stakeholders in PFM. A canoe owner added that their inability to impose sanctions on the executives is due to the timelessness for the existence of one executive body. Thus, the lack of political

accountability in the LBC system, in terms of electing executives and having a clear time limit for a political term, is making the LBCs less responsive to the needs of the other stakeholders. This is most likely to affect the effectiveness of the LBCs in creating the expected community development.

From the study, the only time stakeholders were able to hold their executives responsible for their actions was during their general meetings. However, some of the respondents indicated that members of the group express their thoughts and feelings through anger and insults, which does not help them to get answers. The study found that such meetings mostly end in quarrels. Canoe owners also reported that the executives victimise any member who attempts to demand strict accountability during general meetings. The victimisation occurs by not selling premix fuel to such members. This is very likely to affect effective demand for accountability in the PFM system. The respondents were requested to indicate their level of confidence in the executives of the LBCs. This is essential because the level of confidence of members in their executives is an indication of their perceived level of accountability in their operations. The results are presented in Figure 5.3.

**Figure 5.3: Level of Confidence in the Activities of the LBCs**



Source: Field survey, 2013

Figure 5.3 shows that 60 percent of the fishermen had low and very low confidence in the activities of the LBCs, whereas 15.3 percent of them had high confidence in the activities of the LBCs. The implication is that a majority of the respondents did not believe in the genuine operations of the LBCs. This is likely to affect the level of commitment of the fisher folk in the activities of the LBCs and in PFM.

Some of the reasons given for high or normal level of confidence are increased supply of premix fuel, construction of sheds for fishermen, and distribution of fishing nets. On the other hand, the reasons for the low and very low confidence levels of respondents are few times of community engagement, less responsiveness of some of the projects to the needs of the community, high cost of projects, little regard for members, discrimination in the supply of premix fuel, and poor rendering of accounts during general meetings.

Another issue examined under the accountability section was access to information or transparency in leadership. This was necessary because transparency in the governance of premix fuel would enable members to be abreast of the state of activities in the LBCs. From the study, 86.4 percent of the canoe owners as well 79.6 percent of the fishermen attested that there was no transparency in the operations of the LBCs. The implication is that members do not get easy access to information about the activities of the LBCs.

### **5.5 Contribution of the Decentralised PFM Policy to Community Development**

Fishing is an important economic activity in Elmina that plays a crucial role in the socio-economic well-being of the fisher folk. Datta and Sarkar (2010) indicate that people's willingness to participate in PFM largely depends on the socio-economic benefits they derive from it. The primary aim for the decentralisation of the premix fuel management system in the country was to ensure local control over the commodity for community development. This section, therefore, assesses the socio-economic contribution of the decentralised Premix Fuel Management policy to the development of the fishing community. The analysis was structured into related issues such as access to premix fuel and development projects implemented in the communities through PFM.

### Access to premix fuel

Since fishing is the main economic activity of people in fishing communities, access to or supply of premix fuel is a major issue to guarantee constant fishing for sustainable economic development. Improved access to premix fuel in the fishing communities enables the canoe owners and fishermen to power their fishing vessels for fishing activities. The implication is that inadequate supply of premix fuel may prevent some members of the fisher folk from continually engaging in economic activities, which may have a negative repercussion on the development of fishing households and the community at large. Adequate supply of premix fuel to the LBCs is, therefore, an important avenue for improving the community

The chief fisherman narrated that prior to the establishment of the LBCs in 2001, the sale of premix fuel was handled by individuals and filling stations. Since the motive behind such sales was purely profit-making, prices were high. The canoe owners' representative on the Benya LBC also added that people used to hoard the commodity to attract higher prices. Some of the fishermen indicated that supply of premix fuel used to be erratic, which affected fishing businesses, especially during the peak season. The canoe owners' representative on the Benya LBC reported that the community was receiving one truck equivalent to 3000 gallons of premix fuel a week. The study, however, found that, after the establishment of the LBCs, each LBC receives 3000 gallons of premix fuel every three days from Champion Oil Company Limited. On the average, each LBC receives a maximum of three trucks, that is, 9000 gallons every week. All the respondents admitted that the supply of premix fuel has increased in the community after the establishment of the LBCs. This is likely to promote continuous fishing activities, which would help increase output, sales, profitability, and household and community development.

However, the secretary of the Bantuma LBC reported that the tremendous increase in the number of canoe owners and fishermen after the formation of LBCs is still affecting the adequacy of premix fuel in the community. The implication is that the increase in the number of canoe owners and fishermen is more than the increase in the quantity of premix fuel supplied to the community. As a result, the executives of the LBCs have

instituted a by-law to rotate the distribution of premix fuel to canoe owners and fishermen in the community. The list of registered canoe owners and fishermen was supposed to be used in distributing and selling the premix fuel. This rotational system was to ensure fairness in premix fuel supply for continuous fishing activities. Each canoe requires an average of 72 gallons of premix fuel per day for fishing. Due to the limited supply to the pumping stations in relation to the number of canoes, each canoe obtains 25 to 30 gallons per day.

Nevertheless, 43.2 percent of the canoe owners and 56 percent of fishermen indicated that the executives used cronyism and political party affiliation to distribute the premix fuel. This has led to the hoarding of premix fuel by some members and who sell it to others at exorbitant prices. As a result, some of the fishermen and canoe owners do not procure premix fuel from the LBCs. The study found that some fishermen and canoe owners use petrol or engine oil and mix it with premix fuel to get the required quantity for fishing. They complained of the cost and stress involved in buying petrol from filling stations to dilute the little premix fuel available in order to get the required quantity of premix fuel for their fishing activities. Discrimination in the sale of premix fuel is, therefore, likely to jeopardise the entire process of using decentralised premix fuel management to stimulate local growth and development. Thus, discrimination in the sale of premix fuel may discourage some stakeholders from active participation in the activities of the LBCs. This is because discrimination in the sale of premix fuel is against the principle of fairness in decentralisation. Consequently, even though the LBCs have contributed towards increasing the quantity of premix fuel in the community, a significant proportion of the canoe owners and fishermen, who are supposed to be the direct beneficiaries of the PFM, is not benefiting from the system. This could affect the effectiveness of the use of local management of premix fuel to stimulate community development. Plates 5.2 and 5.3 show premix fuel being transferred into the tanker at the Benya landing beach pumping station and a canoe owner purchasing premix fuel from the pump attendants respectively.

**Plate 5.2 Truck of Premix Fuel to be transferred into Storage Tanker**



Source: Field Survey, 2013

**Plate 5.3 Pump attendant Selling Fuel to a Canoe Owner at the Pumping Station**



Source: Field Survey, 2013

Using proceeds from sale of premix fuel

Currently, the price of premix fuel at the pumping stations is GH¢5.50 per gallon, as compared to the price of GH¢4.00 per gallon given by the NPC. The LBCs pay GH¢15,500 to Champion Oil Company Limited within ten (10) days of receipt of the

premix fuel. The implication is that the LBCs make GH¢1,000 profit from each truck supply, which means that GH¢3,000 is realised by each LBC per week, and GH¢12,000 per month. From the study, after the GH¢15,500 is deducted and paid to the Champion Oil Company Limited, the remaining amount is shared as follows: the chief fisherman who is the chairman of the committee gets 12 percent, other members of the LBC share 18 percent, 10 percent goes to the secretary, seven percent goes to the pump attendant, three percent goes to the committee member and the remaining 50 percent goes to the fishing community. As stipulated in the PFM guidelines the community is supposed to receive 53 percent of the proceeds, but the Benya Lagoon and Bantuma LBCs have by their own power made the division between the community and the LBC equal, that is, 50 percent for the community and 50 percent for the executives of LBC. This is very likely to affect the quantum of projects to be executed in the community. This shows that the LBCs have little regard for the guidelines that establish the PFM, which may be attributed to weak monitoring and enforcement of the tenets of PFM, as indicated by Baffoe (2007) that the unfair benefit-sharing system of communal resources is mainly due to weak implementation and enforcement of institutional laws and structures.

The community gets GH¢500 on each truck supply for development projects. The apportioning of the profits to the various stakeholders on per truck delivery, instead of on monthly basis, may affect the quantum of resources to be spent on development projects in the community. Each LBC has a bank account (Ghana Commercial Bank) with two signatories where the 50 percent for the fishing community is deposited. The two signatories are the chairman and the secretary of the LBC. The money given to the community is used for developmental projects in the fishing community. This is done by the LBCs in consultation with the MA, as proposed by MoFA (MoFA, 2011).

Benefits the community expects to derive from premix fuel

This section assesses the benefits the community expects to derive from premix fuel. The fishermen, canoe owners and fishmongers all indicated that they expect more benefits from premix fuel than what they were receiving. Table 5.6 indicates that fishing community members expect to receive functional health facilities, market centres,

boreholes, schools, libraries, employment, and good roads from PFM. Many residents expect employment benefits since there are few employment opportunities in the community. PFM is more likely to be successful when these expectations are provided for the community members.

**Table 5.6: Benefits Communities Expect to derive from Premix Fuel**

Benefits	Fishermen		Canoe Owners		Fishmongers	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Health facilities	23	18.4	13	10.6	32	25.8
Pipes	15	12.0	13	10.6	20	16.1
Schools	51	40.8	28	22.8	35	28.2
Markets	28	22.4	19	15.4	76	61.3
Libraries	11	8.8	9	7.3	5	4.0
Employment	25	20.0	35	28.5	16	12.9
Outboard motors	91	72.8	76	61.8	-	-
Fishing nets	105	84	90	73.2	-	-
Good roads	47	37.6	15	12.2	9	7.3
<b>Total</b>	<b>*396</b>		<b>*298</b>		<b>*193</b>	

Source: Field survey, 2013

\*n = multiple response

The study showed that 84 percent and 73.2 percent of the fishermen and the canoe owners respectively preferred benefits such as fishing nets from the profits gained from selling premix. A majority (61.3%) of the fishmongers, however, expressed interest in the establishment of markets as this will help promote their trading activities.

Judging from the Social Exchange Theory by Homans (1961), Emerson (1969) and Blau (1964), the extent of commitment to PFM by community members will be in accordance with the benefits they receive. For instance, the 40.8 percent of fishermen who perceive the provision of schools as their preferred benefit from PFM will reciprocate their participation in PFM in relation to the rewards gained.

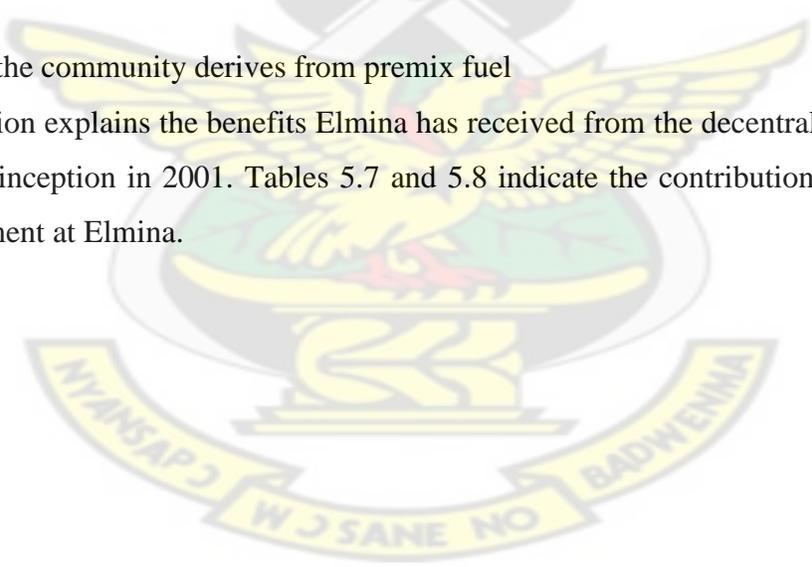
From the study, reasons why some of the fisher folk wanted the decentralised PFM policy to be maintained for the future include improvement in infrastructural facilities, improvement in their living standards, increased accountability in PFM, and the hope of deriving some benefits in the future. On the other hand, those who did not want the

decentralised PFM to be maintained reported on the issues of corruption by the leaders, political discrimination, unfair benefit-sharing among stakeholders, and receipt of little or no benefit from premix fuel.

Ninety-one (72.5%) of the fishermen still wanted the management of premix to be in the hands of the community, whereas 34 (27.5%) wanted the Fisheries Department to manage the sale of premix fuel. About 68 percent of those in the minority group indicated that the money gained from selling premix fuel will inevitably continue to be in the pockets of the leaders of the LBC as long as management remains with the community. Community's support for the Fisheries Department was to eliminate capitalism and its consequences on PFM: a situation in which ownership, access to premix fuel and its benefits are limited to only a small segment of the community through political affiliation, while marginalising members of opposition political party in the management and enjoyment of premix fuel (Gupte, 2004).

Benefits the community derives from premix fuel

This section explains the benefits Elmina has received from the decentralised premix fuel since its inception in 2001. Tables 5.7 and 5.8 indicate the contribution of the policy to development at Elmina.



**Table 5.7: Projects Implemented by Benya Lagoon LBC**

Year	Project	Cost (GH¢)	Location
2004	Shed for fishermen and fishmongers at the landing beach	4,500	Benya Lagoon Landing Beach
2005	Fishing nets for 150 fishermen	39,450	Elmina
2006	Financial support for 50 brilliant but needy children of fishermen (Basic level of school)	5,000	Elmina
2007	Paying premium of national health insurance scheme for the aged and retired fishermen	5,000	Elmina
2008	Fishing nets for 150 fishermen	45,000	Elmina
2009	Soft Loan for fishmongers	10,000	Elmina
2010	Clinic and Conference hall	150,000	Benya Lagoon Landing Beach
2011	Financial support and wax prints for the aged and retired fishermen	10,000	Elmina
2012	Statue of the first chief fisherman Ceremonial Grounds (Two stands)	25,000 55,000	Elmina Benya Lagoon Landing Beach
2013	Administration Block (Office) for LBC	70,500	Benya Lagoon Landing Beach

Source: Benya LBC, 2013

The Benya Lagoon LBC at Elmina, after its inauguration in 2004, made a profit of GH¢60,000 from selling premix fuel within a period of six months. Late that year, the LBC constructed a shed for fishermen and fishmongers at the landing beach to provide shade for them, as shown in Plate 5.4. The shed provides shade for fishing activities and has helped improve the organisation of fishing businesses at the beaches.

**Plate 5.4 Shed at the Landing Site**



Source: Field Survey, 2013

In line with the committee's aim to distribute fishing nets to 600 fishermen, it distributed the first consignment of fishing nets to about 150 fishermen from the area in 2005 and a second batch in 2008. This was important for community development because the fishing net is an important tool in the fishing industry. From the study, 56.6 percent of the fishermen admitted to receiving some of the fishing nets. Further, 53.4 percent of the beneficiaries indicated that the distribution of fishing nets has helped increase their production. One fisherman stated that, prior to the distribution of fishing nets by the LBCs, he used to spend about three days mending his fishing net after every heavy catch.

In the course of the study, the secretary of the Benya LBC explained that in 2009 the Benya Lagoon LBC disbursed GH¢10,000.00 as soft loans to fishmongers in its catchment area to boost their trading activities. Providing easy access to soft loans helps expand businesses. From the study, 13.8 percent of the fishmongers reported having benefited from such loans. A majority (67.5%) of the loan beneficiaries admitted that it has helped them to improve their fishing businesses. Improvement in the fishing activities of the beneficiaries would also help transform household income and development.

The LBC constructed a landing site project at the cost of GH¢150,000 at Benya Lagoon site at Elmina in the Central Region. The project was undertaken by the Premix Committee with profits from the sale of premix fuel to fishermen. The project has a conference facility and clinic. However, it was revealed that the clinic was not functional. It was only used as a meeting place for immunisation programmes in the community. There are no health workers on duty at the clinic at the moment.

Table 5.5 further shows that the LBCs supported 50 brilliant but needy students in the community. This would help improve access to education among children in the community. Improving access to education is an important factor to development because it is an avenue for developing the skills and capacity of people to take mastery of their environment.

From Table 5.5, the LBCs registered some people in the community on the National Health Insurance Scheme. This was to help improve people's economic access to health

care in the community. Certainly, improving people's economic access to health helps reduce the cost of health care, which enables people to have easy access to health care.

The premix committee built a statue of the first chief fisherman in Elmina, Nana Kofi Anthony, to honour him at the landing site, which is depicted in plate 5.5.

**Plate 5.5 Statue of the first Chief Fisherman**



Source: Field Survey, 2013

**Plate 5.6 Office of the LBC**



Source: Field Survey, 2013

In 2013, the Benya LBC constructed an office for their official duties at the Benya Lagoon landing beach, as shown in Plate 5.6. They also hold periodic meetings at the office.

**Table 5.8 Projects Implemented by Bantuma LBC**

Year	Project	Cost (GH¢)	Location
2009	Purchase of electricity poles which connected communities from Ahona to Pershi to the national grid.	12,500	KEEA
2010	Distribution of 300 traditional grills to fishmongers	9,650	Elmina
2011	Distribution of 450 basins to fishmongers	13,950	Elmina
2012	Repair of a portion of the main steel bridge on the Benya Lagoon	2,500	Bantuma
2013	Fishing nets for 150 fishermen	45,000	Bantuma

Source: Bantuma LBC, 2013

The first profit made by the committee was used to purchase electricity poles which connected communities from Ahona to Pershi to the national grid. This was critical to the development of the communities because both the fishermen and fishmongers use the electricity to preserve their excess or unsold fish. Thus, the extension of electricity to the communities has helped reduce post-harvest losses among the fisher folk in those communities. Similarly, the extension of electricity to such communities is very likely to attract other businesses to boost socio-economic development in the communities.

The Bantuma Landing Beach Committee in Elmina distributed 450 basins worth GH¢13,950 to fishmongers at Elmina to boost their fishing activities. The basins, which were given to women for free, were purchased from the profit of the sale of premix fuel by the landing beach committee. The fishmongers used to hire basins at exorbitant fees to go on their fishing activities and it was noted that the initiative went a long way towards alleviating the stress they go through in the course of their work. This was the third initiative since the landing beach committee was formed in 2009. The distribution of the basins eliminated the cost of hiring basins for fishing activities, which could help improve household income for development. Plate 5.8 shows a fishmonger receiving a basin from the LBC executive.

### Plate 5.7 Fishmongers receive Basins



Source: Field Survey, 2013

The Bantuma LBC in Elmina, in November 2012, initiated a move to repair a portion of the main steel bridge on the Benya Lagoon which is currently in a deplorable state. This initiative was as a result of injury suffered by 15 people who used the bridge. The rusty steel plates covering the steel bridge have holes in them, making it difficult for humans as well as vehicles to cross it. The Elmina chief fisherman, Nana Akonu, said the decision to repair the bridge was agreed upon by the fishermen and that the LBC should use proceeds from the sale of premix fuel to repair the bridge which was constructed for the town a long time ago, but has seen scant repairs. The decision was arrived at because fishermen, canoe owners and fishmongers had to cart their goods through a long distance when the bridge was closed. This was affecting sales and profitability of businesses because consumers were diverting to other easy-to-reach landing beaches for their fish. As a result, repairing part of the bridge to aid movement of people and goods to and from the landing beach was seen as a step towards revamping fishing activities at the beach. In addition, repairing part of the bridge was considered as improving infrastructure in the community.

It was noticed that the infrastructural projects implemented by the Benya and Bantuma LBCs were located either at the respective landing beaches or at Elmina. The study also

revealed that, there are fishermen who fish at these landing beaches who are not residents of Elmina but the profits accruing from their purchase of premix fuel is not transferred to their various places of stay. This is in line with relative Matthew effect propounded by Merton (1968). Relative Matthew effect shows that communities which have more landing beaches benefit more from the decentralised PFM policy than communities with less or no landing beaches.

### **5.6 Challenges of stakeholder participation in PFM**

This section examines the challenges stakeholders face in ensuring PFM in the Komenda-Edina-Eguafo-Abirem Municipality. They include challenges faced by the Fisheries Department, KEEA Municipal Assembly, executives of the LBC, secretaries of the LBC, pump attendants, fishermen, fishmongers, and canoe owners.

#### **Challenges faced by the Fisheries Department**

The Fisheries Department cited lack of logistics needed to patrol the various landing beaches in the community as one of the challenges it encounters in ensuring PFM. The Department embarks on routine patrols around the landing beaches to help check the activities of the LBCs and pump attendants as well as get grassroots information about the selling of premix fuel. It also uses the patrols to inspect the activities of the registered fishermen and to detect unregistered fishermen in the community.

Such patrols require vehicles, motorbikes and fuel. It was revealed that the logistics were inadequate for effective monitoring of activities in the fishing communities. The Department was, therefore, unable to monitor large areas at the landing beaches at a time. It was also difficult for the Department to monitor activities of fishing owing to the excessive number of canoes at the beaches as well as inadequate financial and logistical support from the government. In fact, the Department requires additional funding to carry out its activities in PFM.

In addition, the Fisheries Department faces the challenge of non-cooperation from the fishing communities in the PFM exercise. Some of the fishermen in the communities do

not register for a fishing licence to be given to them before they start their activity. They presume that they are the custodians of the land and therefore do not need permission from the Department before having access to the resource that belongs to them. Similarly, some canoe owners refuse to register their canoes before using them for fishing. This attitude makes it difficult for the Department to have a complete list of registered fishermen and canoes to ensure successful PFM. Some registered fishermen and canoe owners cover up such culprits because they are able to sell a portion of their premix fuel to them at a higher price, that is, GH¢7.00 per gallon. Such people prevent the Fisheries Department officials from arresting the offenders and from confiscating their canoes and fishing equipment. This results in occasional clashes between the Department and the community.

The Fisheries Department also pointed out that the community has been given the role of primary caretakers of the premix fuel, so the Department only acts as a monitoring agent. The community is, therefore, expected to report any illegal activities to the Department for action to be taken. The harbouring of illegal activities by some of the community members, no doubt, poses a major threat to the goal of PFM.

Additionally, the Fisheries Department identified exclusion from PFM activities and the sharing of profits from the sale of premix fuel as a challenge it is confronted with in PFM. According to the Department, such exclusion affects their budgets and, for that matter, their effectiveness in monitoring activities at the landing beaches. They also admitted that this affects the commitment and motivation of workers to PFM, as explained by Baffoe (2007) on the unfair benefit-sharing system among stakeholders in PFM.

#### Challenges faced by the Komenda-Edina-Eguafo-Abirem Municipal Assembly

The Municipal Assembly (MA) reported that they are less engaged in the activities of PFM. The Municipal's Planning Officer said, "We are hardly invited to participate in stakeholder meetings, even though we are expected to play an advisory role in the LBC and the fishing community and negotiate on behalf of the communities during

stakeholder meetings held to plan developmental projects. On occasions when we are invited, the invitation arrives late”. The MA does not get enough opportunity to play its advisory and negotiation roles as expected to promote PFM (Padgee et al., 2006). The inadequate benefits derived by the community from PFM may be attributed to this challenge.

The MA also identified corruption by some executives of the LBCs as a challenge they encounter in the PFM. This is revealed during the usual annual financial auditing of the accounts of the Benya Lagoon and Bantuma LBCs. From the study, the executives of the LBC share the money between them and the community by themselves and single-handedly see to the usage of the community’s money. Benefits from the sale of premix fuel are in most cases given to the fishing community through their chief fisherman for community development. This chief fisherman is also the chairman of the committee. However, most of the payments and benefits do not reflect in the development activities of the community. The LBCs do not use the money to initiate development activities in the community but look up to the MA for the development of their community. The fishing community has scant infrastructural developments to boast of as benefits derived from the decentralised PFM policy. The LBCs refuse to render proper accounts to the fishing community for their stewardship. The MA concludes that this brings about improper accountability of the LBCs to the MCE.

#### Challenges faced by the executives of the LBC

The LBCs identified the issue of too many canoes (564) in the community as a challenge to their duties in PFM. Considering the number of canoes and the quantity of premix fuel required per day per canoe, the quantity of premix fuel supplied to the landing beaches is grossly inadequate. The canoes used for fishing at the landing beaches require 13 trucks of premix fuel per day for successful fishing, but the OMC is able to supply one truck within a period of three days to the landing beaches. This reduces the catch of fish in Elmina. This problem is compounded during the peak fishing season, that is, from June to September, when canoes from other communities in KEEA Municipal Assembly and other districts in the region come to fish and land at the Benya Lagoon and Bantuma

landing sites. The LBCs are unable to undertake their function of ensuring adequate supply of premix fuel to the fishing community.

Apart from the challenge posed by too many canoes in the community, the LBCs also complain of inadequate supply of premix fuel by the government. The government supplies one truck every three days to the landing beaches. The maximum supply ever gotten is three trucks per week. This is woefully inadequate for fishing activities at the beaches, and therefore puts a lot of pressure on the LBC. In spite of the inadequacy of supply, the fuel is supplied late by the OMC and the government. Under normal circumstances, the premix fuel is to be supplied every day of the week, but it is supplied every three to four days and this delays fishing activities in the community. To worsen the situation, thieves sometimes steal the premix fuel from the pumping stations at night, thereby reducing the available quantity of fuel as well as the profits to be derived from selling the fuel.

Inadequate supply of premix fuel, coupled with too many canoes at the landing beaches, brings about many conflicts in the community. There are conflicts among the fishermen and canoe owners as well as between them and the LBC during distribution of fuel. There are also conflicts among the fishermen over parking space for canoes at the landing site. These extend to demarcations of the sea during fishing activities when fishermen fight over fish caught. They argue and fight when a canoe catches fish at areas demarcated for other canoes. Owing to the large numbers of both canoes and fishermen, a lot accidents occur at sea. These accidents result in spoilage of canoes, outboard motors, nets, and spillage of fuel. The chairman explained that he resolves at least five conflicts every week at the LBC office, which does not promote successful PFM.

And again the LBC identified unrealistically high expectations from the fishing communities as a challenge they face in PFM. Although the fishing community, particularly those directly and indirectly involved in fishing activities, were educated on communal benefits they stand to derive from the decentralised PFM, the Committee reported that the fishing community demands unrealistic benefits such as asphalt roads,

electricity, and other individual benefits like payment of children's school fees, employment opportunity, and capital. The chairman of the Committee stated, "Communities' expectations for services such as asphalt roads fall beyond our responsibilities; the granting of money for children's school fees conflicts with the purpose of the decentralised PFM; and employment opportunity and capital for a majority of the community members are unrealistic". The Committee's inability to meet these expectations has reduced the motivation and commitment levels of the community members towards the implementation of the PFM programme.

One other challenge raised by the Committee is the lackadaisical attitude portrayed by the KEEA Municipal Assembly and the Fisheries Department. There are no financial benefits from the profit breakdown from selling fuel for the KEEA Municipal Assembly and the Fisheries Department, so they put up a lazy monitoring attitude towards the LBC. The secretary of the LBC stated, "They are jealous of us so they do not want to co-operate with us".

The LBCs indicated inadequate logistics as one of the challenges they encounter in their operations to ensure PFM. The Committee is responsible for ensuring not only the supply of adequate and affordable premix fuel but also sufficient community development. These activities require enough pumping station outlets and office logistics such as chairs, tables, computers, among others. The study revealed that such logistics are inadequately supplied. Despite the large fish production in the community, there are only two pumping station outlets and these are not enough to support fishing activities at the landing beaches. The committee needs to be resourced with adequate logistics to ensure effective PFM.

Furthermore, some committee executives complained that the nomination of ordinary fishermen by the representatives of MoFA is heavily abused and this creates an opening for nomination of party people most of whom never get near any landing beach. There are also deliberate attempts by party people to sideline chief fishermen and in some cases forceful destoolment of some of them occurs because of premix fuel.

Finally, the Committee cited the threat of illegal fishing activities by unregistered fishermen and canoe owners as a challenge they face in PFM. This makes it difficult for the LBC to have a complete list of registered fishermen and canoes for the purpose of distributing the fuel. This form of non-cooperation from the fishing community challenges their efforts to effective PFM because they are expected to play a role in the management of premix fuel since its proceeds will go a long way towards benefiting them. The Committee reported that some of the members of the community condone illegal activities at the landing beaches.

**Plate 5.8 Canoes used for fishing at the landing site**



Source: Field Survey, 2013

#### Challenges faced by the secretaries of the LBC

The secretaries indicated inadequate logistics as one of the challenges they encounter in their operations to ensure PFM. They require some office logistics such as computers. The study revealed that the requisite logistics are hardly available. They concluded that the committee needs to be resourced with adequate logistics to ensure effective PFM.

In addition to inadequate logistics, the secretaries indicated the need to be technically proficient as a challenge to them. They do not have adequate knowledge on the use of

various computer programs such as that used for word processing, financial spreadsheet maintenance, and presentation creation. They explained that because they are not electronically inclined by nature, mastering such equipment and software proves difficult. This makes record-keeping and management a difficult task for them.

The secretaries are also often seen as the clearing house through which the various projects undertaken by the LBCs are processed. They serve as the central nervous system of the LBC: all correspondence and communication in PFM passes through them. As a result, the challenge of staying organised and on top of everything as requested of them threatens their ability to ensure effective PFM.

#### Challenges faced by the pump attendants

The pump attendants pointed out that non-cooperation from the fishermen and canoe owners is a challenge they face in PFM. The pump attendant at the Benya Lagoon landing beach remarked, “Some of the canoe owners and fishermen do not want to be in a queue and wait for their turn before being supplied with the fuel. They fight their way to the front of the queue to buy the fuel”. Another pump attendant at the Bantuma landing beach annoyingly said, “Some of the canoe owners and fishermen treat us as if we were kids. They insult and fight with us when we are distributing the fuel”. These conflicts at the pumping stations result in spillage of fuel, stealing of measuring cans and funnels and even hurting us the attendants. These negative attitudes affect the smooth running of affairs at the pumping stations, profitability of the LBCs, and community development. Failure of any of the stakeholders to play his or her role properly will affect the effectiveness of the others in their roles meant to ensure the success of the PFM programme (Pagdee et al., 2006).

And again, the pump attendants indicated the inadequate supply of fuel to the landing beaches as a challenge to their roles in PFM. They explained that they gauge fuel stock and estimate fuel demand expecting to receive the required stock, but they are always put in a tight corner as the supply is not adequate. The government does not supply enough fuel to the landing beaches and this puts a lot of pressure on them as they are responsible

for selling the fuel. The canoe owners and fishermen continually pressurise them to supply adequate fuel for fishing.

Additionally, the pump attendants explained that the more fuel is supplied, the more income they earn. They receive seven percent of the profits earned from selling the fuel, so they receive more money when they are able to sell more fuel. They complained bitterly against irregular and inadequate supply of fuel by government.

Lastly, the pump attendants noted theft cases as a challenge to their role in ensuring successful PFM. They complained that some thieves come at night to steal some quantities of premix fuel from the pumping stations. Since they are in charge of the safety and maintenance of the pumping stations, they incur losses due to the theft cases, particularly when the culprits are not arrested for they are bound to pay for the loss of the fuel. Sometimes they are accused of conniving with the thieves to undertake such vices for the sake of money. This affects their dignity and self-esteem as human beings.

#### Challenges faced by the fishermen

First and foremost, the fishermen cited inadequate supply of and access to premix fuel as a challenge they face in ensuring PFM. Access to premix fuel is regulated by by-laws of distribution on a rotational basis so even if you are in need of fuel for fishing and it is not your turn, you will not be supplied. Out of the fishermen interviewed, 65.5 percent indicated that the inadequate supply of fuel was a loss of their source of livelihood. One fisherman said, "Fishing is our source of sustenance, so the denial of access to premix fuel makes life difficult". They further explained that they require about 70 gallons of fuel per day per fishing trip and the LBC is only able to supply an average of 25 to 30 gallons every three to four days. The fishermen indicated that they buy petrol for motorists and engine oil to add to the little premix fuel to enable them to undertake their fishing activities. The cost of petrol and engine oil is exorbitant and this makes it difficult for them to go for fishing regularly.

Secondly, political influence affects the role of fishermen in ensuring successful PFM. It was further explained that the executives of the LBC, pump attendants, and secretaries of the LBC are selected and appointed based on political affiliations. The MCE selects members from his own political party to manage the affairs of the committee. As a result of this, premix fuel, which is meant to be sold to all canoe owners, is sold on partisan basis at Elmina. The pump attendants and the executives of the LBC give priority to party members during the distribution and selling of premix fuel. They sell to their party members before attending to the registered names on the list. The registered list, which ought to be followed, has been abandoned by the LBC. It was revealed that this was engineered by a member of the NPC, popularly called “Maanoma”, who used his superior powers to override the rights of the fishermen in the community. If you are in the opposition party, you are not likely to be served premix fuel to go to sea. They sell to some party members more than the necessary gallons of fuel (100 – 150 gallons), so the fishermen in the opposition political party have to buy from them at a higher ‘connection’ price of GH¢8.00 per gallon. Besides, some executives of the LBC hoard large quantities of premix fuel and hire boys to sell them at the ‘connection’ price of GH¢8.00 to the fishermen. Before any truck offloads the premix fuel, each executive of the premix committee takes his share of 60 gallons (one drum). The leftover is then pumped into the tanker at the fuel station and shared among the fishermen. “Maanoma” alone receives 120 gallons (two drums) of premix fuel due to his position as member of the NPC. Meanwhile he is neither a canoe owner nor a fisherman. It was revealed that one can only have adequate supply of fuel by buying from the hoarders at the higher price. This affects their economic activity since they do not have ready cash to purchase fuel at the ‘connection’ price.

Furthermore, the fishermen mentioned poor measurement of fuel as a threat to their activities in PFM. They indicated that the measuring gallon used for selling the fuel at the pumping stations was short of some litres of fuel. A standard imperial (United Kingdom) gallon of premix fuel is equivalent to 4.5 litres of premix fuel. However, the gallon used for selling at the landing beach is equivalent to 4.0 litres of fuel, which is short of 0.5

litres (500ml) of fuel. The fishermen pay for the price of a gallon, but receive a quantity less than a gallon.

In the fishing industry in the community, capital goods and assets such as canoes and fishing vessels are to a large extent privately owned. Fishermen are employed by canoe owners and they share the profits with the owners after deduction of amortisation amounts for canoe, the outboard motor, nets, and premix fuel. The canoe owner takes a greater proportion of the profit (60 percent) and the rest (40 percent) is shared among the fishermen on the canoe. Depending on the size of the canoe, there are about 21 to 24 fishermen using one canoe. Especially during the lean season, which is from November to February and April to May and which happens to be the brooding period for the fishes, catches do not sometimes cover the cost of fuel used for each fishing trip. Debts accumulate and make the fishermen poor. When the major fishing season comes, that is, June to September, there are often bumper catches, but lower selling prices do not make the fishermen any better off.

The unfair benefit-sharing system among stakeholders in the PFM exercise also affects the willingness of the fishermen to participate. The fishing communities were to benefit from the PFM exercise through the implementation of infrastructural development. Eighty-five percent of the fishermen registered their dissatisfaction with the benefits from the PFM exercise. The unfair benefit-sharing system explains why some of the fishermen do not cooperate in collective action in the PFM programmes.

Finally, the fishermen reported that they are less engaged in the activities of PFM. One fisherman said, “We are mostly not considered as important enough to be invited to participate in stakeholder meetings, even though we are supposed to be part of the body that decides what developmental projects should be undertaken in the community”. The LBC is supposed to hold quarterly meetings to render accounts and services to the stakeholders, including the fishermen. However, the LBC only organises annual stakeholder meetings usually in December. During these meetings, only a selected few are invited, particularly fishermen of the same political party as the executives. The

fishermen added that if you are only a fisherman and not a canoe owner as well you are not invited to the meetings at all. These annual stakeholder meetings are not held at the landing beaches but rather at hotel conference rooms (usually at Mabel's Table Hotel and Restaurant) or the Elmina Castle, which makes it extremely difficult for the ordinary fisherman to attend. On rare occasions (once in about three years), meetings are held at the landing beach to give information about PFM to the fishermen. At such meetings they are only given information and they do not have the opportunity to express their views and suggestions.

#### Challenges faced by the fishmongers

To start with, the fishmongers identified the high cost of premix fuel as a challenge to their activities. They explained that the higher the price of fuel, the higher the price of fish per pan sold to them. It was revealed that the price of fish per pan, which was between GH¢90 and GH¢110, is now between GH¢200 and GH¢250 because premix fuel is being bought at a 'connection' price of GH¢8.00 per gallon instead of GH¢5.50 per gallon. Other fishermen also complain of the use of petrol and engine oil as 'top-up' to premix fuel, arguing that it is the major reason for increase in the price of fish. The high cost of fish makes it difficult for some of the women to purchase and sell the commodity, thereby denying them of their source of livelihood. The fishermen do not allow buying on credit to support such women.

The fishmongers also indicated the inadequate supply of fuel as a challenge to their selling activities. When the fishermen do not get enough fuel to go for fishing, the fishmongers do not get enough fish as well to buy and sell. When there is shortage of premix fuel, the few fishermen who are able to go for fishing sell their catch at outrageous prices (GH¢300 per pan) to the fishmongers at the landing beach.

The fishmongers are considered as indirect beneficiaries of PFM by the LBC. The fishmongers identified the non-recognition of their contribution by the LBC as a challenge they are confronted with in promoting PFM. The 'queen mother' of the fishmongers, that is the 'konkohenmaa', expressed her grievances by saying, "I am

excluded from the LBC even though MoFA guidelines for PFM state that I have to be part of the LBC. This is due to my political affiliation. The chairman of the LBC refused to add me to the committee and my views are not considered at all". The konkohenmaa explained that she was part of the LBC until 2011 when the new chief fisherman, also chairman of the committee, was appointed. Since then, she has been deprived of her role as representative of the fishmongers in PFM.

#### Challenges faced by the canoe owners

First and foremost, the canoe owners cited inadequate supply of premix fuel as a challenge they face in ensuring PFM. The canoe owners explained that each canoe requires about 70 gallons of fuel per day per fishing trip and the LBC is only able to supply an average of 25 to 30 gallons every three to four days. In that case, they have to supplement the premix fuel by buying petrol and engine oil to mix with the premix fuel to obtain the needed quantity for fishing activities. The cost of petrol and engine oil is much too high and this adversely affects the working capital of the canoe owners. The situation is worse for canoe owners who own two or more canoes. Sixty-eight percent of the canoe owners had two to five canoes in the community.

The canoe owners pointed out another challenge to PFM as the distribution of fuel based on political affiliations. The pump attendants and the executives of the LBC give priority to party members during the distribution and selling of premix fuel. They sell to canoe owners who are of the same political party as them before attending to the registered list used for distribution. Like the fishermen, the canoe owners complained of having to buy fuel at a higher 'connection' price of GH¢8.00 before getting enough fuel for fishing.

The canoe owners mentioned that the measurement scale for selling the fuel is incorrect and this poses a threat to their activities in PFM. The measuring gallon used for selling the fuel at the pumping stations was short of some 0.5 litres of fuel as compared to the standard imperial gallon. This, in effect, means they pay for what they have not received.

Last but not least, the canoe owners identified dishonesty on the part of the fishermen they employ to use their canoes for fishing. The fishermen are supposed to share the profits with the owner of the canoe after deduction of amortisation amounts for canoe, the outboard motor, nets, and premix fuel. The canoe owner takes 60 percent of the profit and the fishermen take 40 percent, but the fishermen deduct a portion of the money and hide before sharing the proceeds with the canoe owner. They sometimes report of low catch and losses that are not true just to make away with a greater part of the profit. Between the period of June and September, which is the peak fishing season, they report of spoilage of fish and low selling prices, all to make enough room for them to deduct a greater proportion of the profits made.



## CHAPTER SIX

### DISCUSSION OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

#### 6.1 Introduction

This chapter covers a discussion of the findings of the study, the overall conclusions and recommendations appropriate for improving the contribution of premix fuel to community development in the Komenda-Edina-Eguafo-Abirem Municipality.

#### 6.2 Key findings

The study sought to assess the extent to which premix fuel management contributes to community development in the Komenda-Edina-Eguafo-Abirem Municipality. The findings of the study have been grouped under the level of stakeholder participation in the management of the premix fuel, the level of accountability in the management of premix fuel, contribution of premix fuel management towards enhancing access to premix fuel in coastal communities and infrastructural development, and challenges associated with the implementation of the decentralised PFM policy.

##### 6.2.1 Level of stakeholder participation in the management of the premix fuel

Cronyism is used to sell premix fuel to fishermen and canoe owners. Premix fuel in the KEEA Municipality is sold mainly on political connection. This affects people who are not on the side of the executives or not associated with the ruling party. This affects regular access to premix fuel for effective fishing. The implication is that cronyism and delays in placing orders for premix fuel do not promote the achievement of the objectives of the decentralised Premix Fuel Management policy which seeks to ensure constant supply of premix fuel for effective fishing in the Municipality.

The study found that the community (fishermen, fishmongers and canoe owners) participate in PFM through information-sharing. Fishermen, fishmongers and canoe owners are engaged at the information sharing stage of the ladder of citizens' participation which is the first stage of tokenism. This stage of participation is low, as described by Arnstein (1969). The LBCs provide a one-way flow of information to the community, leaving little or no room for feedback. This is likely to affect communal

ownership of development projects initiated by the LBCs since the community does not feel being part of the project initiation and implementation.

The study revealed that, despite the roles played by the Department of Fisheries in PFM and fishing in general, it has not participated in PFM in the KEEA Municipality for the past five years due to political segregation. The implication is that the interest of the fishing industry is not reflected in initiation of development projects since the Department fights for the interest of the fishing industry. In addition, monitoring and evaluation of the PFM activities has been low for the past five years as one of the monitoring agents (Department of Fisheries) has been exempted from PFM. This is likely to affect the efficacy of the supervisory role which is to be played by the Fisheries Department as well as accountability and transparency in PFM. Their participation can be considered as non-participatory.

Stakeholder participation is critical in ensuring successful PFM. However, the willingness and the commitment of the fishing community greatly depend on the benefits they derive from the sale of premix fuel. Stakeholders such as the KEEA Municipal Assembly participate at the information-sharing level in PFM and in few cases at the consultation level, both of which are low levels of participation. The fishing community (fishermen, canoe owners and fishmongers) neither participate in the decision-making and policy formulation processes nor initiate any action in PFM. The low level of participation of the fishing community as owners and main beneficiaries in PFM does not ensure successful and sustainable management of premix fuel.

#### 6.2.2 Level of accountability in the management of premix fuel

The research found out that the LBCs did not obey the rules stipulated by the decentralised PFM policy to organise quarterly meetings. Instead, the LBCs organise semi-annual meetings. This reduces access to information in PFM, which affects clarity and clearness of issues about the operations of the LBCs. This may affect proper accountability because limited access to information reduces the quality of information accessed and transparency of financial records in PFM.

The little engagement of the other stakeholders other than the LBCs showed that the LBCs drew their own powers to implement activities without thorough consultations and deliberations. The executives are more answerable to themselves than to the other stakeholders of PFM. This affects the right of other stakeholders such as the Department of Fisheries, fishermen and canoe owners to access quality information and transparent accounts in PFM.

Additionally, the fishing community did not have proper mechanisms to demand accountability from the LBCs. There were no sanctions to check the LBCs when they fail to render proper accounts to them as stakeholders and beneficiaries of PFM. There was very poor transparency in the activities involved in PFM, coupled with low access and poor quality of information. This is likely to impede efficiency in PFM since there is no proper check on the LBCs as to whether the profits gained are being used appropriately or not. This will also affect the quality and technicalities of infrastructural projects.

The study found out that the MA and the Fisheries Department were not frequently consulted by the LBCs in PFM. These institutions are supposed to monitor and ensure obedience to the rules of the decentralised PFM policy, but their exclusion leads to weak vertical accountability, as explained by Hofstede, 2003 and Carrington et al., 2008. Their exemption or little involvement limits the oversight role of the MA and the Fisheries Department. Besides, the Department is unable to perform its monitoring role over the LBCs to enhance transparency and ensure accountable governance in premix fuel management. This is likely to affect successful implementation of the decentralised PFM policy as increased participation is linked to increased accountability. Thus, there is the likelihood that this will affect the quality of development projects implemented as well as the technicalities involved in project implementation.

Moreover, the study revealed that both the KEEA Municipal Assembly and the Fisheries Department do not benefit from the profits made from selling premix fuel, which is in line with the guiding principles of the policy. This shows that the KEEA Municipal

Assembly and the Fisheries Department go according to the rules of engagement, which promotes accountability and transparency in PFM.

The study also found that the appointment of the secretary of the LBC by the executives of the LBC compromises accountability issues in PFM. The secretary is only accountable to the LBC, and therefore the executives may influence the secretaries on the type of records to be kept for accountability to members. It is also likely to affect some of the accountability and control measures instituted to guarantee effective local development through PFM.

### 6.2.3 Contribution of PFM to community development

Notwithstanding the inadequacy of premix fuel supplied in KEEA Municipality, it was found that supply has increased since the enactment of the policy in 2001. Supply has increased from 3000 gallons before 2001 to 9000 gallons after 2001, which is in line with the realization of the decentralised PFM policy to increase access to premix fuel. This implies that the achievement of the decentralised PFM policy to promote community development is on course. However, the improvement in access to premix fuel is minimal, considering the number of canoes on the landing beaches.

Although the decentralised PFM policy has contributed to increase in the quantity of premix fuel supplied in the community, a significant proportion of the canoe owners and fishermen, who are supposed to be the direct beneficiaries of the PFM, are not benefiting from the system due to unfair distribution and short supply of premix fuel. This implies that there is inadequate premix fuel for fishing in the community, which affects the catch of fish for sale. This goes a long way towards reducing income earned by fishermen, thereby reducing their living standards and community development in general.

The fishing community receives 50 percent of the proceeds earned from the sale of premix fuel instead of the 53 percent directed by the PFM guidelines. This means that there is unfair distribution of the profits earned, which affects the quality and type of projects implemented in the community. This also implies that the accountability in PFM

is low as the executives of the LBCs are not penalised for this deduction from the community's share of profits. This may be as a result of exclusion of the Department of Fisheries and little inclusion of the MA which are responsible for monitoring and evaluation.

The study found out that the communities enjoy some benefits from the sale of premix fuel in the form of infrastructural benefits. However, the community members are not satisfied with these benefits because they feel the benefits do not match up with their needs and, most especially, with the profits accrued from selling premix fuel. This affects their commitment to the operations of the LBCs, as explained by the social exchange theory (Homans, 1961). The implication is that the community reciprocates their participation in PFM according to the measure of rewards they receive. The lesser the rewards the community perceive they receive, the lesser their participation, and vice versa. Thus, rewards received and extent of participation are positively related. This is likely to limit the successful achievement of the decentralised premix fuel management policy to promote community development.

#### 6.2.4 Challenges stakeholders face in PFM

The Municipal Assembly was less engaged in the activities of PFM. It does not get enough opportunity to play its advisory and negotiation roles as expected to promote PFM. This may lead to corruption by some executives of the LBCs and their refusal to make proper account to the community, which may affect accountability in PFM.

The research revealed that the issue of too many canoes in the community, limited parking space for canoes at the landing site, and inadequate logistics (chairs, tables, computers and pumping station outlets) posed challenges to the duties of the LBCs in PFM. These challenges coupled with the inadequacy of supply of premix fuel by the government, bring about too many conflicts in the fishing community during distribution of fuel. This hinders not only the smooth and efficient distribution of premix fuel but also the successful execution of the duties of the LBCs.

Challenges such as inadequate supply of and access to premix fuel, buying petrol and engine oil which are highly priced to add to the little premix fuel obtained, the selling of premix fuel at high price and on partisan basis, and the under measurement of some litres of fuel at the pumping stations faced by fishermen and canoe owners may reduce productivity in the fishing industry in KEEA Municipality. This may reduce the income gains of the fishermen and canoe owners and, consequently, their living standard which is the outcome of community development.

### **6.3 Recommendations**

Based on the findings of the study, the following recommendations are made to improve decentralised Premix Fuel Management policy in the coastal communities:

1. Stakeholders, particularly fishermen, fishmongers and canoe owners require greater capacity to exercise their rights and execute their responsibilities in PFM. The Community Fishing Association should therefore build the capacity of community members (fishermen, fishmongers and canoe owners) to ensure meaningful participation in PFM. When capacity building as a right based approach to development takes place it will enable the community members to take part in higher levels of participation in PFM process and to also take part in decision-making on premix fuel management issues.
2. The Fisheries Department and the LBC should organise regular and frequent stakeholder interaction programmes. These programmes will help to clearly define stakeholder roles and interests. They will also aid to harmonise the various stakeholder interests in premix fuel management. Proper management of stakeholder interests and roles improves PFM.
3. The Department of Fisheries and the MA should ensure that the LBCs involve the community members in discussions concerning the infrastructural project to be undertaken. Since the community members are the direct beneficiaries of the infrastructural projects, they should be involved in the decision-making process so

as to assess their needs and inculcate them into infrastructural projects. The NPC should ensure that MA is involved by the LBCs in decision-making processes to advocate for the interest of the community members. Such meetings organised by the LBCs should include the MA and the community members to ensure that the purpose of the decentralised PFM Policy to empower community members to undertake development activities to promote their own lives is attained.

4. Furthermore, the government through the NPC and the MA should organise educational programmes to educate the other stakeholders, especially the fishing community members, on the kinds of benefits they should expect to gain from the sale of premix fuel. These educational programmes must highlight the mode of sharing profits gained from selling premix fuel and the rules and limitations associated with the use of the money for infrastructural development. This education by the MA and NPC should also include the management plans and procedures in PFM.
5. The government, through the NPC, should enact and enforce laws to ensure that the KEEA Municipal Assembly and Fisheries Department monitor the activities of the LBCs, particularly monitoring the distribution of premix fuel and utilisation of the money that is obtained from selling premix fuel. The KEEA Municipal Assembly and Fisheries Department should be tasked with the duty of cautioning and ensuring that the LBCs desist from their selfish interest of diverting the profits for their personal gains instead of infrastructural development in the fishing communities to benefit all community members. They should also ensure that the benefit-sharing system is transparent and accountable. The Fisheries Department should put in monitoring mechanisms to ensure that the LBCs and pump attendants sell the premix fuel according to the registered list of canoe owners and fishermen.
6. The NPC should enact rules and regulations to secure the inclusion of all relevant stakeholders in PFM. These rules will help prevent issues such as the exemption

of the Department of Fisheries from PFM in KEEA Municipality. Guidelines concerning duration of term of office should be well stipulated by the NPC in the decentralised PFM policy. In this case all relevant stakeholders can hold the LBC responsible should they go wrong.

7. Furthermore, the Fisheries Department in consultation executives of the LBCs and the pump attendants at the premix fuel pumping stations should reconsider issues of contention in PFM such as the rotational method of selling premix fuel and measurement of premix fuel to bring about harmony in PFM. They should use the standard gallon measurement in measuring premix fuel for sale. The Fisheries Department should monitor the executives of the LBCs and the pump attendants to distribute the premix fuel according to the registered list of canoe owners and fishermen, and not on partisan basis.
8. Lastly, the NPC should institute a law to compel the LBCs to adhere to the guiding principles of the decentralised premix fuel management policy. The NPC should liaise with the Department of Fisheries to ensure that the LBCs go according to rules concerning organisation of periodic stakeholder meeting, sharing of profits earned from the sale of premix fuel, the use of the profits for community development, and composition of LBCs. The NPC should undertake a drastic upward revision of penalties for unlawful behaviour in PFM activities to reduce conflicts in PFM. The LBCs should also revise the punishments for engaging in illegal activities at the landing beaches in order to not only curb undesirable activities in PFM but also balance the needs of the current and future generations.

#### **6.4 Conclusion**

The successful implementation of the decentralised PFM policy is directly related to stakeholder participation. Stakeholder participation in PFM creates avenues for community development to be extra responsive to the local needs of the community. Increased stakeholder participation in PFM guarantees community ownership of

infrastructural projects, reflects local conditions, and increases the sustainability of infrastructural projects. Stakeholder participation other than the participation of the LBCs in PFM in KEEA Municipality is mainly manifested in the form of information sharing and consultation which only influences PFM but not necessarily having control over PFM activities. The managing body – LBCs – participates in PFM by taking decisions and initiating development actions with little or no involvement of other stakeholders. However, the exploitation of local knowledge through community participation is a necessary requirement for successful PFM and, consequently, community development.

Furthermore, increased accountability linked with increased stakeholder participation will empower the community to make development initiatives that improve their living conditions and also ensure community development, as depicted in the conceptual framework in Figure 2.3. Thus, accountability is an important component in the successful realisation of the goals and objectives of the decentralised PFM policy. The existence of poor horizontal and vertical accountability in PFM among the stakeholders poses a threat to effective PFM in KEEA Municipality.

These conditions, coupled with the challenges faced by stakeholders, require urgent attention to improve PFM in KEEA Municipality. These include inadequate logistics, inadequate supply of premix fuel, political influences, poor measurement of premix fuel and non-cooperation from the fishing communities. These challenges, coupled with the low level of stakeholder participation and limited benefits the communities derive from the management of premix fuel, hinder the efficacy of the decentralised PFM policy in the KEEA Municipality.

However, the decentralised Premix Fuel Management policy enacted in the KEEA Municipality has, to some extent, contributed to community development. The policy has not only increased supply of and access to premix fuel but also led to the implementation of some infrastructural projects in the KEEA Municipality. Although the policy has not attained its goals and objectives in full, it has succeeded in transferring the sale and

management of premix fuel from private individuals to communities. This has changed the main motive of selling and managing premix fuel from individual profit making to community profit making.

In summary, the decentralisation of the management of premix fuel to the community level has empowered community members to be responsible for development that benefits them. The decentralised PFM policy gives the community the opportunity to initiate, implement and monitor the implementation of projects that satisfy their needs and wants. Besides, the decentralised Premix Fuel Management policy creates a platform for the growth of the fishing industry in the KEEA Municipality by providing premix fuel, a major input in fishing.



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**Appendices**

**A. INTERVIEW GUIDE FOR FISHERIES DEPARTMENT**

**Premix Fuel Management in the Komenda-Edina-Eguafo-Abirem Municipality**

Dear Sir/Madam,

This interview guide is part of requirements for the award of an M.Phil degree in the Department of Planning at the Kwame Nkrumah University of Science and Technology. The aim is to assess the extent of contribution of the premix fuel management committee to community development. You would contribute immensely to the success of this work if you could take some few minutes of your time to respond to the following questions as objectively as possible. Any information given would be treated with utmost confidentiality and used exclusively for academic purposes.

**Section A – Level of participation in premix fuel management**

1. What role does the Department play in the management of premix fuel?.....  
.....
2. Who are the other stakeholders in the management of premix fuel?  
.....  
.....
3. How are the various stakeholders mentioned above involved in the management of the premix fuel?

<b>Stakeholders</b>	<b>Involvement</b>

4. At what level are the fisher folk involved in the management of premix fuel?  
.....  
.....

5. How and when does the Department communicate information to other stakeholders from the community level to the national level?

.....  
.....

6. How and when do stakeholders at the national level communicate information to the Department and other stakeholders at the community level?

.....  
.....

7. How often does the Department communicate with other stakeholders in PFM?

.....

8. What mechanisms have been put in place to ensure stakeholder participation in the implementation of PFM?

.....  
.....

9. How do these mechanisms work?

.....  
.....

Are the mechanisms working now?

.....

**Section B - level of accountability in premix fuel management**

10. What procedures are put in place to ensure accountability in PFM?

.....  
.....

11. How do these procedures work in practice?

.....

12. What role do you play in ensuring accountability in PFM?

.....  
.....

13. How do you interact with other stakeholders in PFM to ensure accountability?

.....

14. How do you perceive the level of accountability in premix fuel management?

[1] Poor                      [2] Very poor                      [3] Good                      [4] Very good

Please, explain your answer

.....

.....

15. What laws and regulations govern the implementation of the decentralized PFM policy?

.....

.....

16. How do people and institutions flout these laws and regulations governing the implementation of the decentralized PFM policy?

.....

.....

17. What does the Department do to people and institutions who flout the laws and regulations governing the implementation of the decentralized PFM policy?

.....

18. What has been or is being done to prevent such violations?

.....

.....

**Section C – contribution of decentralised PFM to infrastructural development**

19. How has the decentralised PFM policy contributed to infrastructural development in beneficiary communities since its inception in 2001?

.....

.....

20. Who determines the projects or programmes to be carried out with the profits made from selling premix fuel?

.....

.....

21. What is the distribution channel that premix fuel goes through from the refinery before it gets to the fisherman?

.....  
.....

22. Who are the actors involved at each stage of the distribution channel?

.....  
.....

23. What was the quantity of premix fuel supplied per week before the enactment of the policy in 2001?

.....

24. What is the supply of premix fuel per week after 2001?

.....

25. What are the success stories that have been achieved in PFM since 2001?

.....

26. Are you satisfied with the way premix fuel is being managed under the policy?

[1] Yes [2] No

Please, give reasons for your answer

.....

**Section D – Challenges faced in the implementation of the decentralised PFM policy**

27. What challenges does the Department face in the role you play in managing premix fuel?

.....  
.....

28. What challenges does the Department face in supplying premix fuel?

.....  
.....

29. What challenges do you face in undertaking developmental projects with proceeds from premix fuel?

.....  
.....

30. Are there any other challenges that affect the effective implementation and success of the decentralized PFM policy? Please, describe them.

.....  
.....

31. How does the Department think such challenges could be addressed?

.....  
.....

32. What is the Department already doing to address the challenges you face in PFM?

.....  
.....

33. What challenges are encountered in Ghana generally in PFM?

.....  
.....

34. How will the Department assess PFM in Elmina?

.....  
.....  
.....

35. Any additional comments:

.....  
.....  
.....

**THANK YOU FOR YOUR RESPONSE**

**B. INTERVIEW GUIDE FOR KEEA MUNICIPAL ASSEMBLY**

**Premix Fuel Management in the Komenda-Edina-Eguafo-Abirem Municipality**

Dear Sir/Madam,

This interview guide is part of requirements for the award of an M.Phil degree in the Department of Planning of the Kwame Nkrumah University of Science and Technology. The aim is to assess the extent of contribution of premix fuel to community development. You would contribute immensely to the success of this work if you could take some few minutes of your time to respond to the following questions as objectively as possible. Any information given would be treated with utmost confidentiality and used exclusively for academic purposes.

**Section A – Level of participation in premix fuel management**

1. What are the Assembly’s interests in premix fuel management in the Komenda-Edina-Eguafo-Abirem Municipality?

.....

2. What role does the Assembly play in the management of premix fuel?

.....

3. What does the Assembly know about PFM and the proceeds obtained from selling premix fuel?

.....

.....

4. How are the proceeds from the sale of premix fuel used?

.....

.....

5. Does the Assembly play any role in the use of the proceeds from premix fuel?

[YES]            [NO]

If yes, what role does the Assembly play?

.....

.....

.....

.

6. Who determines the projects or programmes to be carried out with the proceeds from selling premix fuel?

.....

7. Who are the other stakeholders in the management of premix fuel in the Komenda-Edina-Eguafo-Abirem Municipality?

.....

.....

8. How are the various stakeholders mentioned above involved in the management of premix fuel?

Stakeholders	Involvement

9. At what level and in what ways are the fisher folk involved in the management of premix fuel?

.....

.....

10. How and when do you communicate information to other stakeholders from the community level to the national level?

.....

.....

11. How do stakeholders at the national level communicate information to you and other stakeholders at the community level?

.....

12. How often does the Department communicate information to the other stakeholders?

.....

13. How often do other stakeholders communicate information to the Department?

.....

.....

14. What mechanisms have been put in place to ensure stakeholder participation in the implementation of PFM?

.....  
.....

15. How do the mechanisms work?

.....

16. Are the mechanisms working now?

.....

**Section B – Level of accountability in premix fuel**

17. What procedures are put in place to ensure accountability in PFM?

.....  
.....

18. How do these procedures work in practice?

.....

19. What role does the Assembly play in ensuring accountability in PFM?

.....

20. How do you interact with other stakeholders in PFM to ensure accountability?

.....

21. How often do other stakeholders of PFM render account to the Department?

.....

22. Are you invited to stakeholder meetings?

[1] Yes                      [2] No

23. Do you have any idea about the cost of the infrastructure implemented with profits from selling premix fuel?

[1] Yes                      [2] No

If yes, how do you hear about it?

.....

24. Does the cost of projects match up with profits made from sale of premix fuel?

[1] Yes                      [2] No

25. What measures are in place to make sure people and institutions do not misuse the proceeds from selling premix fuel?

.....

26. How effective have these measures been?

.....

27. Have there been instances of malpractices or violations of premix fuel money or laws?

.....

28. What do you do to people and institutions who flout the law of management?

.....

.....

29. How do you perceive the level of accountability in premix fuel management?

.....

**Section C – Contribution of decentralised premix fuel to infrastructural development**

30. Which infrastructural projects have been undertaken in the community as a result of PFM policy since 2001?

Year	Project	Location
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		

31. Are you satisfied with the way premix fuel is being managed?

[1] Yes

[2] No

If yes, why?

.....

If no, why?

.....

**Section D – Challenges associated with implementation of decentralised PFM policy**

32. What challenges do you face in the role you play in the management of premix fuel?

.....

33. What challenges are encountered in Ghana generally in PFM?

.....

34. How will you assess PFM in Elmina?

.....

35. What should be done to improve upon the management of premix fuel in the Municipality?

.....

.....

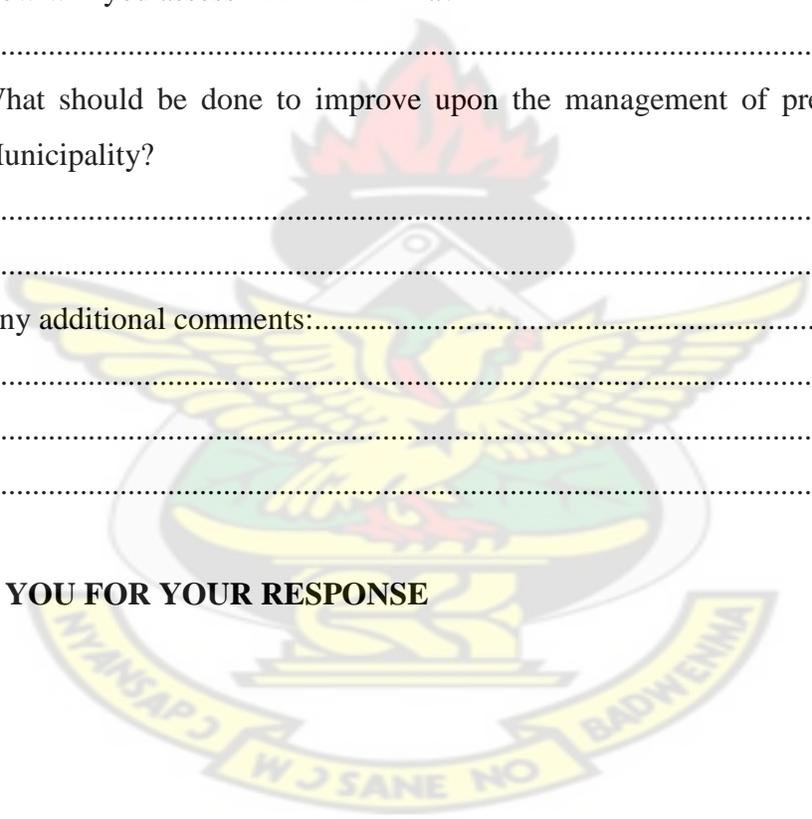
36. Any additional comments:.....

.....

.....

.....

**THANK YOU FOR YOUR RESPONSE**



## C. INTERVIEW GUIDE FOR THE EXECUTIVES OF THE LANDING BEACH COMMITTEE

### Premix Fuel Management in the Komenda-Edina-Eguafo-Abirem Municipality

Dear Sir/Madam,

This interview guide is part of requirements for the award of an M.Phil degree in the Department of Planning of the Kwame Nkrumah University of Science and Technology. The aim is to assess the extent of contribution of premix fuel to community development. You would contribute immensely to the success of this work if you could take some few minutes of your time to respond to the following questions as objectively as possible. Any information given would be treated with utmost confidentiality and used exclusively for academic purposes.

#### Section A – Level of participation in premix fuel management

1. What role does the LBC play in the management of premix fuel?

.....  
.....

2. Who are the other stakeholders in the management of premix fuel?

.....  
.....

3. How are the various stakeholders mentioned above involved in the management of the premix fuel?

Stakeholders	Involvement

4. Who determines the projects or programmes to be carried out with the money from premix fuel?

.....

5. At what level do you invite the fisher folk to join the management of the premix fuel?

.....

6. How and when does the LBC communicate information to other stakeholders from the community level to the national level?

.....

.....

7. How and when do stakeholders at the national level communicate information to the LBC and other stakeholders at the community level?

.....

.....

8. How often does the LBC communicate with other stakeholders in PFM?

.....

9. What mechanisms have been put in place to ensure stakeholder participation in the implementation of PFM?

.....

10. How do these mechanisms work?

.....

11. Are the mechanisms working now?

.....

**Section B – Level of accountability in premix fuel**

12. What procedures are put in place to ensure accountability in PFM?

.....

.....

13. How do these procedures work in practice?

.....

.....

14. What role do you play in ensuring accountability in PFM?

.....

15. How do you interact with other stakeholders in PFM to ensure accountability?

.....

16. How do you perceive the level of accountability in premix fuel management?

[1] Poor      [2] Very poor      [3] Good      [4] Very good

Please, explain your answer

.....

17. What laws and regulations govern the implementation of the decentralized PFM policy?

.....

18. How do people and institutions flout these laws and regulations governing the implementation of the decentralized PFM policy?

.....

19. What does the LBC do to people and institutions who flout the laws and regulations governing the implementation of the decentralized PFM policy?

.....

20. What has been or is being done to prevent such violations?

.....

**Section C – Contribution of decentralised PFM to infrastructural development**

21. Which infrastructure in the community came about as a result of PFM policy since 2004?

Year	Project	Cost (GH¢)	Location
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			

22. Who determines the projects or programmes to be carried out with the profits made from selling premix fuel?

.....

23. What is the distribution channel that premix fuel goes through from the refinery before it gets to the fisherman?

.....

.....

24. Who are the actors involved at each stage of the distribution channel?

.....

25. What was the quantity of premix fuel supplied per week before the enactment of the policy in 2001?

.....

26. What is the supply of premix fuel per week after 2001?

.....

27. What are you doing to ensure constant supply of premix fuel for fishermen?

.....

28. What are the success stories that have been achieved in PFM since 2001?

.....

.....

29. Are you satisfied with the way premix fuel is being managed under the policy?

[1] Yes [2] No

Please, give reasons for your answer

.....

**Section D – Challenges associated with implementation of decentralised PFM policy**

30. What challenges does the LBC face in the role you play in managing premix fuel?

.....

.....

31. What challenges does the LBC face in supplying premix fuel?

.....

.....

32. What challenges do you face in undertaking developmental projects with proceeds from premix fuel?

.....

33. Are there any other challenges that affect the effective implementation and success of the decentralized PFM policy? Please, describe them.

.....

.....

34. How does the committee think such challenges could be addressed?

.....

35. What is the committee already doing to address the challenges you face in PFM?

.....

36. What challenges are encountered in Ghana generally in PFM?

.....

37. How will the LBC assess PFM in Elmina?

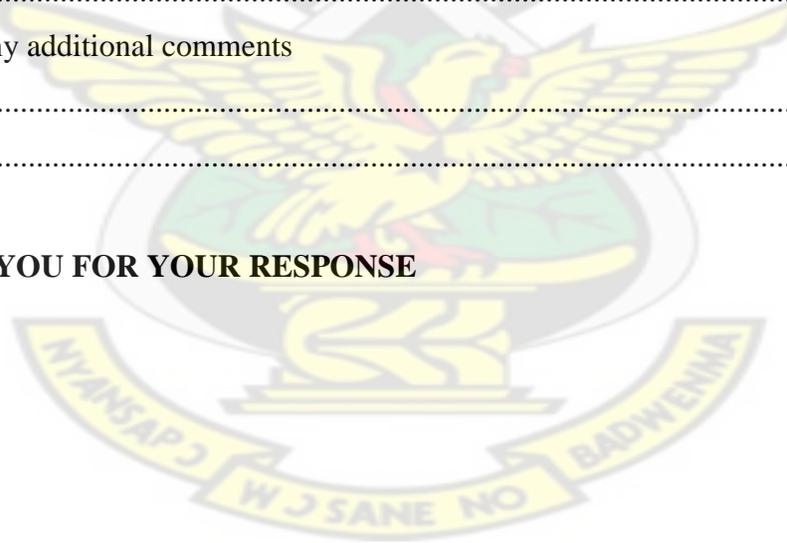
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38. Any additional comments

.....

.....

**THANK YOU FOR YOUR RESPONSE**



**D. INTERVIEW GUIDE FOR SECRETARIES OF LANDING BEACH COMMITTEE**

**Premix Fuel Management in the Komenda-Edina-Eguafo-Abirem Municipality**

Dear Sir/Madam,

This interview guide is part of requirements for the award of an M.Phil degree in the Department of Planning of the Kwame Nkrumah University of Science and Technology. The aim is to assess the extent of contribution of premix fuel to community development. You would contribute immensely to the success of this work if you could take some few minutes of your time to respond to the following questions as objectively as possible. Any information given would be treated with utmost confidentiality and used exclusively for academic purposes.

**Section A – Level of participation in premix fuel management**

1. What role do you play in the management of premix fuel?

.....

2. Who are the other stakeholders in the management of premix fuel?

.....

3. How are the various stakeholders mentioned above involved in the management of the premix fuel?

Stakeholders	Involvement

4. Who determines the projects or programmes to be carried out with the money from premix fuel?

.....

5. At what level do you invite the fisher folk to join the management of the premix fuel?

.....

6. How and when do you communicate information to other stakeholders from the community level to the national level?

.....

7. How and when do stakeholders at the national level communicate information to you and other stakeholders at the community level?

.....

8. How often do you communicate with other stakeholders in PFM?

.....

9. What mechanisms have been put in place to ensure stakeholder participation in the implementation of PFM?

.....

10. How do these mechanisms work?

.....

11. Are the mechanisms working now?

.....

**Section B – Level of accountability in premix fuel**

12. What procedures are put in place to ensure accountability in PFM?

.....

13. How do these procedures work in practice?

.....

14. What role do you play in ensuring accountability in PFM?

.....

15. How do you interact with other stakeholders in PFM to ensure accountability?

.....

16. How do you perceive the level of accountability in premix fuel management?

[1] Poor      [2] Very poor      [3] Good      [4] Very good

Please, explain your answer

.....  
17. What laws and regulations govern the implementation of the decentralised PFM policy?  
.....

18. How do people and institutions flout these laws and regulations governing the implementation of the decentralised PFM policy?  
.....

19. What do you do to people and institutions who flout the laws and regulations governing the implementation of the decentralised PFM policy?  
.....

20. What has been or is being done to prevent such violations?  
.....

**Section C – Contribution of decentralised premix fuel to infrastructural development**

21. Which infrastructure in the community came about as a result of PFM policy since 2004?

Year	Project	Cost (GH¢)	Location
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			

22. Who determines the projects or programmes to be carried out with the profits made from selling premix fuel?  
.....  
.....

23. What is the distribution channel that premix fuel goes through from the refinery before it gets to the fisherman?

.....  
.....

24. Who are the actors involved at each stage of the distribution channel?

.....

25. What was the quantity of premix fuel supplied per week before the enactment of the policy in 2001?

.....

26. What is the supply of premix fuel per week after 2001?

.....

27. What are you doing to ensure constant supply of premix fuel for fishermen?

.....

28. What are the success stories that have been achieved in PFM since 2001?

.....

29. Are you satisfied with the way premix fuel is being managed under the policy?

[1] Yes [2] No

Please, give reasons for your answer

.....

**Section D – Challenges associated with implementation of decentralised PFM policy**

30. What challenges do you face in the role you play in managing premix fuel?

.....

.....

31. What challenges do you face in supplying premix fuel?

.....

32. What challenges do you face in undertaking developmental projects with proceeds from premix fuel?

.....

.....

33. Are there any other challenges that affect the effective implementation and success of the decentralised PFM policy? Please, describe them.

.....

34. How do you think such challenges could be addressed?

.....

35. What are you already doing to address the challenges you face in PFM?

.....

.....

36. What challenges are encountered in Ghana generally in PFM?

.....

.....

37. How will the LBC assess PFM in Elmina?

.....

.....

38. Any additional comments

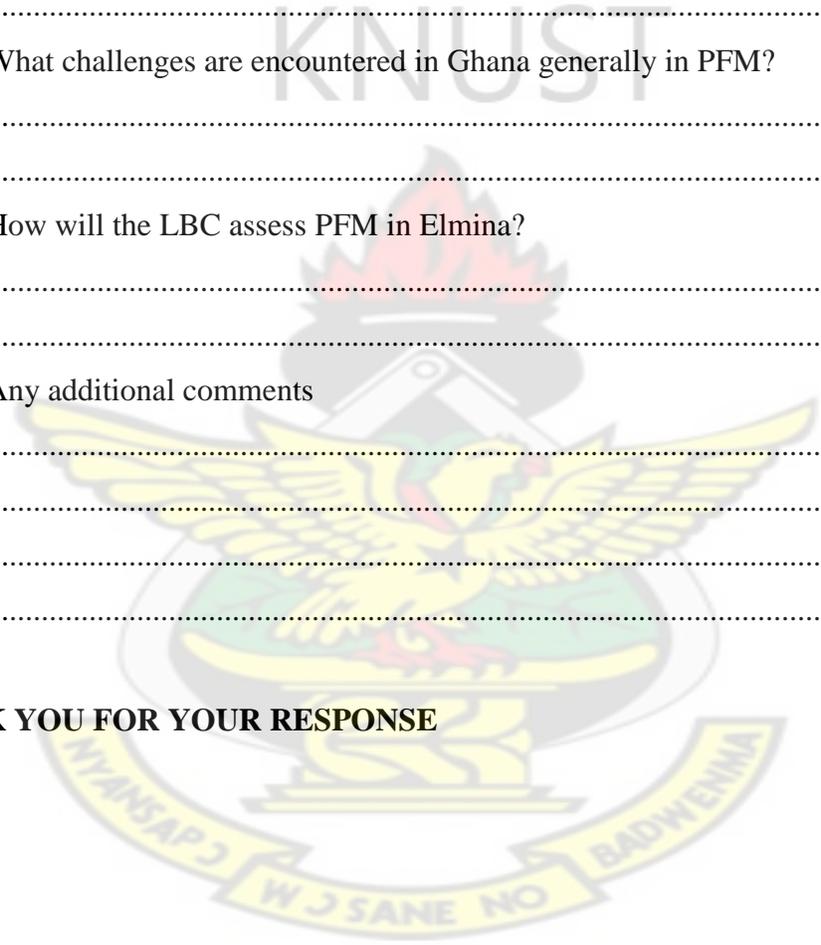
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**THANK YOU FOR YOUR RESPONSE**



**E. INTERVIEW GUIDE FOR PUMP ATTENDANTS**

**Premix Fuel Management in the Komenda-Edina-Eguafo-Abirem Municipality**

Dear Sir/Madam,

This interview guide is part of requirements for the award of an M.Phil degree in the Department of Planning of the Kwame Nkrumah University of Science and Technology. The aim is to assess the extent of contribution of premix fuel to community development. You would contribute immensely to the success of this work if you could take some few minutes of your time to respond to the following questions as objectively as possible. Any information given would be treated with utmost confidentiality and used exclusively for academic purposes.

**Section A – Level of participation in premix fuel management**

- 1. What role do you play in the management of premix fuel?

.....

- 2. Who are the other stakeholders in the management of premix fuel?

.....

- 3. How are the various stakeholders mentioned above involved in the management of the premix fuel?

Stakeholders	Involvement

- 4. Who determines the projects or programmes to be carried out with the money from premix fuel?

.....

- 5. At what level do you invite the fisher folk to join the management of the premix fuel?

.....

6. How and when do you communicate information to other stakeholders from the community level to the national level?

.....

7. How and when do stakeholders at the national level communicate information to you and other stakeholders at the community level?

.....

8. How often do you communicate with other stakeholders in PFM?

.....

9. What mechanisms have been put in place to ensure stakeholder participation in the implementation of PFM?

.....

10. How do these mechanisms work?

.....

11. Are the mechanisms working now?

.....

**Section B – Level of accountability in premix fuel**

12. What procedures are put in place to ensure accountability in PFM?

.....

13. How do these procedures work in practice?

.....

14. What role do you play in ensuring accountability in PFM?

.....

15. How do you interact with other stakeholders in PFM to ensure accountability?

.....

16. How do you perceive the level of accountability in premix fuel management?

[1] Poor      [2] Very poor      [3] Good      [4] Very good

Please, explain your answer

.....

17. What laws and regulations govern the implementation of the decentralised PFM policy?

.....

18. How do people and institutions flout these laws and regulations governing the implementation of the decentralised PFM policy?

.....

19. What do you do to people and institutions who flout the laws and regulations governing the implementation of the decentralised PFM policy?

.....

20. What has been or is being done to prevent such violations?

.....

**Section C – Contribution of decentralised premix fuel to infrastructural development**

21. Which infrastructure in the community came about as a result of PFM policy since 2004?

Year	Project	Cost (GH¢)	Location
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			

22. Who determines the projects or programmes to be carried out with the profits made from selling premix fuel?

.....

23. What is the distribution channel that premix fuel goes through from the refinery before it gets to the fisherman?

.....

24. Who are the actors involved at each stage of the distribution channel?

.....

25. What was the quantity of premix fuel per week before the enactment of the policy in 2001?

.....

26. What is the supply of premix fuel supplied per week after 2001?

.....

27. What are you doing to ensure constant supply of premix fuel for fishermen?

.....

28. What are the success stories that have been achieved in PFM since 2001?

.....

29. Are you satisfied with the way premix fuel is being managed under the policy?

[1] Yes

[2] No

Please, give reasons for your answer

.....

**Section D – Challenges associated with implementation of decentralised PFM policy**

30. What challenges do you face in the role you play in managing premix fuel?

.....

.....

31. What challenges do you face in supplying premix fuel?

.....

.....

32. What challenges do you face in undertaking developmental projects with proceeds from premix fuel?

.....

.....

33. Are there any other challenges that affect the effective implementation and success of the decentralised PFM policy? Please, describe them.

.....

.....

34. How do you think such challenges could be addressed?

.....

.....

.....

35. What are you already doing to address the challenges you face in PFM?

.....  
.....

36. What challenges are encountered in Ghana generally in PFM?

.....  
.....  
.....

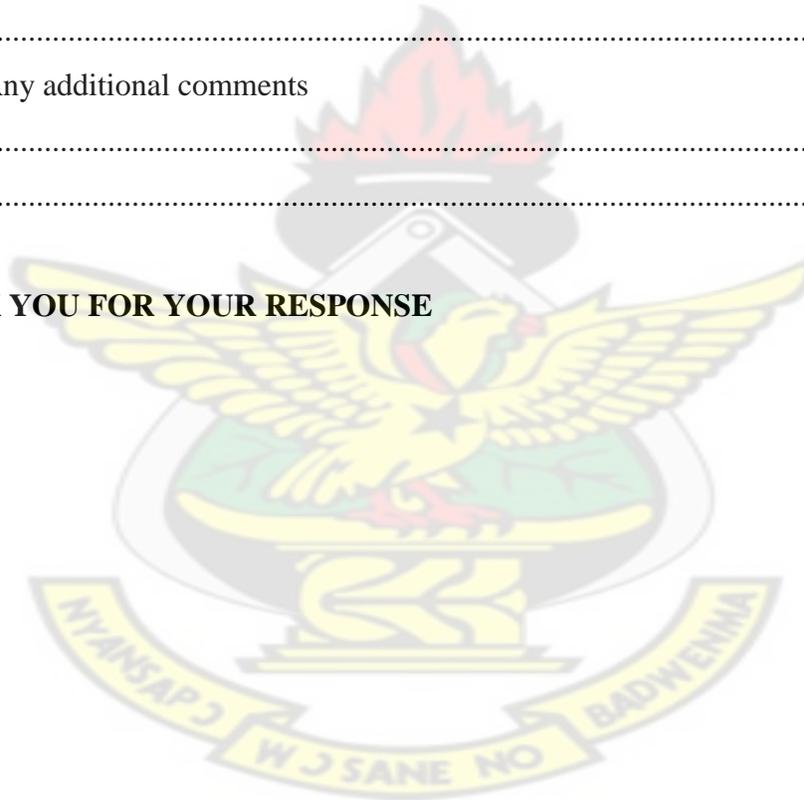
37. How will the LBC assess PFM in Elmina?

.....  
.....  
.....

38. Any additional comments

.....  
.....

**THANK YOU FOR YOUR RESPONSE**



**F. INTERVIEW SCHEDULE FOR FISHERMEN, FISHMONGERS AND CANOE OWNERS**

**Premix Fuel Management in the Komenda-Edina-Eguafo-Abirem Municipality**

**Section A: Background of respondents**

Dear Sir/Madam,

This interview is part of requirements for the award of an M.Phil degree in the Department of Planning at the Kwame Nkrumah University of Science and Technology. The aim is to assess the extent of contribution of premix fuel to community development. You would contribute immensely to the success of this work if you could take some few minutes of your time to respond to the following questions as objectively as possible. Any information given would be treated with utmost confidentiality and used exclusively for academic purposes.

- i. Community: .....
- ii. Landing beach area.....
- iii. Respondent ID number: .....

**Section A: Background characteristics of respondents**

- iv. Gender: [1] Male [2] Female
- v. Age: .....
- vi. Level of education: [1] None [2] Basic [3] SHS [4] Tertiary
- vii. Type of occupation: [1] Fishing [2] Fishmonger [3] Canoe Owner  
[4] Others (specify) .....

**Section B: Level of stakeholder participation in the management of premix fuel**

- 1. What role do you play in the management of premix fuel?  
.....  
.....
- 2. Who are the other stakeholders in the management of premix fuel?  
.....



12. How do they communicate with you?

.....

**Section C: Level of accountability in the management of premix fuel**

**12. Which activities in premix fuel management are delegated to you?**

Stakeholders	Delegated activity	Delegating Authority
Fishermen		
Fishmongers		
Canoe owners		

13. Do the leaders of premix fuel committees organise meetings to render account with you?

[1] Yes [2] No

14. How many times a year do the leaders render account and services to you?

[1] Daily [2] Weekly [3] Monthly

[4] Quarterly [5] Semi-annually [6] Annually

[7]Others.....

15. Are you invited to such meetings?

[1] Yes [2] No

16. Do you have the liberty to ask questions at the meetings?

[1] Yes [2] No

17. Are you able to demand the right thing to be done by leaders?

[1] Yes [2] No

18. Do you have any idea about the cost of the infrastructure?

[1] Yes [2] No

If yes, how did you hear about it?

.....

19. Do you have any idea about the profits from the sale of premix fuel?

[1] Yes [2] No [3] Do not Know

20. Does the cost of projects match up with profits made from sale of premix fuel?

[1] Yes [2] No [3] Do not Know

21. How do you perceive the level of accountability in premix fuel management?

[1] Poor [2] Very poor [3] Good [4] Very good

Please explain your answer

.....

22. Do you see your leaders to be accountable to you?

[1] Yes [2] No

Please explain your answer

.....

**Section D: Contribution of the decentralised PFM policy to infrastructural development**

23. What benefits do you derive from the decentralised PFM Policy?

{Satisfaction – [1] Yes [2] No}

Benefits	[1] Yes	Monetary value	Satisfied	Remarks
	[2] No		[1] Yes [2] No	
Regular supply of premix fuel				
Subsidised prices				
Better Living conditions				

24. Do you expect more benefits to be generated from the premix fuel?

[1] Yes [2] No

If yes, what other benefits do you expect from the premix fuel?

.....

25. Which infrastructural projects in the community came about as a result of the decentralised PFM policy since 2001?

Year	Project	Location
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		

26. Would you want the management of premix fuel to be left to private individuals?

[1] Yes [2] No

Please explain your answer

27. What was the supply of premix fuel per week before PFM policy in 2001?

28. What is the supply of premix fuel per week after PFM policy?

29. What quantity of premix fuel is needed a week for your activities?

30. Is supply of premix fuel regular?

[1] Yes

[2] No

31. Are you satisfied with the way premix fuel is being managed?

[1] Yes

[2] No

Please explain your answer

**Section E: Challenges associated with the implementation of the decentralised PFM policy**

32. What challenges do you face in the role you play in managing premix fuel?

33. Are there any other challenges that affect the effective implementation and success of the decentralised PFM policy? Please, describe them.

34. How do you think such challenges could be addressed?

35. What are you already doing to address the challenges you face in PFM?

36. What challenges are encountered in Ghana generally in PFM?

.....

.....

.....

37. How will you assess PFM in Elmina?

.....

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38. Any additional comments

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**THANK YOU FOR YOUR RESPONSE**

