THE IMPLEMENTATION OF GOVERNMENT POLICY ON CHILD SURVIVAL STRATEGIES IN ARDO-KOLA LOCAL GOVERNMENT AREA OF TARABA STATE, NIGERIA

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DECLARATION

I hereby declare that this dissertation titled "The Implementation of Government policy on Child Survival Strategies in Ardo-Kola Local Government area of Taraba State, Nigeria" is a product of my own research effort. It has not been presented or published anywhere by any person, institution or organization or used for any previous award for a degree or other qualification. All sources of information used have been duly acknowledged by means of references.

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APPROVAL

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CERTIFICATION

This dissertation "The Implementation of Government policy on Child Survival Strategies in Ardo-Kola Local Government area of Taraba State, Nigeria", by Zuwaira Bako Adamu meets the regulation governing the award of the Master of Science (M.sc) Degree in Sociology, of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge.

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DEDICATION

This work is dedicated to my darling husband, Col. U. M. Obere who gave me his total support and a life of hope without which this programme would not have come to fruition. My gallant officer Sir, thank you for your unflinching support.

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You cannot reposition yourself without the support, encouragement and commitment of those around you sharing a vision of who you are and where you are going (Jakes, 2007). It is only by the grace of God and through the contributions of those around me who know me and share my desire to aspire to greater heights that an endeavour of this magnitude can be achieved. I am indeed very grateful to my Supervisors, Dr. J. M. Hellandendu and Prof. A. J. Oluwabamide for their contribution in the writing of this thesis. Infact, they gave me their unstinting support throughout the period of the programme and their scholarly supervision, meticulousness and perseverance exposed me to the rudiments of academics and the challenges which prepared me to complete this thesis. Their approach to supervision no doubt encouraged me to accept the challenge. I cannot forget the role played by Prof. B. F. Okeshola and my then H.O.D. Dr. Y. K. Gandu. Profs Ma and Sir, I will forever remain indebted to you. Thank you so much.

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LIST OF ABREVIATIONS

ANC	Antenatal Care
ARI	Acute Respiratory Infection
BCG	Bacille Calmette Guerin
CSS	Child Survival Strategies
CPR	Contraceptive Prevalence Rate
DPT	Diphtheria, Pertussis and Tetanus
FMOH	Federal Ministry of Health
FMWA&YD	Federal Ministry of Women Affairs and Youth Development
FOS	Federal Office of Statistics
HSMB	Health Services Management Board
IMCI	Integrated Management of Childhood Illnesses
IMR	Infant Mortality Rate
ITNs	Insecticide Treated Nets
LBW	Low Birth Weight
LGA	Local Government Area
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
NDHS	National Demographic and Health Survey
NGOs	Non-Governmental Organisations
NHMIs	National Health Management Information System
NPI	National Programme on Immunisation
RH	Reproductive Health
RI	Routine Immunization
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United State Agency for International Development
U5	Under-Five
U5MR	Under-5 Mortality Rate
VHWs	Village Health Workers
VPD	Vaccine Preventable Diseases
WHO	World Health Organization

ABSTRACT

The first five years of life are the most crucial to the physical and intellectual development of children and determine their potentials to learn and thrive for a lifetime. The issue of child survival is a global concern. The common causes of child morbidity and mortality are malaria, pneumonia, diarrheal diseases, preterm births complications and birth asphyxia which are preventable or treatable. This is inspite of various programmes and policies of governments aimed at addressing the problem. Studies exist on child survival strategies in Nigeria, but little or not much has been done on the factors influencing the implementation of Government policy on child survival strategies in rural areas such as Ardo Kola community. This study therefore examined the implementation government policy on child survival strategies in Ardo-Kola Local Government Area of Taraba State, Nigeria. The study examined the implementation of Government Policies on child survival strategies in Ardo-Kola LGA of Taraba State; ascertained the factors influencing the implementation of Government Policy on child survival strategies in Ardo - Kola LGA; determined the influence of mothers' educational background on child survival strategies in the study area and also examined possible ways of improving child health in Ardo-Kola Local Government Area. This study employed Chen and Mosley Model of child survival as theoretical framework. The research was based on descriptive survey. The study used both the probability and non-probability sampling methods in obtaining its primary data. Questionnaires were administered to a sample of 235 mothers. Purposive sampling was employed where 8 in-depth interviews were conducted for key informants in the Four (4) selected political wards in Ardo-Kola Local Government Area of Taraba State. The data collected were analyzed using frequency distribution and percentages. The findings of the study showed that majority of the respondents (82.2%) were within the age bracket of 20-34years, and 93% were married. Additionally, 79% had post-primary education, 74% were self-employed, 12.6% civil servant and 9.7% were unemployed. However the study revealed that only 15.1% of the women sampled make maternal health decisions alone, 21.9% have the decisions made by their husbands, 60.1% decide jointly with their husbands and 2.9% indicated that decisions about maternal health were made by other members of their family. Their mean monthly income was ₦8, 520. Immunization was mentioned as a government policy on child survival strategies. A large proportion of the women from Ardo-Kola ward (36.6%) said it was effective, while a good number of the women in Sunkani Ward (40.0%), Lamido Borno ward (44.2%) and Zango Kombi ward (43.3%) did not see immunization as being effective. The large proportion of mothers (45.1%) said that basic health services like vaccination and community outreaches are factors that influenced child survival strategies and this was found to be inadequate in Ardo-Kola ward (45.5%); while a higher proportion of the respondents said that it is very inadequate in Sunkani ward (64.0%), Lamido Borno ward (46.5%) and Zango Kombi ward (45.0%). Most women from Ardo-Kola ward (51.2%), Zango Kombi ward (65.0%), Sunkani Ward (46.0%) and Lamido Borno ward (81.4%) said government funding, policies and implementation were inadequate and a major factor that influenced child survival strategies. From the findings of the study, it was deduced that government funding, policies and implementation were inadequate and that has affected the purpose of formulating and implementing some of these government policies. This study recommended among others that, there is urgent need for more adequate funding of health programmes; thus, funds can be rechanneled from some areas that do not benefit the generality of the citizens of Ardo Kola to support health programme implementation.

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

It has been estimated that more than ten million children in developing countries die of preventable and curable diseases before their fifth birthday (WHO, 2000). The high mortality among children tends to be a global public health problem and a threat to child survival, especially in the developing countries, including Nigeria (Onwunaka e'tal, 2015). Nigeria's estimated population of 170 million in 2006 makes it the largest country in sub-Saharan Africa and the tenth most populated country worldwide. Nigeria is largely rural, where 63.7 percent populations live. Currently, about 45 percent of Nigeria's total population is less than 15 years old, with about 20 percent (24 million) under five (USAID, 2006). The sheer numbers involved, therefore, demand that child survival issues be investigated which informed this study.

According to the National Bureau of Statistics Report (2013), 70% of Nigerians are poor with people living in rural areas accounting for higher percentage, thus, limiting their access to adequate nutrition, quality health care, and other basic social services, especially among the women and children. Less than one-half of the population has access to safe water (40% in rural areas) and only 41 percent have access to adequate sanitation (32% in rural areas). These facts adversely affect the survival of children and the reproductive health (RH) status of women in general. Adegoke (2015) observed that, good nutritional behaviour before, during and after pregnancy means better health for the mother, less likelihood of complications and safe delivery. More so, the health and well-being of the baby during the early months of life is protected. There is a synergy between poverty, ignorance, poor health, malnutrition, and reduced child survival, which is worsened by social exclusion and political marginalisation. A child born to a financially deprived and less educated family is at risk of dying perinatally or within the first month of life, since the mother was probably poorly

nourished during pregnancy, had little or no ANC, and is unlikely to have delivered at a health facility. On surviving the first month of life, the child is then exposed to increased risks of illnesses, such as malaria and diarrhoea, due to poor living conditions, limited access to safe water and inadequate sanitation, malnutrition from household food insecurity, or ignorance about good child feeding practices (Nte, 2012).

According to Nte (2012), a child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illnesses and the child's chances of survival. Children who weigh less than 2.5 kilograms at birth or children reported to be "very small" or "smaller than average" have a higher than average risk of early childhood death (NDHS, 2013). Worldwide, 15.5% of all births, more than 20 million babies are born as Low Birth Weight (LBW) babies. More than 95% of these LBW are born in developing countries. Low Birth Weight is the key determinant of neonatal mortality, morbidity, subsequent growth and developmental retardation and also early onset of adulthood diseases (Singh, Sinha, Khanna and Jain, 2012). Child survival in Nigeria is threatened by nutritional deficiencies and illnesses, particularly malaria, diarrhoeal diseases, acute respiratory infections (ARI), and vaccine preventable diseases (VPD), which account for the majority of morbidity and mortality in childhood (Policy Project Nigeria, 2002).

The National Policy on Population for Sustainable Development has guide lines, programme policy and implementation which are set to ensure that child mortality rate is reduced to 35 deaths per 1,000 live births by 2015 and maternal mortality ratio to 75 deaths per 100,000 live births by 2015 (National Population Commission, 2004). USAID (2006) noted that, Nigeria has in place several policies and plans that affect the survival of children and their mothers. Some of these have been adopted and are being implemented, whereas some are drafts or under review. These documents include the National Health Policy of 1988 (revised in 1996), Maternal and Child Health (MCH) Policy (1994), National Immunisation

Policy and Standards of Practice (1996), which is currently being revised. Others include the National Acute Respiratory Infections Programme: National Policy and Plan of Actions, 1991–1995; Breastfeeding Policy (1999); Essential Drug Policy; National Nutrition Policy, compiled in 1995, adopted in 1998, and recently published in 2001; National Reproductive Health Policy (2001); and National Policy on Population and Sustainable Development (2001 draft). In addition, the Water Supply and Sanitation Policy was adopted in 2000.

In addition, the Policy Project Nigeria (2002) observed that, the government adopted the policy on Fortification of Food with Vitamin A; National Programme of Action for the Survival, Protection, and Development of the Nigerian Child (1992); and National Policy on Women (2000), which strives to enhance the status of women, and the MCH component of the National Primary Health Care Development Programme, aimed at improving the health status of women and children. The Federal Ministry of Health (FMOH) also strongly supports and is implementing all aspects of the RBM Initiative backed by the Guidelines for Malaria Control in Nigeria (1989), National Malaria Control Policy (1997), National Antimalarial Policy (2001), and the Strategic Plan for Rolling Back Malaria in Nigeria, 2001–2010 (2000).

Analyses of several child morbidity and mortality data from community and facility based surveys in developed and developing nations indicate that the under-fives constitute the most at-risk group being the majority among the ill and dead children with newborns and post-neonatal infants being most represented (Jegede, 2010). It is therefore sensible to focus on this group if development targets are to be attained. Consequently the Integrated Management of Childhood Illness (IMCI) which seeks to improve child survival targets disease conditions and interventions that impact most on this age group. Specifically, their immature immune system cannot immediately produce antibodies and other protective factors to fight the common infections in such environments. Additionally, small babies who are low weight at birth (weight less than 2500grammes) have low body fat and this increases their

susceptibility to death from cold hence the need for newborn thermal care (Adegoke, 2015). The study further stressed that, it is also important in a setting like Nigeria where 12% newborns weigh less than 2500grammes and cannot keep warm. Furthermore, their immature digestive system cannot absorb the usual adult foods- no teeth for chewing and the skill for swallowing semisolids and solids develops with time hence the need for appropriate Infant and Young Child Feeding practices to protect them from malnutrition and related nutritional deficiencies and diseases. The immature neurological and other systems cannot inform them about the risks in the environment and the methods to avoid them. Additionally, they can neither take themselves for preventive health interventions nor give histories of their illnesses for appropriate therapeutic interventions to be applied. They therefore depend on adults (caregivers and health workers) for their protection, feeding, health and other cares. If these are neglected, delayed or provided inappropriately, their survival is threatened.

Child survival strategy is an essential component of public health which was developed by WHO, UNICEF and World Bank in 2006 to address the issue of high mortality rate of under-five in the African region. The strategy aims to scale up a defined set of effective child survival interventions, including antenatal care, newborn care, appropriate infant feeding, immunization, management of common childhood illnesses and use of insecticide treated nets (ITNs) (Habimana et al., 2010, in Akanbi and Anyarsor, 2014). Under-five mortality rate in the African Region was estimated at 145/1,000 live births in 2007, these death were mainly of preventable or treatable conditions (Neill et al., 2012). Furthermore, World Health Organization (1995) also identified a number of health problems that need special attention in under-five children, and childhood malnutrition is one of those health problems. In this regard child nutrition has been given high priority in terms of its management and control.

Globally, the immediate causes of under-five deaths have remained infections (64%), malnutrition (down from 54% to about one third 33%) and newborn deaths (percentage contribution, now increasing) both from hospital and community level data in developed and developing countries (Nte, 2012). The distant and intermediate determinants of under-five (U5) deaths may explain their greater risks in resource-limited settings compared to their counterparts in industrialized nations. The 2010 analysis of the immediate causes of U5 deaths highlighted the decline in the total number of deaths from 12 million in 1990 to 7.6 million in 2010 but noted that the major killers remained pneumonia (18%), diarrhoeal diseases (15%), preterm birth complications (12%) and birth asphyxia (9%) and that despite these reductions, pneumonia and diarrhea still cause more than two million deaths a year that could have been prevented by available preventive and prompt treatment measures (Jegede, 2010). Malaria was noted to still be a major killer in Nigeria, contributing about 16% of under-five deaths (Kehinde, 2014).

Child survival in Nigeria is threatened by nutritional deficiencies and other diseases, particularly malaria, diarrhoeal diseases, acute respiratory infections (ARI), and vaccine preventable diseases (VPD), which account for the majority of morbidity and mortality in childhood (Policy Project Nigeria, 2002). According to National Bureau of Statistics report (2013), 70% of Nigerians are poor with people living in rural areas accounting for higher percentage, thus, limiting their access to adequate nutrition, quality health care, and other basic social services, especially among vulnerable population of women and children, than one-half of who have access to safe water (40% in rural areas) and only 41 percent have access to adequate sanitation (32% in rural areas).

Nigeria's National Health Policy launched in 1989 and revised in 1996, has a goal of attaining a level of health that will enable all Nigerians to achieve socially and economically productive lives with a national health system that is based on Primary Health Care (PHC).

According to the Ministry of Health and Family Welfare (2008), by 1990, only 17 per cent of the population had access to modern health facilities; PHC facilities are supposed to provide basic preventive and health promotion services that include immunization, health education, and the promotion of adequate nutrition as well as the management of malaria, diarrhea, ARI, and other common diseases. PHC also provides Antenatal Care, Family Planning services, and basic surgical services. In spite of the laudable goal of its health policies, Nigeria continues to spend below the WHO-stipulated 5 per cent (less than $5 per capita) of its annual budget on health care (Centre for Disease Control, 2002).

The challenges facing the health of Nigerian children are enormous, ironically amidst voluminous mineral and human resources the country is endowed with. In terms of health infrastructure, Nigeria has about 18,258 PHC facilities, 3,275 secondary facilities, and 29 tertiary facilities. Although this number seems adequate, the 1999 NDHS reported that 9 per cent of households surveyed had no access to any modern health facility, 34 per cent had no private doctor, and 24 per cent had no access to a pharmacy (Federal Ministry of Women Affairs and Youth Development, 2000). In addition, timely access to secondary and tertiary services is more problematic than facilities on the ground may suggest. The health system has been plagued by problems of service quality, including inadequate skills, insufficient number of skilled workers, decaying infrastructure, insufficient equipment, as well as an acute drug shortage. Other factors include financial barrier to access due to poorly designed cost recovery mechanisms; lack of effective community participation or real decentralization; poor road networks; poor maternal knowledge; weak referral systems among the primary, secondary, and tertiary care; overlapping vertical programmes; reduced national funding; and weak information systems. However, the majority of the population regards public health services poorly (Federal Ministry of Women Affairs and Youth Development, 2000).

As a result, many States in Nigeria began to enact laws and the introduction of viable programmes for addressing these health challenges, particularly as it affects the children. One of these States is Taraba in the North-Eastern geo-political zone. Taraba State has a population of 2,300,736 (2006 NPC). Males constitute 52.2% of the population. Approximately 80 per cent of the population lives in the rural areas. Women of reproductive age (13 to 40) constitute 21.9% of the population and under-five children 21% (Taraba State Government, 2010). Health care services are provided on a 2% to 5% of the annual health budgets. The Taraba State Ministry of Health (SMOH) formulates policies for health services delivery and implementation with the Health Services Management Board (HSMB) as well as Local Government Authorities (LGAs). Each of the 16 LGAs is responsible for managing the Primary Health Care (PHC) system, including community health activities such as immunization and health education; hygiene and provision of basic outpatient services at its maternities, among others. The State provides a supportive linkage to the LGAs through management of referrals from the PHC level, to the secondary level (Taraba State Government, 2010).

From the foregoing, the Taraba State Children's law No. 4 of 2005 establishes basis for the implementation of child survival strategies across socio-economic groups. In the same way, the law states that all efforts at providing an enabling environment for the survival and development of a child are vested with the State Ministry of Health and its agencies. However, some of the challenges of achieving the stated goals among others include, inadequate budgetary allocation for Health in line with WHO requirement, inefficient integration and linkages in Health Services, non-availability of modern medical equipment, difficulty in reaching riverine communities and remote areas, non-implementation of existing policies and Poor condition of service for health services personnel, other threats are exodus of skilled medical personnel, inconsistent Government policies, dwindling State

Government revenue, activities of unskilled and unlicensed health practitioners, prevalence of fake and adulterated drugs and preponderance of unregulated traditional medical practitioners (Taraba State Government, 2010).

This State-led intervention incorporated all the Local Government Areas since majority of the people are rural dwellers. In short, the incidence of child mortality is largely common in these rural areas where the level of socio-economic status is very low. For instance, the people live in abject poverty with little or no primary health facilities to cater for the sick. One of the Local Government Areas grossly affected by these challenges is Ardo-Kola, in which this study is geared towards understanding the problem with the view to assessing how these government-led strategies have been implemented.

Several researches conducted on child survival have always focused on environmental impact (Khoushabi and Saraswathi, 2010; Ramakrishnan, 2004). Saloua et al., (2005), in their various study conducted on pregnant women with eating disorders said that such women have a greater risk of delivering infants with low birth weights and small for gestational age infants. These are due to cultural factors like food habits, customs, beliefs, traditions and attitudes. There also exist socio economic factors like poverty, literacy level, ignorance, lack of knowledge regarding the utilization of health facilities (Ogungba, 2006). Hence, this study examined the implementation of child survival strategies in Ardo-Kola Local Government Area of Taraba State, Nigeria.

1.2 Statement of the Research Problem

The most common cause of under-five deaths are pneumonia, diarrhea, malaria and measles. More than a third of under-five deaths globally can be attributed indirectly to malnutrition according to the Countdown to 2015 Decade Report (Ministry of Health and Family Welfare, 2008). Poor maternal nutrition also compromises children's survival chances. Birth asphyxia and pre-term birth complications are among the leading causes of

prinatal deaths (Black et. al, 2010). While these conditions are preventable or treatable, other factors such as poverty, poor knowledge, distant care center, inadequate facilities and poor maternal education are stacked against poor children surviving from these diseases.

Access to healthcare, clean water, sanitation and mothers education is significant determinants of child survival but is scarce in many places in Ardo Kola. More importantly, access to the relevant interventions is largely unequal, which drives unequal survival chances. While more than 80% of the richest households have access to a healthcare facility for delivery, just over10% of the poorest households have access to the health care facility (NDHS, 2013).

It was reported that about 70% of the world's Under five deaths in 2010 occurred in only 15 countries with about 82% of them in Sub Sahara Africa (Adegoke, 2015). In addition to this international gap in child deaths, Nigeria Demographic and Health Survey, 2008 reported regional gaps in under five mortality with the rates ranging from 89 deaths per 1,000 live births in South West to 222 deaths per 1,000 live births in North East and the North West also had the highest child death indices compared with other zones in Nigeria. It is important to note that, more deaths occur in rural areas and urban slums (Nte, 2012). The Nigerian Demographic and Health Survey (NDHS) 2008 also showed this disparity between rural and urban areas with rural areas having poorer health indices than urban ones-e.g. under five mortality rate 121/1,000 live births (urban) and 191/1,000 live births(rural).

Studies have shown that the children of the poor are more likely to die than those of the rich for many reasons including increased exposure to risks of disease through inadequate water and sanitation, indoor air pollution, crowding, poor housing conditions, and high exposure to disease vectors. They are also more likely to have lower resistance to infectious diseases; malnutrition caused by diets deficient in one or more essential micronutrients (e.g. vitamin A, iron, zinc); low birth weight as a result of poor maternal nutrition, infections

during pregnancy, short birth intervals; and to have reoccurring disease episodes. Poverty thus increases exposure and reduces resistance to diseases, a synergy that contributes to child morbidity and makes poor children more likely to become sick and die.

In most hospitals in Taraba State, especially in rural communities, including Ardo-Kola, all modern public health facilities are inadequate and in states of disrepair. The facilities are also understaffed, while poor transportation and communication add to the difficulties of delivering child care services. This is evident as data collected during the pilot visit showed that in Ardo–Kola, there is only one (1) medical doctor, one (1) pharmacist, two (2) laboratory technicians, thirty (30) nurses including midwives and only nine (9) PHC workers provided for by the LGA. This is grossly inadequate compared to the clients an average of 1:400 per day in the area. Government funding for child health care is inadequate. According to the Taraba State Government (2010) report, 2% to 5% of annual budgets is allocated to health across all the LGAs. The development and improvement of child health care has lagged behind the economic development in Taraba state. The allocation of health resources is not adequate and equitable. Most of the resources are concentrated in urban areas that have a smaller population than rural areas (Nte, 2012).

According to Nte (2012), the low coverage of interventions, factors related to service delivery and its quality and several obstacles to successful programme implementation are worse in Nigeria. Furthermore, the politicization of the health and sectors, misapplication and poor utilization of resources, and insecurity arising from the incessant communal clash pose additional challenges to child survival in Taraba State. Child survival in Nigeria is threatened by nutritional deficiencies and illnesses, particularly malaria, diarrhoeal diseases, acute respiratory infections (ARI), and vaccine preventable diseases (VPD), which account for the majority of morbidity and mortality in childhood. Other threats include high maternal morbidity and mortality. There is the need for an enabling environment through well-

articulated policies, projects, and programmes to ensure wholesome development of Nigerian children and enhance the quality of life.

The NDHS (2008) demonstrated that higher levels of maternal educational attainment were generally associated with lower mortality rates-U5MR for children of mothers with no education 209 deaths/1000 live births compared to 68 deaths/1000 live births for children of mothers who had post-secondary education. This may be partly responsible for the zonal disparities in child mortality indices in Nigeria. In Ardo-Kola, there are a deeply rooted cultural beliefs and attitudes that often result in harmful practices for children and women. These include food taboos, gender-related practices such as early marriage and low levels of female education, and the attendant risks of maternal morbidity and mortality. Also, the inability of women to exercise their reproductive rights due to culturally based limitations brings about higher levels of maternal, infant, and child mortality. Some cultural factors lead to poor childcare practices in Ardo-Kola; for instance, widespread false beliefs about the aetiology of some disease such as HIV/AIDS are being attributed to evil spirits. The use of traditional medicine as the first line of treatment for child illnesses is therefore common. Child survival is affected by multiple factors including remote/distant contributors to child deaths to intermediate and proximal/immediate causes that can be largely addressed through the health sector. The survival of children requires the implementation of strategies that can reduce the impact of these factors. It is against this background that, this study sought answers to the following research questions:

1.3 Research Questions

The following research questions are posed to direct the study:

1. What are the Government Policies on child survival strategies known by mothers in Ardo-Kola LGA of Taraba State?

2. What are the factors influencing the implementation of Government Policy on child survival strategies in Ardo - Kola LGA?
3. What is the influence of mothers' educational background on the number of child survival strategies in the study area?
4. What possible ways can child health in Ardo-Kola Local Government Area be improved?

1.4 Aim and Objectives of the Study

The broad objective of the study was an examination of the implementation of child survival strategies in Ardo-Kola Local Government Area of Taraba State, Nigeria. However, the specific objectives are:

1. To examine Government Policies on child survival strategies known to mothers in Ardo-Kola LGA of Taraba State.
2. To ascertain the factors influencing the implementation of Government Policy on child survival strategies in Ardo - Kola LGA.
3. To determine the influence of mothers' educational background on the implementation of child survival strategies in the study area.
4. To examine possible ways of improving child health in Ardo-Kola Local Government Area.

1.5 Significance of the Study

The significance of the study is encompassing in terms of its sociological findings, its relevance to policy, intervention strategies (behavioural) and methodological contributions. Various studies conducted in bio-medical and behavioural sciences have placed emphasis on the role and importance of child survival. There exist dearths of knowledge documented from a holistic view on the socio-cultural factors affecting the implementation of the child survival

strategies. In this light, the implementation of child survival in Ardo-Kola Local Government Area of Taraba State was investigated and documented.

The methodological contribution of the study was the development and administration of a measurement scale on the implementation of child survival strategies. Also, the verification of the theories and conceptual framework that were utilized to explain the phenomenon aided in contributing to the understanding of the interplay that exist between the variables (independent and dependent). Findings of the study would contribute to understanding frameworks that focus attention on providing adequate intervention plans and relevant policies in the improvement of maternal health and reduction of child mortalities. The gaps in this study if any would also aid in further research on the issues of child survival strategies. It will therefore add to existing stock of knowledge on child survival strategies and will be of benefits to other researchers who might wish to carry out similar studies on the subject matter, educationists, health intervention bodies like the ministries of health, primary health care providers, state maternity hospitals, policy makers, etc. This work will also be useful to the society at large in terms of educating even the unmarried women on the relevance of child survival strategies to the survival of their children in future.

1.6 Scope of the Study

The issue of child survival strategies and their implementations in terms of policy cut across developed and developing societies. However, this study was limited to Ardo-kola Local Government Area of Taraba State specifically in the areas of child care and survival. The study focused its attention mainly on mothers or married couples in the selected wards (See methodology section).

1.7 Operational Definition of Terms

Behaviour: Is an individual observable response in a given situation with respect to a given target.

Child: Every human being below the age of eighteen years unless under the law applicable to the child.

Child Survival: This refers to the survival of children aged 0-5 years, commonly called "Under-fives".

Child Survival Programmes: These are programmes that are geared towards addressing the major causes of under-five mortality, especially diarrhoea, Acute Respiratory Infection (ARI) and malaria with an integrated set of interventions related to child health, nutrition, water and sanitation.

Malnutrition: Refers to both under nutrition (chronic and acute malnutrition and macronutrient deficiencies) and over nutrition (obesity and overweight).

Maternal Death or Maternal Mortality or **Obstetrical Death:** Is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

Nutritional Behaviour: Within the context of this study is what a woman does or did not do which is in response to her food intake, health status, the environmental hygiene, and access to nutritional information during her gestation period.

Postpartum Woman: Is someone who has a birth delivery with the duration of postpartum being at the time of delivery and six weeks after delivery.

CHAPTER TWO
LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter reviewed relevant literature in accordance to the stated objectives of the study so as to bring out the gaps in previous studies. Thus, the reviewed literature covered nature and pattern of the implementation of child survival strategies, factors influencing the implementation of child survival strategies and the influence of mother's educational background on the knowledge and practices of child survival strategies. Additionally, Mosley and Chen Model of Child Survival were utilized to provide theoretical orientation to the study.

2.2 Child Survival in Nigeria

Child Survival Strategies (CSS) is defined as steps taken for children aged 0-3 years by individuals and communities to reduce risk, duration or severity of an adverse health condition that detrimentally affects the survival of infants and children (USAID, 2002). Child survival strategies entail well-articulated measures to prevent the major killer diseases in children under 5 years of age. These measures include: Maternal and newborn care, vitamin A and micronutrient supplements, exclusive breastfeeding and appropriate complementary feeding, antibiotics, prevention and treatment of diarrhoea; safe water; hygiene promotion; and oral rehydration therapy. Others include immunization, growth monitoring, improved infant and young child feeding practices, prevention and treatment of malaria; treated mosquito net; intermittent preventive treatment for malaria in pregnancy; and artemisinin-combination therapies, Community-based management of acute malnutrition (Sanusi and Gbadamosi, 2009). The diseases against which the aforementioned are taken are Newborn infections and birth complications, pneumonia and acute respiratory infections, diarrheal diseases, malaria, measles, and under nutrition. The adoption of the strategies is made through delivery of quality Community-Centered Approaches such as social and behavior

change communication and community case management and Health Facility Services which include outreach services, integrated management of childhood illnesses, and supportive supervision (Concern Worldwide, 2012).

According to the United States Agency for International Development (USAID, 2000), the first five years of life are the most crucial to the physical and intellectual development of children and can determine their potential to learn and thrive for a lifetime. Similarly, UNICEF (2001) observed that, infant and child mortality rates are exceedingly high in Nigeria as it ranks 15th highest in the world among countries with high under-five mortality. It further stated that every year, over one million Nigerian children die before their fifth birthday, a figure that represents about 10 per cent of the global total; over a quarter of these are newborns dying within their first month of life. Furthermore, maternal deaths, still births and newborn deaths are strongly linked with delay in access to medical care (Nigerian Academy of Science, 2009).

The causes of child deaths, e.g. malnutrition, are multisectoral; and, as was proposed by the UNICEF's (2001) conceptual framework on the causes of malnutrition developed in 1990, the causes include food, health and caring practices. The causes are also classified as immediate (individual level), underlying (household or family level) and basic (societal level), whereby factors at one level influence other levels. This framework is used, at national, district and local levels, to help plan effective actions to improve nutrition and, in addition to guiding the assessment and analysis of the causes of the nutrition problems it helps in identifying the most appropriate mixture of actions for managing the situation. The use of such frameworks for other causes and determinants of under-five deaths can lead to the application of appropriate interventions as was proposed by the Lancet Series on Child Survival which classified the determinants of under-five deaths as operating at the distant/remote level (socioeconomic factors, such as income, social status, and education),

which work through an intermediate level of environmental and behavioural risk factors and these in turn lead to the proximal causes of death (nearer in time to the terminal event), such as under-nutrition, infectious diseases, and injury. The series additionally defined the proximal/proximate/immediate cause of a child's death as the "disease or injury which initiated the train of morbid events leading directly to death" (Nte, 2012).

Survival of infants and children remains one of the most important issues in the developing world. Every year 15 million children below the age of five years die in the developing countries. The causes and determinants of infant and child mortality have been well studied and they range from biological to socio-economic variables. Efforts have been directed to enhance child survival for several decades and though the infant and child mortality rates have been decreasing, they still remain at unacceptably high levels, in the developing countries. Dutt and Srinvasa (1997) noted that, twenty to twenty-five per cent of the children born in developing countries die before their fifth birthday. This figure is very high when compared to that in the developed countries where only about 2% of the children die before the age of five years.

2.3 Nature and Pattern of the Implementation of Child Survival Strategies

The 20th century witnessed a dramatic decline in under-five mortality in almost all countries of the world, regardless of initial levels, socio-economic circumstances and development strategies. In Africa, the decline in childhood mortality has been slow despite broad approaches toward improving child health (WHO, 2005). Although, approximately 11 million infants and children under five years of age die each year, with large variations across regions and countries in the developing world, mortality rates among children under five years in African countries are higher when compared with other developing countries. According to UNICEF (2015), worldwide, 79 per cent of children are living in the countryside. The report highlighted that Children in rural areas are at disadvantage compared

to those who live in urban areas. The gap can be dramatic even in lower-middle-income countries and nearly three quarters (or around 1.8 billion) of the 2.5 billion people around the world who still have no access to improved sanitation live in rural areas.

The rates of infant, child and under-five mortality in Nigeria (100,112 and 201 respectively) fall short of the World summit for children national goal of reducing infant mortality rate to 50/60 per 1000 and the under-five mortality rate to 70/80 per 1000 (NPC, 2004). The reduction of the child mortality rate is one of the Eight-Millennium Development Goals. The target of this goal is to reduce under-five mortality rate by two thirds between 1990 and 2015 (Policy Project, 2002).

The interventions identified were preventive (reducing the exposure to the infection or condition or reducing the likelihood of exposure that leads to disease) or therapeutic (treating the condition to reduce its likelihood of causing death). These preventive and therapeutic interventions were noted not to require the development of elaborate or expensive new technologies for implementation but were said to have been successfully implemented, even in some of the poorest countries. According to Nte (2012), the Lancet Series classified the interventions, based on the evidences of their effectiveness, as *Level 1*—sufficient evidence of effect existed for their effectiveness in reducing cause-specific mortality among children younger than 5 years in developing countries. *Level 2*—limited evidence of effect but some data showed that they had possible positive effects. The evidences were conflicting and low-income countries were poorly represented in the data. *Level 3*—inadequate evidence of effect as available data could not confirm their impact on under-5 mortality because of major qualitative or quantitative limitations. The preventive and therapeutic interventions as identified by UNICEF (2006), include the following:

(i) Preventive interventions of greatest potential impact:

- Continued breastfeeding through the first year of life;

- Insecticide-treated bed nets for malaria;
- Micronutrient supplements (vitamin A, zinc).
- Complementary feeding;
- Immunization (especially Tb, measles and tetanus) and neonatal care (clean delivery and newborn temperature management);
- Sanitation (clean water, waste disposal);
- Prevent mother-to-child transmission of HIV in countries with a high prevalence of HIV through administration of an antiretroviral drug.

(ii) Therapeutic interventions of greatest impact:

- Oral rehydration therapy for diarrhoea;
- Antibiotics for neonatal sepsis, pneumonia and dysentery;
- Anti-malarial drug treatment;
- Zinc therapy for diarrhoea

Nigeria has adopted and implemented a number of major global initiatives affecting children such as the Safe Motherhood Initiatives and its follow-up Making Pregnancy Safer, Baby-Friendly Hospital Initiatives (BFHI) among others. In spite of these initiatives and programmes, the under-five mortality rate is still high (Policy Project, 2002).

The Village Health Workers (VHW) programme is a community based initiative introduced to provide basic maternal and child health skills through locally trained community members. As reported in the Child Situation Analysis of 2006, the VHW programme has not significantly improved. No district has reached the target of one VHW per 100 households. The bulk of the VHW, who are mainly former Village Community Workers, are in the rural communal areas, others in farming areas. In the district visited by UNICEF, Farm Health Workers are the least supported due to their remote location and poorly developed road networks. Currently, UNICEF supports the VHW programme in 11

LGAs namely; Ardo-Kola, Ibi, Jalingo, Karim Lamido, Lau, Takum, Wukari, Bali, Donga, Kurmi and Gashaka (UNICEF, 2009). In some of the LGAs, VHWs are supported by some NGOs, but this was not harmonized throughout the state and which affected the sustainability of the programme.

Furthermore, the situation around drugs, equipment and essential supplies remains dire. According to the Ministry of Health and Child Welfare (2007), the common challenges include: low capacity of surgical and laboratory services, problems with maintenance of available equipment and obsolescence of some, severe shortages of blood and blood products at district hospital level, autoclave machines and oxygen cylinders either absent or non-functional resulting in increased numbers of referrals requiring Caesarean sections, and neonatal units in central and districts hospitals without functional resuscitation equipment and incubators. Referral systems and community outreach programmes are being severely compromised by lack of transportation. Ambulance services are severely compromised from district to central hospital. Fixed communication equipment such as telephones and radio services are significantly limited. The lack of fixed telephones has affected electronic mail access through the Health net system which had been established earlier. Other challenges faced by community in accessing health services including: distance to the clinic; some mothers are walking 30 km to the nearest clinic, financial barriers such as user fees and transport costs, shortages of health commodities such as vaccines and drugs and acute shortage of human resources.

2.3 Factors Influencing the Implementation of Child Survival Strategies

In spite of significant global achievements in the areas of policy, strategy and plan development; capacity building; partnerships and communication strategies; operations research, documentation and monitoring and evaluation; child survival in Nigeria, has been affected by a number of factors which have continued to contribute to their high U5 deaths.

Known interventions that can reduce U5 deaths and improve their survival exist but the children have continued to die because the coverage with most interventions is less than 100%. It has been suggested that if all the world's children were covered by available effective interventions, the risk of death in childhood would fall to about one-third of the current level. These interventions could eliminate 88% diarrhoeal deaths, 65% pneumonia deaths, 91% malaria deaths and 55% (1.7 million) neonatal deaths. Indeed simply ensuring that pregnant women received tetanus immunization would save 180,000 neonates each year (Jegede, 2010). The situation is poorer in Nigeria where the coverage rates are lower as a result of inequities in access to care due to place of residence, maternal education/age, family's wealth, and other socio-cultural factors.

In 2000, as part of the Millennium Development Goals for health, nations pledged to ensure a two-third reduction in child mortality by 2015, from the base year 1990 (UN, 2001). To achieve these goals, understanding of determinants of under-five mortality and implementing appropriate intervention is expected from all nations of the world. In depicting the determinants of child mortality using socio-economic determining factors such as income, social status, education and maternal factors like (age parity, birth order etc), and as well as environmental, nutritional, injury and behavioral factors are highlighted (Mosley and Chen, 1984). An in-depth review of factors influencing child survival strategies will provide a base line of our discussion. Amare, Fasil and Belaineh (2007) posited that the major causes of death in under-five children are pneumonia, malaria, diarrheal diseases, low birth weight, meningitis and neonatal tetanus. Among many variables, vaccination status, maternal education, practice and perception of mothers on severity of common illness and benefits of some modern treatment were the best predictors of under-five mortality. Cognizant of this fact, Amare, Fasil and Belaineh (2007), recommend that mothers should be trained to practice key child survival interventions like antenatal care follow-up, skilled-based delivery, use of

oral rehydration salt and homemade fluids, vaccination and treated bed nets. The literacy status of women should be improved so that they can care for their children for better child survival. Other interventions includes exclusive breastfeeding, nutritional status should be checked. Additionally, growth monitoring, child immunization, insecticide treated mosquito nets, fertility and family planning, and reproductive health care units should be made available.

Poverty and the need to pay user fees negatively impact on the utilization of health services by sick children and their mothers. Additionally a number of developing countries have not been able to commit the required resources for the delivery of health interventions. They have depended on donor funds with their challenges including lack of ownership, inability of the government to plan for, monitor and evaluate the programme, non-sustainability, non-prioritization, etc. Examples include the several pilot programmes implemented in different sites in Nigeria, including Taraba State, without the government taking over ownership and scaling them up to ensure universal coverage. Specifically the implementation of the IMCI, especially Community IMCI, the training of health workers on several health interventions have largely depended on the availability of donor funds and with dwindling donor support. Many programmes have either died or remained at the pilot sites. Donors like UNICEF, WHO, Save the Children e.t.c. have different areas of interest, reasons for actions and monitoring indicators.

Women's education has been reported as a key factor in reducing infant and child mortality. The higher a woman's level of education, the more likely it is that she will marry later, play a greater role in decision making, and exercise her reproductive rights. Her children will tend to be better nourished and enjoy better health. Data from both the 1999 NDHS and the 1999 MICS (Multiple Indicator Cluster Survey) reveal that lower educational levels among females was related to higher infant and under-five mortality. Similarly, rural

areas had lower levels of female literacy and consequently higher under-five mortality than urban areas. The relationship between female literacy and child survival is also clearly demonstrated when looking at immunisation coverage rates and treatment of diarrhea illnesses. Caldwell (1979) established that, education, in general, and female education, in particular, exert a great influence in children's health and survival with regard to pregnancy, childbirth, immunisation, and management of childhood diseases. Children of educated mothers are less vulnerable to morbidity and mortality. He found that educated women were more likely to be proactive mothers, taking initiatives in providing the best care for their children and willing to go against traditional norms to access modern health care facilities for children, increasing their rate of survival. Mosley and Chen (1984) also agree that the mother's educational level increases her skills in health care practices related to disease treatment, preventive care, hygiene, and nutrition – thus, improving chances for child survival. This relationship has area of residence been shown to hold up even after controlling for a wide range of indicators of income, social status, and access to health services (Forste, 1994).

Childhood immunisation remains an important strategy in the reduction of morbidity and mortality from common VPD. According to UNICEF, the WHO, and National Programme on Immunisation (NPI) guidelines, a child should receive a Bacille Calmette Guerin (BCG) vaccination for tuberculosis, four doses of oral polio, three doses of DPT (Diphtheria, Pertussis and Tetanus), and one dose of measles vaccine by age 12 months. VPD have been implicated in the deaths of more than 20 percent of children under five. International comparative data show that Nigeria's immunisation coverage rates are among the worst in the world (UNICEF, 2001). Although this decline was for all types of vaccines, it was greater for DPT and polio than for BCG and measles, possibly because of the shortage of vaccines in Nigeria. Nigeria remains one of the largest reservoirs of wild polio viruses,

attracting the attention of the world in the effort to eradicate polio globally by 2002 and certify the world polio-free by 2005. Polio is a highly infectious viral disease that invades the central nervous system and can cause paralysis, especially in the legs. One in 200 infections leads to irreversible paralysis and 5–10 percent of those paralysed die when their breathing muscles are paralysed.

Presently, fertility rates are high in Nigeria as indicated by a TFR of 5.2 births per woman and a crude birth rate of 41 (Isiugo-Abanihe and Uga, 2012). Childbearing begins early in Nigeria, with nearly one-half of women of the reproductive age becoming mothers before age 20. Teenage childbearing is higher in rural than in urban areas and has negative demographic, socio-economic, and socio-cultural consequences. These young mothers are more likely to suffer from severe complications during delivery, resulting in higher morbidity and mortality for both themselves and their children. With an unmet need for family planning of 18 percent (13% for spacing, 5% for limiting births) and a Contraceptive Prevalence Rate (CPR) of 9 percent, Nigerians are still having more children than planned and at shorter than desired birth intervals (Rutstein, 2001).

In terms of health infrastructure, Nigeria is well covered, having about 18,258 PHC facilities, 3,275 secondary facilities, and 29 tertiary facilities (NHMIS). Although these numbers seem adequate, the 1999 NDHS reports that 9 percent of households surveyed had no access to any health facility, 34 percent had no private doctor, and 24 percent had no access to a pharmacy. These data show regional variations with the northeast and north–central regions being the worst served. In addition, timely access to secondary and tertiary services is more problematic than facilities on the ground may suggest.

The health system has been plagued by problems of service quality, including inadequate and insufficient numbers of skilled workers, decaying infrastructure, unavailable

equipment, as well as acute drug shortage. Other factors include a financial barrier to access from poorly designed cost recovery mechanisms; lack of effective community participation; weak referral systems among primary, secondary, and tertiary care; reduced national funding; and weak information systems. In addition, the majority of the population regards public health services poorly; 26 percent of people surveyed in Taraba state using the Core Welfare Indicator Questionnaire Survey of 1999, conducted by the Federal Office of Statistics as part of the National Integrated Survey of Households, reported dissatisfaction with public health services because of cost (56%), unavailability of drugs (33%), and long waiting periods (33%).

2.4 Mothers' Education and Practice of Child Survival Strategies

The importance of mothers' education for child survival through pathways other than enhanced socioeconomic status was brought into focus by Caldwell's (1979) seminar paper on Nigeria. His paper argued that education of women played an important role in determining child survival even after control for a number of other factors, including such socioeconomic characteristics of the husband, as his educational level and occupation. Caldwell (1979) suggested several pathways whereby mother's education might enhance child survival. These were a shift from 'fatalistic' acceptance of health outcomes towards implementation of simple health knowledge; an increased capability to manipulate the modern world, including interaction with medical personnel; and a shift in the familial power structures, permitting the educated woman to exert greater control over health choices for her children.

Cleland (1990) posited that education may have a modest effect on health knowledge and beliefs, but a pronounced effect on the propensity to use modern medical facilities, and adopt modern health practices, because of a closer social identification with the modern world, greater confidence at handling bureaucracies or a more innovative attitude to life

among women who have some experience of school. A research carried out in Bangladesh for instance by Lindenbaum (1990), stressed the apparent role of greater cleanliness among educated women in explaining differentials in child mortality. Hobcraft *et al*. (1984) study demonstrated that socioeconomic differentials in child survival widened with increasing age of the child and found the greatest consistency in mortality between ages one and five, where there were strong suggestions that a model that included both mother's and father's levels of education had widespread applicability in the survival of the child.

2.5 Theoretical Framework: Mosley and Chen Model of Child Survival

The Mosley and Chen model was developed in 1984. It is an analytical framework that sought to create a new multifaceted model for studying childhood mortality. The approach incorporates both social and biological variables and integrates research methods employed by social and medical scientists. The framework is based on the premise that all social and economic determinant of child mortality necessarily operate through a common set of biological mechanism and proximate determinant to exert an impact on mortality. The framework is intended to advance research on social policy and medical interventions to improve child survival. It is, in itself, a multidisciplinary model.

The Mosley and Chen analytical model alleviates the common problem of looking at mortality from a single factor conceptualization to a multifactorial causality (Mosley and Chen, 1984) .The basic point of Mosley and Chen's model is based on the idea that the factors that affect childhood mortality work through a set of "proximate determinants."

Five other premises were also suggested that lay the background for the model along with the basic premises. These premises are:

(1) Under optimal conditions, child survival ability rates for infants can be expected to reach 97 percent.

(2) In the real world, this rate is lowered by social, economic, biological and environmental factors.

(3) Socioeconomic determinants must operate through the "proximate determinants" in order to influence disease and disease processes.

(4) The proximate determinants can be indicated by the diseases and deficiencies of surviving population.

(5) Child mortality is the result of the cumulative consequences of multiple disease processes.

Proximate determinants, as defined by Mosley and Chen, are divided into five categories: maternal and demographic factors, environmental health factors, nutrient deficiency, injury and personal illness control. Maternal factors include age of the mother, parity and birth interval. The demographic factors include sex of child, multiple births, and previous child death. Household environmental factors include the material of household construction, sources of water, and presence/types of toilet facilities as well as type of cooking facilities. Environmental contaminations which are routes of infection include a multitude of factors, such as air, food, water, fingers, skin, soil, inanimate objects and insects.

Mosley and Chen (1984) discussed that socioeconomic determinants affects childhood mortality. They divide socio economic determinants into three major categories:

a. Individual-level,
b. Household level and
c. Community level.

The effects of socioeconomic variables manifest as the child gets older (Manda, 1999). Variables such as Maternal Education, Paternal education, residence, occupation and assets are good measures of socioeconomic factors. All these work together to determine and influence child survival and under five mortality. This explains the problem of the study and

provides us with a contextual understanding of the choices and variables that come into play with regard to the implementation child survival strategies. We therefore adopt this model for the study.

It is difficult to critique a theory or a model that in itself is multidisciplinary in nature or adopts a multi-disciplinary approach to tackling issues such as the Mosley and Chen model. Credit must be given to this model in that its left no discipline out and gives an unhindered access for other discipline to make contributions to it to further strengthen its tenents and address issues in understanding child mortality. The study objectives of this thesis is well covered in the Mosley and Chen model in that it has taken into cognizance individual (ie child and mother) determinants to child survival, group (household) child survival practices and community determines of the problem of the study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedures employed in the study. Therefore, in this chapter, the researcher discusses the methods and procedures adopted in eliciting information from the respondents and respondents for the study, specifically, population of the study, location of the study, sample size and sampling techniques, instrumentation, procedure for data collection and analysis, as well as ethical considerations.

3.2 Research Design

The study primarily employed the survey research methodology using a questionnaire. A survey entails that a fraction of the population is sampled and studied intently, there after generalizations are made. Additionally, indepth interviews were used to enrich the data collected.

3.3 The Study Area

This study was conducted in Ardo Kola LGA in Taraba State, Nigeria. Ardo Kola Local Government Area is one of the Sixteen (16) LGAs in Taraba State, Nigeria. Its headquarters is in the town of Sunkani which is made up of ten political wards namely Tau, Sunkani, Mallum, Merayoranewo, Iware, Ardo-Kola, Bakin Dutse, Lamido Borno, Jauro Uno, Alingora and Zango Kombi. In Ardo-Kola LGA, the following ethnic groups exist- Mummuye, Fulani, Kona, Wurkun, Jiru and Wurbo. The common socio-economic activities in the local government area include farming, fishing and petty trading. Islam and Christianity are the dominant religions in Ardo Kola LGA. The purposive selection of Ardo-Kola local government was informed by the rising child mortality rates in the area as a result of certain socio-cultural factors inspite the governmental and non-governmental efforts (USAID, 2006).

The diverse people of the State have very rich cultural heritage, which they uphold religiously. These manifest in the many festivals, which, serve as a source of inspiration, recreation and entertainment all the year round. These festivals are also veritable tools of unity among the ethnic nationalities in the State. Agriculture is traditionally the main occupation in Ardo Kola. Important food crops grown in the LGA include yam, maize, guinea corn, rice, sugarcane, beans, soya beans, groundnuts, and assorted fruits such as water melon, sweet melon etc and vegetables like tomatoes, spinach, and pepper. Fishing and herding are also flourishing agricultural activities in Ardo Kola.

3.4 Population of Study

The population of this study comprises primarily mothers, namely women who had delivered and were residents of the selected areas, their significant others; health care givers; and other community members. While the exclusion criteria were women who had never had a child though, residents of the selected areas.

3.5 Sampling Techniques

The Simple random for survey and purposive selection techniques of informants for qualitative data were used. Households served as the units of analysis while mothers in the household were the units of response for the study. The simple random and purposive sampling techniques were used for the study because both gives sampling units (respondents) equal chances of being selected since selection of sample unit does not depend on the selection of other units. Using simple random sampling techniques to select both the target area (wards) and respondents, the researcher first of all constructed a sampling frame, secondly, determined the sample size, thirdly, placed a number of balls or pieces of paper with the names of the wards in Ardo Kola in a container with the number that corresponds with the sample frame, fourthly, shuffled the pieces of paper then selected one ball or paper from the container at a time and registered it. This process continued until the required

sample size was selected. A total of four pieces of papers were picked which represented the sampled areas.

Table 3.5.1 below shows us a breakdown of the sample size based on the selected wards and population figures of NPC, 2006.

Table 3.5.1 Breakdown of Sample Size

Selected Wards	**Population based on 2006 NPC**	**Sample Size (5.0% of sample frame)**
Ardo-Kola	1,647	81
Sunkani	1,011	50
Lamido Borno	874	43
Zango Kombi	1,230	61
Total	**4,762**	**235**

Source: National Population Commission, 2006

A sample size of 235 respondents (representing 5 % of the number) was drawn from the four selected wards (Ardo-Kola, Sunkani, Lamido Borno and Zango Kombi wards). For in-depth interviews, the researcher employed the purposively selected eight (8) key informants. This technique allowed the researcher to purposely select her key informants on certain relevant issues because they were believed to be knowledgeable on the issue investigated. The in-depth interview engaged key informants in the community consisting of community leaders and medical practitioners (Care-givers). A total of eight (8) In-depth Interviews were conducted for the study with four (4) community leaders and four (4) medical practitioners selected from the sampled wards. The four community leaders were reached using the snow ball sampling technique i.e based on referral and on their availability in the health institutions visited.

3.6 Types and Sources of Data

This study employed primary data sources. The primary data were collected using semi-structured questionnaire and in-depth interview guides on child survival strategies. The secondary data included clinical records in the health facilities and official government health related documents. The research instruments for primary data were translated into Hausa language. Translation of the instrument was to ensure accuracy and consistency.

3.7 Methods of Data Collection

For either of the procedural method of data collection (quantitative and qualitative), consents of appropriate persons were sought. The researcher had alongside a field assistant who was trained purposefully on the process of the field work. The semi structured questionnaires were administered to mothers at the selected primary healthcare facilities and households in the LGA.

a. Questionnaire

The Questionnaire (Appendix 1) covers Socio-demographic characteristics of respondents; nature and pattern of implementation of child survival strategies; factors influencing the implementation of child survival strategies; Mothers' education and child survival practice and probable solutions to address the poor implementation of child survival strategies in Ardo Kola LGA.

b. In-Depth Interview Schedule

Interview schedule is a list of topics drawn from the research questions. It could either be conducted face to face or through the use of telephone. In the case of this research work both were adopted. Usually, it is arranged to get relevant information from an interviewee who knows about the subject matter. Thus, the health workers and eight (8) key informants were purposively selected for the IDI.

In-depth interview with the key informants were conducted in the house of such persons. Each session began with briefing on the objectives of the study, respondent's consent was then sought and obtained, and the interview conducted. The debriefing exercise normally summaries discussions and respondents asked to raise any questions in respect of the study. Data collection for all techniques followed the same pattern with respondents exercising the right to freely be part of the study. The researcher conducted all the interviews.

3.8 Validity and Reliability of Instruments

Content validity was adopted to authenticate that the study instruments measured exactly what it was designed to measure. This was embarked on by the contribution of knowledge of persons who are key informants in the subject matter on the construct of the measurement tool. The reliability of the research instruments was conducted by administering the instruments to a replica of the proposed study population being women who have given birth before.

3.9 Methods of Data Analysis

This study employed two levels of data analysis. These are quantitative and qualitative analysis.

Quantitative Analysis: The quantitative part of the study which were the administered questionnaire responses were imputed and analyzed using the Statistical Package for Social Sciences (SPSS) Version 2.0. Analysis was done using the univariate analysis. The univariate analysis depicted the descriptive statistics of frequency distribution tables by location on the respondents' socio-demographic and socio-economic characteristics.

Qualitative Analysis: Here, the data generated through the in-depth interviews (IDIs) were processed and analyzed qualitatively. This began with the process of transcription of the interviews conducted from where the coding of similar themes and patterns of responses were

done. The responses were read and scrutinized from the field notes/ tapes. Second, responses with similarities and/or differences were identified and merged together. Also, alternative inferences from these responses were compared, out of which inferences were made. Several excerpts from the field notes were used to emphasize the opinions, views and perceptions of informants on the issue under investigation.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

The results presented are based on data gathered from the sampled respondents and objectives of the study. Presentations were made on the socio-demographic and socio-economic characteristics of the respondents as a preliminary. These initial presentations are meant to aid the interpretations of the objectives of the study. This chapter consists of two sections: presentation and discussion of findings.

4.2 Socio-demographic Characteristics of Respondents

This section presents the socio-demographic characteristics of the respondents. This includes age, marital status, duration of marriage, number of children, educational status, religion, occupation etc, as shown in table 4.2.1.

Table 4.2.1 Socio-demographic Characteristics of Respondents

Characteristics	**Ardo-Kola Ward**		**Sunkani Ward**		**Lamido Borno Ward**		**Zango Kombi Ward**		**Total**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Age										
15-20 years	20	24.4	9	18.0	12	27.9	10	16.7	51	21.7
21-26years	20	24.4	16	32.0	17	39.5	18	30.0	71	30.2
27-32 years	18	22.0	12	28.0	11	25.6	19	31.7	62	26.4
33-38 years	14	17.1	7	14.0	3	7.0	8	13.3	32	13.6
39 years and above	10	12.2	4	8.0	-	-	5	8.3	19	8. 1
Total	**82**	**100**	**50**	**100**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Marital Status										
Married	66	80.5	47	94.0	37	86.0	45	75.0	195	83.0
Divorced	13	15.9	1	2.0	3	7.0	10	16.7	27	11.5
Widowed	3	3.7	2	4.0	2	4.7	5	8.3	12	5. 1
No Response	-	-	-	-	1	2.3	-	-	1	0.4
Total	**82**	**100**	**50**	**100**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Duration of Marriage										
1-4 Years	29	35.4	18	36.0	19	44.2	20	33.3	86	36.6
5-8 Years	22	26.8	20	40.0	19	44.2	16	26.7	77	32.8
9-12 Years	17	20.7	5	10.0	1	2.3	13	21.7	36	15.3
14-16 Years	5	6. 1	2	4.0	4	9.3	7	11.7	18	7.6
17 Years and above	8	9.8	5	10.0	-	-	4	6.7	17	7.2
No Response	1	1.2	-	-	-	-	-	-	1	0.4
Total	**82**	**100**	**50**	**100**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Continued in the page 36

Table 4.2.1 Socio-demographic Characteristics of Respondents… (Cont'd)

No of Children										
1-3 Children	37	45.1	10	20.0	16	37.2	16	26.7	79	33.6
4-6 Children	22	26.8	22	44.0	15	34.9	22	36.7	81	34.5
7-9 Children	14	17.1	14	28.0	12	27.9	14	23.3	54	23.0
10 Child.& above	9	11.0	4	8.0	-	-	8	13.3	21	8.9
Total	**82**	**100**	**50**	**100**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Educational Status										
None	17	20.7	14	28.0	12	27.9	12	20.0	55	23.4
Qua'ranic School	12	14.6	11	22.0	6	34.9	12	20.0	41	17.5
Primary School	15	18.3	15	30.0	15	14.0	13	21.7	58	24.7
Secondary School	19	23.2	7	14.0	6	14.0	11	18.3	43	18.3
NCE/OND	14	17.1	-	-	4	9.3	8	13.3	26	11.0
Tertiary Education	5	6. 1	3	6.0	-	-	4	6.7	12	5. 1
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Religion										
Christianity	6	7.3	-	-	2	4.7	5	8.3	13	5.5
Islam	75	19.5	50	100	41	95.3	55	91.7	221	90. 1
Traditionalist	1	1.2	-	-	-	-	-	-	1	0.4
Total	**82**	**100**	**50**	**100**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Current Occupation										
Farming	16	19.5		20.0	15	34.9	16	26.7	57	24.3
Large Business	5	6. 1		-	2	4.7	3	5.0	10	4.3
Petty Trading	16	19.5	10	44.0	10	23.3	20	33.3	68	29.0
Artisan	1	1.2	-	-	-	-	-	-	1	0.4
Civil Servant	17	20.7	22	10.0	3	7.0	9	15.0	34	14.5
Others	27	32.9	-	26.0	13	30.2	12	20.0	65	27.7
Total	**82**	**100**	5 13 **50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Husband's Occupation										
Farming	28	34.	15	30.0	15	34.9	16	26.7	74	31.5
Large Business	5	16.1	4	8.0	1	2.3	6	10.0	16	6.8
Petty Trading	14	17.1	8	16.0	8	18.6	9	15.0	39	16.6
Artisan	12	14.1	18	36.0	15	34.9	19	31.7	64	27.3
Civil Servant	17	20.7	5	10.0	3	7.0	10	16.7	35	15.0
Others	6	7.3	-	-	1	2.3	-	-	7	2.9
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.2.1 Socio-demographic Characteristics of Respondents… (cont'd)

Average Monthly Income (Naira)										
Don't Know	32	40.2	16	32.0	16	37.2	7	11.7	71	30.2
Below 5000	12	14.6	19	38.0	21	48.8	12	20.0	64	27.3
6000 – 11000	8	9.8	10	20.0	3	7.0	24	40.0	45	19.2
12000 – 17000	7	8.5	-	-	1	2.3	7	11.7	15	6.4
18000 – 23000	5	6. 1	1	2.0	-	-	1	1.7	7	3.0
24000 – 29000	2	2.4	2	4.0	2	4.7	3	5.0	9	3.8
30000 – 35000	6	7.3	2	4.0	-	-	2	3.3	10	4.3
42000 – 47000	2	2.4	-	-	-	-	2	3.3	4	1.7
48000 – 53000	2	2.4	-	-	-	-	1	1.7	3	1.3
54000 – 59000	2	2.4	-	-	-	-	1	1.7	3	1.3
66000 – 71000	2	2.4.	-	-	-	-	-	-	2	0.9
72000 And above	1	1.2	-	-	-	-	1	1.7	2	0.9
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Husband's Average Monthly Income (N)										
Don't Know	12	14.6	9	18.0	11	25.6	4	6.7	36	15.4
Below 5000	9	11.0	10	20.0	10	23.3	14	23.3	53	22.6
6000 - 11000	7	18.3	9	18.0	14	32.6	12	20.0	42	17.9
12000 – 17000	5	15.9	14	28.0	4	9.3	11	18.3	34	14.5
18000 - 23000	2	8.5	2	4.0	-	-	1	1.7	5	2. 1
24000 - 29000	6	3.7	1	2.0	2	4.7	2	3.3	11	4.7
30000 – 35000	2	4.9	1	2.0	1	2.3	1	1.7	5	2. 1
36000-41000	1	1.2	1	2.0	-	-	2	3.3	4	1.3
42000 - 47000	2	6. 1	1	2.0	1	2.3	3	5.0	7	3.0
48000 - 53000	2	2.4.	1	2.0	-	-	1	1.7	4	1.7
54000 - 59000	2	2.4	1	2.0	-	-	2	3.3	5	2. 1
66000 - 71000	1	1.2	-	-	-	-	1	1.7	2	0.9
72000 And above	1	1.2	-	-	-	-	1	1.7	2	0.9
No Response	3	3.7	-	-	-	-	5	8.3	8	3.4
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

The socio-demographic characteristics of the respondents in Table 4.2.1 show that the respondents had similar characteristics in various aspects across the age of the respondents as most of the respondents in all the wards are within the age bracket of 21 to 26 years, while only very few of the respondents in all the wards are above 39 years of age. This means that they are not first time mothers, however should know the strategies to adopt in order for their children to survive. On the marital status of the respondents, the survey revealed that greater percentage 83.0% (195) of the respondents are married while only few 5.1% (12) of them are widow. However, of important note is the significant difference in the number of children

among mothers with Ardo-Kola Ward mothers having mostly 1 and 3 Children, Sunkani Ward, Lamido Borno Ward and Zango Kombi Wards mothers mostly baring between 4 and 6 Children. In the Local Government 34.5% (81) of the respondents have between 4 and 6 children while only 8.5% (21) of them have more than nine (9) children. This indicates a high fertility and birth rate of mothers in the LGA.

Ardo-Kola Ward women mostly have secondary school education while women in Sunkani, Lamido Borno and Zango Kombi Wards mostly had primary school education. Mothers in all the wards were mostly involved in farming and petty trading. In Sunkani (38%) and Lamido Borno (48.8%) wards women mostly earned below N5000 monthly, in Zango Kombi ward, women mostly earned between N6000 and 11000 monthly while in Ardo-Kola Ward most women do not actually know how much they earn monthly. Similarly, Sunkani Ward women husbands mostly earn between 12000 and 17000, Lamido Borno and Zango Kombi wards women husbands mostly earned between N6000 and 11000 monthly while in Ardo-Kola Ward most women don't actually know how much their husbands earn monthly. Generally, 30.2% (71) of the women in the L.G.A don't know their monthly income while only an inconsequential population 0.9% (2) earn N72,000 or more monthly. It can be further deduced that the nature of their occupation may be a factor responsible for poor record of monthly earnings. It is important for a woman to know the income of her husband; this will enable her to give her child or children the appropriate diets

4.3 Nature and Pattern of the Implementation of Child Survival Strategies

This section is concerned with the different kinds of survival strategies designed and implemented by government in Ardo-Kola Local Government Area. Table 4.3.1 shows the respondents' awareness of policies governing child survival strategies.

Table 4.3.1: Respondents' Awareness of Policies Governing Child Survival Strategies in Ardo-Kola LGA

Response		WARDS									
		Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
		Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Awareness of policies	Yes	58	70.7	30	60.0	24	55.8	38	63.3	150	63.8
	No.	24	29.3	20	40.0	19	44.2	19	31.7	82	34.9
	No Response	-	-	-	-	-	-	3	5.0	3	1.3
	Total	**82**	**100**	**50**	**100**	**43**	**100**	**60**	**100**	**235**	**100**

Table 4.3.1 indicates that a substantial proportion, 63.8% (150) of the respondents are aware of policies governing child survival, while some 34.9% (82) of them said they were not aware. The respondents who said they knew went further to mention some of these policies. Majority of the respondents are aware of immunization policy in all the wards in Ardo-Kola LGA. Seventy one percent of mothers in Ardo-Kola Ward and 60% in Sunkani Ward said that they were aware of immunization and exclusive breast feeding as a government policy. From Lamido Borno ward and Zango Kombi the proportion that said that they were aware of immunization and breast feeding as a government policy were 55.8% (24) and 63.3% (38) respectively. In addition, a good number of the respondents in all the wards are aware of prevention and treatment of malaria and diarrhea in their respective wards. When the respondents were further probed on whether the policies are properly enforced, the survey result showed that in the various wards the policies are properly enforced. For instance in Ardo-Kola ward (52.4%) and Zango Kombi ward (34.0%) affirmed same. Generally, smaller proportion of the respondents 39.2% (91) affirmed that the policies are properly enforced, while a smaller proportion 33.6% (79) of the respondents did not respond to the question. This implies that policies are not only made but are implemented in the various wards.

Table 4.3.2 presents the general perception of all respondents in the study on all the child survival strategies identified.

Table 4.3.2: Perception of the Respondents of Government Policies on Child Survival Strategies in Ardo-Kola LGA

Perception of child survival strategies	WARDS									
	Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No response	3	3.7	-	-	-	-	3	5.0	6	2.6
Very effective	16	19.5	-	-	3	7.0	-	-	19	8.1
Effective	9	11.0	-	-	2	4.7	3	5.0	14	6.0
Fairly effective	18	22.0	10	20.0	7	16.3	21	35.0	56	23.8
Not effective	14	17. 1	20	40.0	12	27.9	14	23.3	60	25.5
No response	22	26.8	20	40.0	19	44.2	19	31.7	80	34.0
Total	**82**	**100**	**50**	**100**	**43**	**100**	**60**	**100**	**235**	**100**

Perceptions of the respondents on government policies on child survival strategies in Ardo-Kola LGA were sought. Table 4.3.2 shows that respondents in Ardo-Kola ward 22.0% (18) and Zango Kombi ward 35.0% (21) said that the government policies on child survival strategies are fairly effective. Findings indicated that, respondents from Sunkani ward 40.0% (20) said that they are not effective, while 44% (19) of respondents from Lamido Borno ward did not respond. From these findings, it can be deduced that when the policies are effectively implemented, it will lead to low morbidity and mortality of children in the study area.

In Zango Kombi ward, a community health worker at the primary health centre explained his experiences that:

> Right from the time a child is born, we used to administer RI (immunization) and subsequently the mother is placed on routine 4 weeks visits to the health centre for routine check-up so as to determine if there is any symptoms of fewer or any other complications on the baby until the period of 9 months when the mother will no longer be visiting the health centre except when she notices any problem in the baby. Apart from this, one of the other strategies is the monthly routine immunization that we normally send trained health personnel so that they would be able to move around the community to immunize the children against preventable diseases like measles, yellow fewer, etc. Let me tell you, we also give the children polio vaccines.

Contrary to the health personnel's view, a community member at Ardo-Kola said:

> Among the Mumuye, when a child is born, on the day of naming ceremony, a bow and arrow and a cutlass are tied around door of the house indicating what the fore-fathers did so and as such the child will grow up to learn as hunter. When he grows up and was successfully in life, it therefore means that the child has taken the full step of

his fore-fathers. After that the child is taken to farm at the age of 2 to 3 years to learn farming while sitting under a tree. When the child has reached the age of farming by himself, the parents could no longer stop him from doing so. Also, when a child is born, there is a herb prepared and robbed on his body which makes the child to work faster and become intelligent rather than being inactive. The herb is also boiled for the child to drink in order to prevent dysentery; this is because, if the child is not properly treated, it will become a problem that will last for life.

Another community member interviewed in Zango Kombi ward stated that:

> Among the Yandam people, when a baby boy is born, effort is made to tie a knife on his waist and he grow up to identify who his friends are. There is also this herb that our people slide in a water and ask a child to drink it thus these herbs prevent kwashiorkor not only on the child but the entire community is prevented from the outbreak of this disease. The herbs also prevent inactiveness among the children. The administration of this herb is like immunization; the moment a child is born, the herb is boiled in a pot and the child drinks it; thus preventing kwashiorkor and any other diseases such as measles.

An informant in Lamido Borno ward stressed that:

> When a new born baby is born, the baby will be put in a container and dropped in a stream for 3 days before taken home. No one is allowed to stay in the stream with the child and no food is given to the child for this period of 3 days. This is based on the strong belief that the child is protected in the stream and whatever the child eats comes from the stream. The general belief underlying this act is that the child will be healthy and will also not be afraid of the stream as an adult.

Table 4.3.3 shows the responses of respondents on their knowledge of programmes set on maternal education in Ardo Kola LGA.

Table 4.3.3: Knowledge of Programmes set on Maternal Education in Ardo-Kola LGA

Programmes set on maternal education	WARDS									
	Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
	Freq.	%	Freq.	%	Freq	%	Freq	%	Freq.	%
Yes	48	58.5	8	16.0	5	11.6	25	41.7	86	36.6
No	16	19.5	9	18.0	15	34.9	21	35.0	61	26.0
Don't know	13	15.9	13	26.0	4	9.3	14	23.3	44	18.7
No response	5	6. 1	20	40.0	19	44.2	-	-	44	18.7
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Programmes set on maternal education in Ardo-Kola LGA was investigated from the respondents. Table 4.3.3 indicated that most respondents from Ardo-Kola Ward 58.5% (48) and Zango Kombi Ward 41.7 % (25) said that the maternal education programmes are set in their wards while majority of the respondents from Sunkani Ward 40.0% (20) and Lamido Borno Ward 44.2% (19) opined that the maternal education programmes are No response. This implies that there are different maternal education programmes which will make mothers to be knowledgeable about child survival strategies in the study area. On the disease oriented awareness programmes, the survey shows that most of the respondents from Ardo-Kola 80.5% (64) and Zango Kombi 55.5% (46) wards said that the disease-oriented awareness programmes are put in place to ensure child survival in their wards. While most respondents from Sunkani Ward 40.0% (20) and Lamido Borno ward 44.2% (19) did not respond to their wards. From the results, this shows that there are various diseases oriented programmes that will enable mothers to be aware of some common diseases their children are exposed to and how they are contracted, the symptoms and how to prevent them from occurring. The study further reveals that a large proportion 29.4% (69) of the respondents mentioned Immunization programme as disease-oriented awareness programmes in the local government area. This implies that awareness programmes on child immunization are

effectively carried out in the different wards under the study area. The media can be through bill boards, radio jingles, television and the use of public health workers.

Table 4.3.4: Respondents' Knowledge of Government Policies on Child Survival Strategies and Level of their Effectiveness in Ardo-Kola LGA

Government Policies on Child Survival Strategies		WARDS									
		Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
		No	%	No	%	No	%	No	%	No	%
Maternal and newborn care	Effective	19	23.2	5	10.0	6	14.0	16	26.7	46	19.6
	Very effective	14	17.1	-	-	1	2.3	-	-	15	6.4
	Fairly effective	25	30.5	11	22.0	7	16.3	15	25.0	58	24.7
	Not effective	10	12.2	14	28.0	10	23.3	2	3.3	36	15.3
	No response	14	17.1	20	40.0	19	44.2	27	45.0	80	34.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Vitamin A and micronutrient supplements	Effective	8	8.9	5	10.0	-	-	2	3.3	15	6.4
	Very effective	10	12.2	-	-	-	-	-	-	10	4.3
	Fairly effective	22	26.8	10	20.0	4	9.3	5	8.3	41	17.4
	Not effective	28	34. 1	15	30.0	20	46.5	26	43.3	89	37.9
	No response	14	17. 1	20	40.0	19	44.2	27	45.0	80	34.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Exclusive breastfeeding	Effective	8	8.9	-	-	-	-	1	1.7	9	3.8
	Very effective	7	8.5	-	-	-	-	-	-	7	3.0
	Fairly effective	32	39.0	7	14.0	8	18.6	16	26.7	63	26.8
	Not effective	21	25.6	18	36.0	16	37.2	16	26.7	71	30.2
	No response	14	17.	25	50.0	19	44.2	27	45.0	85	36.2
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Complementary feeding	Effective	6	7.3	-	-	5	11.6	4	6.7	15	6.4
	Very effective	19	23.2	-	-	-	-	-	-	19	8.1
	Fairly effective	27	32.9	10	20.0	10	23.3	10	16.7	57	24.3
	Not effective	16	19.5	19	38.0	9	20.9	19	31.7	63	26.8
	No response	14	17. 1	21	42.0	19	44.2	27	45.0	81	34.5
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Antibiotics	Effective	8	8.9	3	6.0	-	-	9	15.0	20	8.5
	Very effective	12	14.6	-	-	-	-	-	-	12	5.1
	Fairly effective	22	26.8	17	34.0	15	34.9	15	25.0	69	29.4
	Not effective	22	26.8	10	20.0	9	20.9	9	15.0	50	21.3
	No response	18	22.0	20	40.0	19	44.2	27	45.0	84	35.7
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Prevention and treatment of diarrhea	Effective	15	18.3	8	16.0	7	16.3	14	23.3	44	18.7
	Very effective	29	35.4	-	18.0	2	4.7	5	8.3	36	15.3
	Fairly effective	18	22.0	9	26.0	7	16.3	11	18.3	45	19.11
	Not effective	6	7.2	13	-	8	18.6	3	5.0	30	2.8
	No response	14	17. 1	20	40.0	19	44.2	27	45.0	80	34.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.3.4: Government Policies on Child Survival Strategies Respondents know and the Level of their Effective in Ardo-Kola LGA… (Cont'd)

Hygiene promotion	Effective	23	28.0	-	-	4	9.3	4	6.7	31	13.25
	Very effective	12	14.6	-	-	-	-	1	1.7	13	5.5
	Fairly effective	22	26.8	9	18.0	11	25.6	22	36.7	64	27.2
	Not effective	11	13.4	21	42.0	9	20.9	6	10.0	47	20.0
	No response	14	17. 1	20	40.0	19	44.2	27	45.0	80	34.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Safe water	Effective	3	3.7	10	20.0	1	2.3	3	5.0	17	7.2
	Very effective	12	14.6	-	-	-	-	-	-	12	5.1
	Fairly effective	36	43.9	7	14.0	11	25.6	15	25.0	69	29.4
	Not effective	17	20.7	13	26.0	12	27.9	15	25.0	57	24.3
	No response	14	17. 1	20	40.0	19	44.2	27	45.0	80	34.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Oral rehydration therapy	Effective	16	19.5	5	10.0	1	2.3	6	10.0	28	11.9
	Very effective	19	23.2	-	30.0	-	-	1	1.7	20	8.5
	Fairly effective	23	28.0	15	-	8	18.6	20	33.3	66	28.1
	Not effective	9	11.0	10	20.0	12	27.9	6	10.0	37	15.7
	No response	15	18.3	20	40.0	22	51.2	27	45.0	84	35.7
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Immunization	Effective	30	36.6	18	36.0	4	9.3	18	30.0	70	29.8
	Very effective	25	30.5	-	-	-	-	9	15.0	40	17.0
	Fairly effective	10	12.2	6	12.0	13	30.2	7	11.7	36	15.3
	Not effective	3	3.7	6	12.0	7	16.3	-	-	10	4.3
	No response	14	17. 1	20	40.0	19	44.2	26	43.3	79	33.6
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Growth monitoring	Effective	4	4.9	4	8.0	-	-	-	-	8	3.4
	Very effective	9	11.0	-	-	-	-	-	-	9	3.8
	Fairly effective	31	37.8	17	34.0	5	11.6	17	28.3	70	29.8
	Not effective	24	29.3	9	18.0	18	41.9	17	28.3	68	28.9
	No response	14	17. 1	20	40.0	20	46.5	26	43.3	80	34.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Improved infant and young child feeding practices	Effective	14	17. 1	4	8.0	6	14.0	8	13.3	32	13.6
	Very effective	8	8.9	-	-	-	-	7	11.7	15	6.4
	Fairly effective	27	32.9	16	32.0	4	9.3	12	20.0	59	25.1
	Not effective	19	23.2	10	20.0	14	32.6	7	11.7	50	21.3
	No response	14	17. 1	20	40.0	19	44.2	26	43.3	79	33.6
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.3.4: Government Policies on Child Survival Strategies Respondents know and the Level of their Effective in Ardo-Kola LGA… (Cont'd)

Prevention and treatment of malaria	Effective	31	37.8	9	18.0	4	9.3	18	30.0	62	26.4
	Very effective	24	29.3	-	-	-	-	4	6.7	28	11.9
	Fairly effective	10	12.2	16	32.0	8	18.6	12	20.0	46	19.6
	Not effective	3	3.7	5	10.0	12	27.9	-	-	20	8.5
	No response	14	17. 1	20	40.0	19	44.2	26	43.3	79	33.6
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Treated mosquito net	Effective	30	36.6	13	26.0	6	14.0	9	15.0	58	24.7
	Very effective	19	23.2	3	6.0	-	-	14	23.3	36	15.3
	Fairly effective	17	20.7	14	28.0	11	25.6	11	18.3	53	22.6
	Not effective	2	2.4	-	-	7	16.3	-	-	9	3.8
	No response	14	17. 1	20	40.0	19	44.2	26	43.3	79	33.6
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Intermittent preventive treatment of malaria in pregnancy	Effective	25	30.5	10	20.0	6	14.0	11	18.3	52	22.1
	Very effective	12	14.6	-	-	-	-	9	15.0	21	8.9
	Fairly effective	18	22.0	12	24.0	8	18.6	11	18.3	49	20.9
	Not effective	13	15.9	9	18.0	10	23.3	3	5.0	35	14.9
	No response	14	17. 1	19	38.0	19	44.2	26	43.3	78	33.2
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Currently, as presented in table 4.3.4, child survival includes strategies such as ante-natal care attendance, skilled birth attendance at delivery and commencement of breastfeeding within one hour of delivery. Others include use of insecticide treated bed nets, management of fever and treatment of acute respiratory infections, amongst others. Table 4.3.4 show that most respondents from Ardo-Kola and Zango Kombi wards said Maternal and newborn care are fairly effective in their wards while most respondents from Sunkani Ward and Lamido Borno wards said it is not effective. This means that maternal and new born care is not effective in Ardo-Kola local government area. The implication of this is high neonatal, infant and maternal mortality rate.

Vitamin A and micronutrient supplements was another government policies on child survival strategies respondents know, most respondents 34.1% (28) from Ardo-Kola ward and 46.5% (20) from Lamido Borno said it is not effective while most respondents 40.0% (20) from Sunkani Ward and 45.0% (27) Zango Kombi ward did not respond. This policy is not effective and has negative impacts on the child.

Another government policy on child survival strategies known to respondents was exclusive breast feeding. Most women from Ardo-Kola Ward 39.0% (32) said it is fairly effective, while most women from Sunkani Ward 50.0% (25), Lamido Borno Ward 44.2% (19) and Zango Kombi Ward 26.7% (16) said that it is No response. This means that most of the respondents don't participate or are not mandated to participate in exclusive breast feeding. Complementary feeding was also mentioned as government policy on child survival strategies, most respondents from Ardo-Kola ward 32.9% (27) said that it is fairly effective, while majority of the respondents from Sunkani ward 42.0% (21), Lamido Borno ward 44.2% (19) and Zango Kombi ward 45.0% (27) did not respond. On a general note, complementary feeding is fairly effective in Ardo-kola L.G.A of Taraba State.

Antibiotic was mentioned as a government policy on child survival strategies. Most women from Ardo-Kola ward 26.8% (22) said it is fairly effective, while most respondents from Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 45.0% (45) did not respond. Most women from Ardo-Kola ward 35.4% (29) said prevention and treatment of diarrhea was very effective government policy on child survival strategies while most respondents from Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 45.0% (27) did not respond.

Hygiene promotion was stated as a government policy on child survival strategies. Most women from Ardo-Kola ward 28.0% (23) said it is effective, most women from Sunkani Ward 42.0% (21) said it is not effective while most women from Lamido Borno ward 44.2% (19) and Zango Kombi ward 45.0% (27) did not respond. Most women 43.9% (36) in Ardo-Kola ward stated that safe water was fairly effective government policy on child survival strategies while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 45.0% (27) did not respond.

Furthermore, Oral rehydration therapy was mentioned as a government policy on child survival strategies. Most women from Ardo-Kola ward 28.0% (23) said it is fairly effective, while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 51.2% (22) and Zango Kombi ward 45.0% (27) did not respond. Immunization was mentioned as a government policy on child survival strategies. Most women from Ardo-Kola ward 36.6% (30) said it is effective while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 43.3% (26) did not respond. Another government policy on child survival strategies mentioned was growth monitoring. Most women from Ardo-Kola ward 37.8% (31) said it is fairly effective while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 46.5% (20) and Zango Kombi ward 43.3% (26) did not respond.

Improved infant and young child feeding practices was also stated as a government policy on child survival strategies. Most respondents from Ardo-Kola ward 32.9% (27) said it is fairly effective, while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 43.3% (26) did not respond. Prevention and treatment of malaria was mentioned as a government policy on child survival strategies. Most women from Ardo-Kola ward 37.8% (31) said it is effective, while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 43.3% (26) did not respond.

Treatment of mosquito net was mentioned as a government policy on child survival strategies. Most women from Ardo-Kola ward 36.6% (30) said it is effective, while most women in Sunkani Ward 40.0% (20), Lamido Borno ward 44.2% (19) and Zango Kombi ward 43.3% (26) did not respond. Additionally, intermittent preventive treatment of malaria in pregnancy was stated as a government policy on child survival strategies. Most women from Ardo-Kola ward 30.5% (25) said it is effective, while most women in Sunkani ward 38.0% (19), Lamido Borno ward 44.2% (19) and Zango Kombi ward 43.3% (26) did not

respond. On a general note, majority of the child survival programmes in Ardo-Kola local government area are not effective. The study further revealed that it is not formulation of policies that matters, but the effective implementation of these programmes.

4.4 Factors Influencing the Implementation of Child Survival Strategies

This is concern with factors that influences child survival strategies in Ardo-Kola L.G.A. Children represent the future and hope of a nation. Disabilities in children, either congenital or acquired, affect the quality of their whole life and seriously limit their future prospects. Some cases are preventable, and prevention of child illnesses and chances of survival are cost-effective. In the contemporary world, where human talent and intelligence are regarded as the most important resources and health equates with wealth, disabilities may place children in unfavourable positions. For the society at large, avoiding congenital malformations and reducing or eliminating all forms of child illnesses would not only decrease expenditures made by families and society, but also improve the health of the population. The benefit and guarantee of better health from generation to generation will directly contribute to the country's overall development. As such, these efforts will have an everlasting impact on socio-economic development and the construction of a harmonious society. According to *the 2005 World Health Report: Making Every Mother and Child Count* issued by WHO, great disparities exist in the chances of child survival in countries around the world. In 2003, the lowest under five mortality rate was 3 to 5 per thousand live births in developed countries such as Belgium, Denmark, France, Germany and Japan, and also in relatively developed countries like Korea, Monaco and Singapore, accounting for 10% of the total countries in the world. Meanwhile, in some countries, mainly located in Africa including Nigeria, the under five mortality is as high as 200 per thousand live births. The question that arises from this background information is what factors influences the child survival strategies? Answer to this question is provided by findings from the survey as follows:

Table 4.4.1: Assessment of Factors that Influence Child Survival Strategies in Ardo-Kola LGA

Government Policies on Child Survival Strategies		WARDS									
		Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
		No	%	No	%	No	%	No	%	No	%
Mother/female education	Adequate		7.3	6	12.0	7	16.3	17	28.3	36	15.3
	Very adequate	6	22.0	-	-	-	-	2	3.3	20	8.5
	inadequate	18	40.2	32	64.0	13	30.2	23	38.3	101	43.0
	V. inadequate	33	30.5	12	24.0	23	53.5	18	30.0	78	33.2
	No response	25	-	-	-	-	-	-	-	-	-
	Total	- **82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Basic health services: vaccination, community outreaches	Adequate	11	13.4	5	10.0	-	-	11	18.3	27	11.5
	Very Adequate	14	17. 1	-	-	-	-	-	-	14	6.0
	Inadequate	37	45. 1	13	26.0	7	9.3	22	36.7	79	33.6
	V. inadequate	20	24.4	32	64.0	36	46.5	27	45.0	115	48.9
	No response	-	-	-	-	-	0.0	0	-	-	-
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Family planning	Adequate	8	8.9	-	-	5	11.6	15	25.0	43	18.3
	Very adequate	7	8.5	5	10.0	-	-	3	5.0	24	10.2
	inadequate	32	39.0	23	46.0	17	39.5	26	43.3	88	37.4
	V. inadequate	21	25.6	22	44.0	21	48.8	16	26.7	79	33.6
	No response	14	17.	-	-	-	-	-	-	1	0.4
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.4.1: Assessment of Factors that Influences Child Survival Strategies in Ardo-Kola LGA

Antenatal care	Adequate	35	42.7	16	32.0	5	11.6	28	46.7	84	35.7
	Very adequate	15	18.3	-	-	-	-	10	16.7	25	10.6
	Inadequate	19	23.2	25	50.0	24	55.8	14	23.3	82	34.9
	V. inadequate	11	13.4	9	18.0	14	32.6	8	13.3	42	17.9
	No response	2	2.4	-	-	-	-	-	-	2	0.9
	Total	**82**	**100.0**	50	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Hospital facilities	Adequate	6	7.3	-	-	-	-	2	3.3	8	3.4
	Very adequate	1	1.2	16	32.0	-	-	-	-	1	0.4
	Inadequate	48	58.5	25	50.0	13	30.2	31	51.7	101	43.0
	V. inadequate	26	31.7	9	18.0	30	69.8	27	45.0	124	52.8
	No response	1	1.2	-	-	-	-	-	-	1	0.4
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Skilled health personnel	Adequate	3	3.7	-	-	-	-	10	16.7	13	5.5
	Very adequate	1	1.2	-	-	-	-	-	-	1	0.4
	Inadequate	43	52.4	9	18.0	16	37.2	22	36.7	91	38.7
	V. inadequate	35	42.7	41	82.0	27	62.8	28	46.7	130	55.3
	No response	-	-	-	-	-	-	-	-	-	-
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Government funding, policies and implementation	Adequate	1	1.2	-	-	-	-	-	-	1	0.4
	Very adequate	6	7.3	-	-	-	-	-	-	6	2.6
	inadequate	42	51.2	19	38.0	8	18.6	39	65.0	108	46.0
	V. inadequate	32	39.0	23	46.0	35	81.4	15	25.0	105	44.7
	No response	1	1.2	8	16.0	-	-	6	10.0	15	6.4
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Monitoring and supervision	Adequate	2	2.4	-	-	6	14.0	5	8.3	13	5.5
	Very adequate	3	3.7	-	-	-	-	1	1.7	4	1.7
	Inadequate	36	43.9	20	40.0	34	79.1	28	46.7	118	50.2
	V. inadequate	40	48.8	30	60.0	3	7.0	20	33.3	93	39.6
	No response	1	1.2	-	-	-	-	6	10.0	7	3.0
	Total	**82**	**100.0**	50	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Health partnership between the government & private organizations	Adequate	1	1.2	-	-	-	-	3	5.0	4	1.7
	Very adequate	-	-	-	-	-	-	-	-	-	-
	Inadequate	31	37.8	9	18.0	28	65.1	23	38.3	91	38.7
	V. inadequate	32	39.0	24	48.0	1	2.3	18	30.0	75	31.9
	No response	18	22.0	17	34.0	14	32.6	16	26.7	65	27.7
	Total	**82**	**100.0**	50	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Resource distribution (electricity, water, good roads etc)	Adequate	7	8.5	-	-	-	-	5	8.3	12	5.1
	Very adequate	7	8.5	-	-	-	-	-	-	7	3.0
	inadequate	41	50.0	13	26.0	2	4.7	33	55.0	89	37.9
	V. inadequate	27	32.9	37	74.0	41	95.3	22	36.7	127	54.0
	No response	-	-	-	-	-	-	-	-	-	-
	Total	**82**	**100.0**	50	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.4.1 is concerned with assessment of the factors that influence child survival strategies in Ardo-Kola LGA. The results show that most of the respondents from Ardo-Kola ward 40.2% (18), Sunkani ward 64.0% (32) and Zango Kombi ward 38.3% (23) said mother/female education is a factor that influences child survival strategies in their wards and

is inadequate while most of the respondents from and Lamido Borno ward 53.5% (23) said it is very inadequate. From these findings, it can be deduced that mothers' education on the influence of child survival is ineffective across all the wards in the study area.

The proportions of mothers said that the basic health services like vaccination and community outreaches are factors that influence child survival strategies and it is inadequate in Ardo-Kola ward was higher with 45.1% (37), while a higher proportion of the respondents said that it is very inadequate in Sunkani ward 64.0% (32), Lamido Borno ward 46.5% (36) and Zango Kombi ward 45.0% (27).

Regarding family planning as a factor that influences child survival strategies was also sought from the respondents. The findings of the study revealed that a small proportion of the women from Ardo-Kola ward 39.0% (32), Sunkani ward 46.0% (23) and Zango Kombi ward 43.3% (26) said that it is inadequate while small proportion of the women from Lamido Borno ward 48.8% (21) said that it is very inadequate. Antenatal care was one of the factors that influence child survival strategies which was investigated. The results showed that small women from Ardo-Kola ward 42.7% (35) while Zango Kombi ward 5 (11.6%) said that it is adequate while most of the women from Sunkani ward 50.0% (25) and Lamido Borno ward 55.8% (24) said that it is inadequate. In the local government at large, antenatal care policy is adequate. This will help to detect likely complications that mothers are likely to encounter during child delivery and how to prevent such complications.

Hospital facility was another factor that influences child survival strategies. Most respondents 58.5% (48) from Ardo-Kola ward, 50.0% (25) from Sunkani Ward and 51.7% (31) from Zango Kombi ward said it is inadequate while 69.8% (30) of the respondents in Lamido Borno ward said that it is very inadequate. This implies that the hospital facilities in Ardo-kola local government are inadequate. This makes it difficult for women of reproductive age to have easy access to health workers and lead to low patronage of pregnant

women and nursing mothers to hospital facilities in the area. Furthermore, skilled health personnel is a factor that influences child survival strategies, most respondents from Ardo-Kola ward 52.4% (43) said it is inadequate, while most respondents from Sunkani Ward 82.0% (41), Lamido Borno ward 62.8% (27) and Zango Kombi ward 46.7% (28) said it is very inadequate. This means that the populations of skill health workers are inadequate in the local government area.

Most women from Ardo-Kola ward 51.2% (42) and Zango Kombi ward 65.0% (39) said government funding, policies and implementation is an inadequate factor that influences child survival strategies while a smaller proportion of women from Sunkani Ward 46.0% (23) and Lamido Borno ward 81.4% (34) said it is very inadequate. From these findings, it can be deduced that government funding, policies and implementation is inadequate and this affect the purpose of formulating some of these policies. The outcome on monitoring and supervision as a factor that influences child survival strategies a small proportion of the respondents from Ardo-Kola ward 48.8% (40) and Sunkani ward 60.0% (30) said that it is very inadequate while a significant proportion of the respondents from Lamido Borno ward 79.1% (34) and Zango Kombi ward 46.7% (28) said that it is inadequate.

Health partnership between the government and private organizations is another factor that influences child survival strategies. A small proportion respondents from Ardo-Kola ward 39.0% (32) and Sunkani Ward 48.0% (24) said that it is very inadequate while majority of the respondents from Lamido Borno ward 65.1% (28) and Zango Kombi ward 38.3% (23) said that it is inadequate. Furthermore, resource distribution (electricity, water, good roads, etc) as a factor that influences child survival strategies was said to be inadequate as observed by most of the respondents from Ardo-Kola ward 50.0% (41) and Zango Kombi ward 55.0% (33) while, most respondents from Sunkani Ward 74.0% (37) and Lamido Borno ward 95.3% (41) said that it is very inadequate.

4.5 Influence of Mother's Educational Background on Knowledge and Practice of Child Survival Strategies

The health of the child and services offered to protect it are influenced by factors classified by Cleason, Edward, Mawiji, and Pathmanathan (2000) as proximate factors (such as non-medical and medical care during the antenatal period, care at birth, preventive and curative care in the post-natal periods) and non-proximate factors such as maternal factors (age, parity and birth intervals). Household and community level factors (such as water supply, sanitation, and housing), socio-economic development and health services. Diamond (2000) pointed out that there is little doubt that high child mortality rates are associated with high rates of child bearing, early child bearing, short birth spacing and high-parity. He suggested that effort to reduce high child mortality should not only end in health intervention but should include improvement in women's education. Maternal education is an important determinant of child survival. According to Mosley and Chen (1984), maternal education affects children's health today. The various pathways through which maternal education promotes child survival, as suggested by the literature, include the acquisition of health education, adherence to recommended feeding practices for children, and increased command over resources. This is exemplified in the Table 4.5.1 below.

Table 4.5.1: Views of Respondents on the Places where Most Women Give Birth to Their Children

Child		WARDS									
		Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
		F	%	F	%	F	%	F	%	F	%
Youngest child	Hospital	37	45. 1	19	38.0	9	20.9	29	48.3	94	40.0
	Home	38	46.3	24	48.0	24	55.8	22	36.7	108	46.0
	Traditional Birth Attendant	7	8.5	7	14.0	10	23.3	9	15.0	33	14.0
	No response	-	-	-	-	-	-	-	-	-	-
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
First child	Hospital	37	45. 1	20	40.0	10	23.3	29	48.3	96	40.9
	Home	30	36.6	28	56.0	31	72.1	25	41.7	114	48.5
	Traditional Birth Attendant	4	4.9	2	4.0	2	4.7	3	5.0	11	4.7
	No response	-	-	-	-	-	-	3	5.0	14	6.0
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Second Child	Hospital	16	19.5	16	32.0	5	11.6	20	33.3	57	24.3
	Home	33	40.2	29	58.0	30	69.8	29	48.3	121	51.5
	Traditional Birth Attendant	4	4.9	2	4.0	3	7.0	3	5.0	12	5.1
	No response	29	35.4	3	6.0	5	11.6	8	13.3	45	19.1
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Third child	Hospital	11	13.4	12	24.0	5	11.6	16	26.7	44	18.7
	Home	25	30.5	23	46.0	20	46.5	24	40.0	92	39.1
	Traditional Birth Attendant	6	7.3	4	8.0	1	2.3	-	-	11	4.7
	No response	40	48.8	11	22.0	17	39.5	20	33.3	88	37.4
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**
Fourth child	Hospital	5	6.1	11	22.0	-	-	9	15.0	25	10.6
	Home	31	37.8	21	42.0	18	4.7	24	40.0	94	40.0
	Traditional Birth	1	1.2	2	4.0	2	4.0	-	-	5	2.1
	Attendant	-	-	-	-	1	0.4	-	-	1	0.4
	Prayer house										
	No response	45	54.9	16	32.0	22	51.2	27	45.0	110	46.8
	Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

The places where respondents give birth to their children in table 4.5.1 shows that, mothers' in Ardo-Kola ward 37.8% (21) and Sunkani Ward 42.0% (19) gave birth to their youngest children at home while most of the women in Lamido Borno ward 51.2% (28) and Zango Kombi ward 55.0% (32) do not respond. The outcome on place where they gave birth to their first child revealed that, 45% (37) of mothers in Ardo-Kola ward and 48% (29) Zango Kombi ward said that they gave birth to their first child in hospital while majority of the women in Sunkani ward 56.0% (28) and Lamido Borno ward 72. 1% (31) said that they gave

birth to their first child at home. This implies that majority of the women in the ward gave birth to their first child at home. This increases the risk of mortality. Furthermore, most mothers in all the wards Ardo-Kola 40.2% (33), Sunkani 58.0% (29), Lamido Borno 69.8% (30) and Zango Kombi 48.3% (29) said that they gave birth to their second child at home.

Regarding the place where mothers gave birth to their third child, a small proportion of the mothers from Ardo-Kola ward 48.8% (40) said that it is No response to them while most mothers from Sunkani ward 46.0% (23), Lamido Borno ward 46.5% (20) and Zango Kombi ward 40.0% (24) revealed that they gave birth to their third child at home. A good number of them gave birth at home. Furthermore, most of the women from Sunkani Ward 42.0% (21) gave birth to their fourth child at home while most mothers Ardo-Kola ward 54.9% (45), Lamido Borno ward 51.2% (22) and Zango Kombi ward 45.0% (27) did not respond to them.

Generally speaking, most of the women of reproductive age gave birth to their first four children at home. This means that there is low patronage of health care facilities by women of reproductive age. Despite the fact that majority of the women do not patronize hospital and give birth at home, this has not lead to complication that result to delivery by cesarean operation. From the survey, majority 202 (86.0%) of the respondents did not give birth through cesarean operation; while 33 (14.0%) of the respondents have ever given birth through cesarean operation.

4.5.2 Utilization of Antenatal Care Clinic During Pregnancy

Antenatal care is the care received during pregnancy from skilled health personnel which requires at least five (5) visits for pregnant women. In other words, it is the care of women and their unborn babies during pregnancy. Antenatal care (ANC) is generally aimed at producing a healthy mother and baby at the end of any pregnancy**.** It

presents important opportunities for reaching pregnant women with a number of interventions that are vital to their health and the well-being of the unborn. ANC is a key strategy for reducing maternal mortality; unfortunately, millions of women in developing countries do not receive it. ANC services include educating, counseling, screening and treatment to monitor and promote the wellbeing of mothers and their unborn children. Antenatal care also takes cognizance of the histories of previous and current pregnancies, routine measurement of weight, height, blood pressure, abdominal palpation, nutritional advice, examination for the presence or absence of oedema, distribution of iron and foliate supplements, malaria prophylaxis, urine testing for protein and tetanus toxoid vaccination. The quality of care they receive at these points is also an essential determinant of their survival. ANC utilization is important for early detection of illness and chances of mortality during pregnancy.

Table 4.5.2 shows the responses of women in the study areas on their attendance of ANC during delivery.

Table 4.5.2: Attendance at Antenatal Care Clinic During Pregnancy

Attendance	**WARDS**									
	Ardo-Kola Ward		**Sunkani Ward**		**Lamido Borno Ward**		**Zango Kombi Ward**		**Total**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Yes	53	64.6	30	60.0	12	27.9	40	66.7	135	57.4
No	29	35.4	20	40.0	31	72.1	20	33.3	100	42.6
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.5.2 reveals that most of the mothers in all the wards, Ardo-Kola 64.6% (53), Sunkani 60.0% (30), and Zango Kombi 66.7% (40) said that they attended antenatal care clinic during pregnancies while a significant proportion in Lamido Borno ward 72.1% (31) said that they do not attend. The high percentage of mothers that attend antenatal care clinic during pregnancy can be said to be high due to high level of awareness and sensitization

programmes by health workers and non-governmental organizations in Ardo-Kola LGA. Furthermore, on the number of times respondents had attended antenatal care clinic during pregnancy, the survey shows that, mothers in all the wards Ardo-Kola ward 35.4% (29), Sunkani Ward 40.0% (20), and Zango Kombi ward 72. 1% (31) and 33.3% (20) from Lamido Borno ward did not respond. From these findings, it implies that most of the respondents did not go for antenatal care clinic during pregnancy. On the kind of education received during antenatal period, the survey shows that most of the mothers in all the wards Ardo-Kola 29.3% (33), Sunkani 40.0% (20), Lamido Borno 40.0% (20) and Zango Kombi 33.3% (20) did not respond. The reason for non-utilization include financial constraints, lack of awareness of maternity homes, poor perception on need for such services and preference for home delivery because it is much less expensive. On the four study areas in Ardo Kola LGA, a significant population 40 (17.0%) of the respondents said that they received education on hygiene promotion, food intake and nutritional.

On whether the respondents were given anything during antenatal care visits, the survey revealed that majority of the respondents from Ardo-Kola ward 61.0% (38) Sunkani Ward 54.0% (33), and Zango Kombi ward 60.0% (30) said they were given something during antenatal while most respondents from Lamido Borno ward 69.8% (37) did not respond to them. This implies that most of the women who go for ANC are given detergents during ANC. It was further disclosed that drugs is one of the most common things that they were given during ANC for the prevention and treatment of any infection. From the survey, it can be inferred that these drugs that pregnant women are given during antenatal is meant to improve the health standard of the women and their unborn children.

With regards to payment for medication there is no doubt that there are incidental expenses that discouraged pregnant women from registering for antenatal care in Nigeria. Cost of ANC and delivery services usually serves as a barrier to accessing ANC. Thus,

pregnant women who would otherwise attend ANC services are discouraged due to economic constraints. Within the context of the studied communities, the Table 4.3.5 indicates whether the pregnant women that visit the health facilities for ANC services pay for medication.

Table 4. 5.3: Respondents' Views on whether they Ever Paid for Medication

Ever paid	WARDS									
	Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
	F	%	F	%	F	%	F	%	F	%
Yes	43	52.4	17	34.0	6	14.0	31	51.7	97	41.3
No	18	22.0	13	26.0	6	14.0	9	15.0	46	19.6
No Response	21	25.6	20	40.0	31	72.1	20	33.3	92	39.1
Total	**82**	**100**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.5.3 shows that majority of the respondents from Ardo-Kola ward 52.4% (43) and Zango Kombi ward 51.7% (31) said they do not pay for medication during antenatal; while respondents from Sunkani ward 40.0% (20). Payment for medication is possible to discourage some women who cannot afford to buy drugs from going to hospital during pregnancy. The respondents were further asked to mention items paid for. The survey revealed that 35 (14.9%) of the respondents asserted that they paid for diagnostic test while only 10 (4.3%) of them said that they paid for drugs. Furthermore, the respondents were asked on the amount they paid for the items they purchased. From the survey data, 36 (15.3%) of the respondents paid above N500 for the item (s) that they purchased, while only 21 (8.9%) of them paid between N301 and N500. The cost of items can discourage pregnant women from going to the hospital.

Table 4.5.4: Age of Respondents at First Birth

Age at first birth	WARDS									
	Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
	No	%	No	%	No	%	No	%	No	%
Less than 18 years	38	46.3	23	46.0	17	39.5	16	26.7	94	40.0
18 - 22 years	35	42.7	27	54.0	22	51.2	39	65.0	123	52.3
23 - 27 years	3	3.7	-	-	4	9.3	4	6.7	11	4.7
28 - 32 years	3	3.7	-	-	-	-	1	1.7	4	1.7
No Response	3	3.7	-	-	-	-	-	-	3	1.3
Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.5.4 shows that, mothers in the studied wards, Ardo-Kola 46.3% (38) gave birth to their first children when they were between 18 years old, while majority of the mothers in Sunkani 54.0% (27), Lamido Borno 51.2% (22) and Zango Kombi 65.0% (39) said that they gave birth to their first children when they were less than 18 and 22 years old. In the entire local government area 123 (52.3%) had their first babies at ages between 18 and 22years, while only 4 (1.7%) of them delivered their first child when they were within 28 and 32 years. This means that all the respondents (52.3%) who had their first child below 18 years got pregnant and married before they were ripe for marriage. Furthermore, on the numbers of pregnancies respondents had, the survey shows that 82 (34.9%) have had about 4-6 pregnancies while only 25 (10.6%) of them have had 10 pregnancies or more. This implies that most of these mothers were productive. Furthermore, a good number 128 (54.5%) of the respondents have had about 2-4 children, while only 23 (9.8%) of them have one child.

Table 4.5.5 shows the views of respondents on the disease that has affected most of their children.

Table 4.5.5: Views of Respondents on the Disease that has Ever Affected Women's Children

Children's affected diseases	WARDS									
	Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
	No	%	No	%	No	%	No	%	No	%
Pneumonia	12	14.6	5	10.0	1	2.3	9	15.0	27	11.5
Malaria	34	41.5	17	34.0	13	30.2	24	40.0	88	37.4
Diarrhea	16	19.5	12	24.0	11	25.6	9	15.0	48	20.4
Meningitis and neonatal tetanus	3	3.7	3	6.0	-	-	-	-	6	2.6
Low vaccination	1	1.2	-	-	-	-	-	-	1	0.4
Inadequate feeding	2	2.4	-	-	-	-	-	-	2	0.9
Poor maternal education	1	1.2	-	-	-	-	-	-	1	0.4
Options 'A' AND 'B'	2	2.4	4	8.0	-	-	7	11.7	13	5.5
Options 'A', 'B' AND 'C'	3	3.7	5	10.0	8	18.6	3	5.0	19	8.1
Options 'B' AND 'C'	3	3.7	4	8.0	10	23.3	5	8.3	22	9.4
Options 'A', 'B', 'C' AND 'D'	3	3.7	-	-	-	-	3	5.0	6	2.6
No Response	2	2.4	-	-	-	-	-	-	2	0.9
Total	**82**	**100.0**	**50.0**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Table 4.5.5 shows that respondents in Ardo-Kola 41.5% (34), Sunkani 34.0% (17), Lamido Borno 30.2% (13) and Zango Kombi 40.0% (24) said, malaria are the disease that has ever affected their children. This means that malaria is one of the most prevalent diseases that children in the study area are exposed to, it causes neonatal and infant mortality among children.

Qualitative data collected from community health personnel revealed that:

> We have observed that the common diseases among children in Sunkani ward are malaria, and we have also try to sensitize the concerned mothers on the dangers of malaria and the need to prevent their unborn child as well as their children from this illness. As such, we educate them on hygiene, environmental health, and to ensure good drinking water. Yes, we sensitize these nursing mothers in the health centre and we also go to the community as well to create more awareness. On every antenatal visit, we educate and remind expectant mothers on the protection of their unborn child when born against malaria and typhoid with emphasis on their personal hygiene.

Table 4.5.5: Diseases Youngest Children of the Respondents Were Vaccinated Against

Vaccinated Disease	WARDS									
	Ardo-Kola Ward		Sunkani Ward		Lamido Borno Ward		Zango Kombi Ward		Total	
	F	%	F	%	F	%	F	%	F	%
Measles	54	65.9	32	64.0	28	65.1	40	66.7	154	65.5
Whooping cough	25	30.5	9	18.0	7	16.3	12	20.0	53	22.6
No Response	3	3.7	9	18.0	8	18.6	8	13.3	28	11.9
Total	**82**	**100.0**	**50**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

Source: Field Survey (2016)

Table 4.5.5 shows that a significant proportion of the respondents in Ardo-Kola ward 54 (65.9%), Sunkani ward 32(64.0%), Lamido Borno ward 28(65.1%) and Zango Kombi ward 40 (66.7%) said measles is the disease that their youngest children were vaccinated against. Children are mostly vaccinated against measles which is one of the six infant killer diseases and causes of high rate infant mortality in many rural communities.

Respondents were also asked whether or not they have ever practiced exclusive breast feeding. The survey showed that most of the respondents in all the wards, Ardo-Kola 63(76.8%), Sunkani 43(86.0%), Lamido Borno 37(86.0%) and Zango Kombi 50(83.3%) said that they have been practicing exclusive breast feeding. A good proportion of the mothers had practiced exclusive breast feeding. This is representation of poor implementation of the policy on exclusive breast feeding in Ardo-Kola.

During the IDI, a medical practitioner in Ardo-Kola ward opined that:

> Honestly, I think education is very important to the breastfeeding mothers on how to feed their children. That is, if they are properly educated, these women would be able to take care of their children. On their own, for instance, they can visit the hospital for routine check-up which means the awareness is beginning to take its rightful place here.

A similar comment was made by an informant in Lamido Borno ward. According to him:

> "In fact, it is not an easy task to convince these women because before they visit the health centre, they are already preoccupied with the religious and cultural belief that is contrary to the orthodox education we usually provide them. Thus, I want you to understand that on their visit, we advise the women to discard all the traditional belief

> related to their health so as to embrace the education we provide to them. To my surprise, it is bringing a lot of changes in this community. In a related development there is religious and cultural belief. Some of these women believed that everything is from God, in spite of some words of discouragements and the challenges will still visit the health centre for counseling and be educated".

In Zango Kombi ward, during the in-depth interview, an informant narrated that:

> We educate them on HIV, how it is contacted and how the unborn child can also be prevented from it. We therefore counsel and test these women against the virus. We also educate them on the necessary delivery materials like cotton wool and hand glove before their EDD and this is really assisting them. We do that because most of the times, you see women coming to labour room without any delivery material.

Table 4.5.6 shows the views of respondents sampled on strategies that can be adopted to reduce child mortality in Ardo Kola LGA.

Table 4.5.6: Views of Respondents on Things that should be done to Reduce Child Mortality in Ardo-Kola LGA

Suggested Reduction Strategies	**WARDS**									
	Ardo-Kola Ward		**Sunkani Ward**		**Lamido Borno Ward**		**Zango Kombi Ward**		**Total**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
Regular utilization of antenatal care and other healthcare	18	22.0	10	20.0	5	11.6	15	25.0	48	20.4
Improve antenatal feeding and practice exclusive breastfeed	11	13.4	13	26.0	6	14.0	13	21.7	43	18.3
Government should provide adequate medical facilities	25	30.5	13	26.0	13	30.2	14	23.3	65	27.7
Government should provide adequate water supply	9	11.0	6	12.0	11	25.6	5	8.3	31	13.2
Government should partner with NGO's to intensify health care	5	6.1	-	-	-	-	-	-	5	2.1
Others	3	3.7	1	2.0	4	9.3	3	5.0	11	4.7
No Response	11	13.4	7	14.0	4	9.3	10	16.7	32	13.6
Total	**82**	**100.0**	**50.0**	**100.0**	**43**	**100.0**	**60**	**100.0**	**235**	**100.0**

The outcome of what respondents think should be done to reduce child death in Ardo-Kola LGA as shown in Table 4.5.6 shows that fewer proportion of the respondents in Ardo-Kola ward 30.5% (25), Sunkani Ward 26.0% (13) and Lamido Borno ward 30.2% (13) said government should provide adequate medical facilities and personnel would reduce child death while most respondents in Zango Kombi ward 25.0% (15) said that there should be regular utilization of antenatal care and other healthcare to reduce child mortality rate in the study area.

In-depth interview with an attendant at the health centre of Lamido Borno revealed that:

> Anti-malaria drugs should be provided to suppress the spread of malaria infection in this community. Also, provision of good drinking water is necessary because

> the source of drinking water in this community is highly irritating. The source of water in this community is Fadama water and there is only one borehole in this community with many people queuing up to fetch water which is not enough for all of us. Thus if water could be provided, it will help in curbing the menace of water related diseases. Again, ITN should be provided enough to go round for the community members as the major challenge in this community is malaria.

An informant during the IDI in Ardo-Kola ward disclosed that:

> The government should endeavor to provide immunization in order to protect the children from all diseases in this community. Also, ANC should be given to mothers to enable them learn how the unborn child can be protected from diseases. During the ANC, I think they can learn general issues about their personal hygiene for a better and safe delivery.

These sections concludes that in as much government policies on child survival strategies are well known, much more needs to be done to enforce and ensure proper implementation of these strategies across Ardo Kola LGA. This will go a long way to reduce child mortality in Ardo Kola LGA.

4.6 Discussion of Key Findings

This section is concerned with the discussion of major findings of this study which is done according to the research objectives. On the nature and pattern of the implementation of government policies on child survival strategies in Ardo Kola LGA, the study established that mothers in all the wards were aware of policies governing child survival. They are aware of immunization policy in the study area. Furthermore, some of the mothers in Ardo-Kola ward (52.4%) and Zango Kombi ward (34.0%) agreed that these policies are properly implemented through the provision of maternal health services. This finding agrees with the UNICEF (2001) report which revealed that the implementation of childhood immunization remains an important strategy in the reduction of morbidity and mortality from common VPD. According to the UNICEF (2006), the WHO (2005), and the National Programme on Immunization (NPI) guidelines, a child should receive a Bacille Calmette Guerin (BCG) vaccination for tuberculosis, four doses of oral polio, three doses of DPT (diphtheria,

pertussis, and tetanus), and one dose of measles vaccine by age of 12 months. VPD has been implicated in the deaths of more than 20% of the children under five years. However, the international comparative data show that Nigeria's immunization coverage rates are among the worst in the world.

Findings from the study further revealed that the perception of most mothers in Ardo-Kola ward (22.0%) and Zango Kombi ward (35.0%) on government policies on child survival strategies are effective and maternal education programmes are set in their wards while mothers in Sunkani ward (40.0%) narrated that they are not effective and maternal education programmes are not held in their wards. This finding is in line with the Policy Project (2002) which asserted that Nigeria has adopted and implemented a number of major global initiatives affecting children such as the Safe Motherhood Initiatives and followed by Making Pregnancy Safer, Baby-Friendly Hospital Initiatives (BFHI) among others. In spite of these initiatives and programmes, the under-five mortality rate is still high.

The study found that in Ardo-Kola and Zango Kombi wards majority of the mothers said that maternal and newborn care were a government policy on child survival strategies and they are fairly effective. The study also revealed that vitamin A and other micro-nutrient supplements are among government's policies on child survival strategies but were not effective. Complementary feeding was also said to be one of the government policies on child survival strategies known in Ardo Kola LGA. Few respondents from Ardo-Kola ward (32.9%) also said it is fairly effective. Antibiotic was mentioned as a government policy on child survival strategies. Fewer women from Ardo-Kola ward (26.8%) said that it was fairly effective. These findings agree with Concern Worldwide (2012) submission which stated that child survival strategies entail well-articulated measures to prevent the major killer diseases in children under 5 years of age. These measures include maternal and newborn care, vitamin

A and micronutrient supplements, exclusive breastfeeding, appropriate complementary feeding and antibiotics.

Findings from the study showed that a good proportion of the women from Ardo-Kola ward asserted that the prevention and treatment of diarrhea was a very effective government policy on child survival strategies in the study area. Fewer proportions of the women from Ardo-Kola ward (28.0%) said hygiene promotion was a government policy on child survival strategies and it was effective while a few proportion of the women from Sunkani ward (42.0%) said that it was not effective. These findings also agree with Concern Worldwide (2012) which stated other well-articulated child survival strategies and measures to prevent the major killer diseases in children under 5 years of age which include prevention and treatment of diarrhea; safe water; hygiene promotion; and oral rehydration therapy and immunization.

As regards the factors influencing the implementation of child survival strategies, a good proportion of the respondents from Ardo-Kola ward (40.2%), Sunkani ward (64.0) and Zango Kombi ward (38.3%) agreed that mother/female education is a factor that influences child survival strategies in their wards and it was found to be inadequate while most of the respondents from and Lamido Borno ward (53.5%) said that it was very inadequate. The proportions of mothers who said that the basic health services like vaccination and community outreaches are factors that influence the child survival strategies was inadequate in Ardo-Kola ward but relatively higher with 45.5%, while a higher proportion of the respondents said that it was very inadequate in Sunkani ward (64.0%), Lamido Borno ward (46.5%) and Zango Kombi ward (45.0%). The finding of this study has confirmed what various studies regarding the implementation of child survival strategies like Caldwell (1979) who suggested that education, in general, and female education in particular, exert a great influence on children's health and survival with regard to pregnancy, childbirth,

immunization, and management of childhood diseases. Amare, Fasil and Belaineh (2007) posited that the major causes of death in under-five children are pneumonia, malaria, diarrheal diseases, low birth weight, meningitis and neonatal tetanus. Among many variables, vaccination status, maternal education, practice and perception of mothers on severity of common illness and benefits of some modern treatments were the best predictors of under-five mortality. The literacy status of women should be improved so that they can more adequately care for their children for better child survival.

National Demographic Health Survey (1999) stated that women's education has been reported as a key factor in reducing infant and child mortality. The higher a woman's level of education, the more likely it is that she will marry later, play a greater role in decision making, and exercise her reproductive rights. Her children will tend to be better nourished and enjoy better health. Data from both the 1999 NDHS and the 1999 MICS revealed that lower educational levels among females was related to higher infant and under-five mortality. Similarly, rural areas had lower levels of female literacy and consequently higher under-five mortality than urban areas. The relationship between female literacy and child survival is also clearly demonstrated when looking at immunization coverage rates and treatment of diarrhea diseases. Children of educated mothers are less vulnerable to morbidity and mortality. They found that educated women are more likely to be proactive mothers, taking initiatives in providing the best care for their children and willing to go against traditional norms to access modern health care facilities for children, increasing their rate of survival. Mosley and Chen (1984) also agree that the mother's educational level increases her skills in health care practices related to disease treatment, preventive care, hygiene, and nutrition, thus, improving chances for child survival.

Findings from the study showed that a good proportion of the women from Ardo-Kola ward (39.0%); Sunkani Ward (46.0%) and Zango Kombi ward (43.3%) said family planning

as a factor that influences child survival strategies it is inadequate while, most women from Lamido Borno ward (48.8%) said it is very inadequate. Antenatal care was one of the factors that influence child survival strategies. A good proportion of the women from Ardo-Kola ward (42.7%) and Zango Kombi ward (46.7%) said it is adequate while most women from Sunkani ward (50.0%) and Lamido Borno ward (55.8%) said that it was inadequate. These findings concurred with what various studies regarding the implementation of child survival strategies have revealed. Notably among them is that of Amare, Fasil and Belaineh (2007) who recommend that mothers should be trained to practice key child survival interventions like antenatal care follow-up, Modern mid wives, use of oral rehydration therapy (salt solution) and homemade fluids, vaccination and insecticide treated bed nets. Rutstein (2001) stated that presently, fertility rates are high in Nigeria as indicated by a TFR of 5.2 births per woman and a crude birth rate of 41. Childbearing begins early in Nigeria, with nearly one-half of women of reproductive age becoming mothers before the age of 20. Teenage childbearing is higher in rural than in the urban areas and has negative demographic, socio-economic, and socio-cultural consequences. These young mothers are more likely to suffer from severe complications during delivery, resulting in higher morbidity and mortality for both themselves and their children. With an unmet need for family planning of 18 percent (13% for spacing, 5% for limiting births) and a contraceptive prevalence rate (CPR) of 9 percent, Nigerians are still having more children than planned and at shorter than desired birth intervals (see NDHS, 1999).

Findings of the study showed that most respondents (58.5%) from Ardo-Kola ward, (50.0%) from Sunkani Ward and (51.7%) from Zango Kombi ward said hospital facilities were other factors that influences child survival strategies and it is inadequate while (69.8%) of the respondents in Lamido Borno ward said it is very inadequate. Skilled health personnel is a factor that influences child survival strategies, most respondents from Ardo-Kola ward

(52.4%) said it is inadequate, while a reasonable number of the respondents from Sunkani ward (82.0%), Lamido Borno ward (62.8%) and Zango Kombi ward (46.7%) said that it was very inadequate. Their view is in line with the NDHS (1999) which reported that 9% of households that were surveyed had no access to any health facility, 34% had no private doctor, and 24% had no access to a pharmacy. These findings shows that there are regional variations with the north-east and north-central regions being the worst served. In addition, timely access to secondary and tertiary services is more problematic than facilities on the ground may suggest. The health system has been plagued by problems of service quality, including inadequate and insufficient numbers of skilled workers. The Federal Ministry of Women Affairs and Youth Development (2000) asserted that timely access to secondary and tertiary services is more problematic than available facilities. The health system has been plagued by problems of service quality, including inadequate skills, insufficient number of skilled workers, decaying infrastructure, insufficient equipment, as well as an acute drug shortage. Other factors include financial barrier to access from poorly designed cost recovery mechanisms, lack of effective community participation or real decentralization; poor road networks, poor maternal knowledge, weak referral systems among the primary, secondary, and tertiary care; overlapping vertical programmes; reduced national funding; and weak information systems. However, the majority of the population rated the public health services as poor.

Most women from Ardo-Kola ward (51.2%) and Zango Kombi ward (65.0%) said that the government funding, policies and implementation were inadequate factors that influence the child survival strategies while a good proportion of the women from Sunkani ward (46.0%) and Lamido Borno ward (81.4%) said that it was very inadequate. Findings further showed that most of the respondents from Ardo-Kola ward (48.8%) and Sunkani ward (60.0%) were of the view that monitoring and supervision were the factors that influence the

child survival strategies and it was rated very inadequate while majority of the respondents from Lamido Borno ward (79. 1%) and few from Zango Kombi ward (46.7%) said that it was inadequate. This view is in line with Taraba State Government (2010) report that the government funding for child health care is inadequate. According to this report, 2% - 5% of the annual budgets were allocated to health across all the LGAs. The development and improvement of child health care has lagged behind the economic development in Taraba State. According to the Ministry of Health and Family Welfare (2008), by 1990, only 17 per cent of the population had access to modern health facilities; PHC facilities are supposed to provide basic preventive and health promotion services that include immunization, health education, and the promotion of adequate nutrition as well as management of malaria, diarrhea, ARI, and other common diseases. PHC also provides Antenatal Care, Family Planning services, and basic surgical services. In spite of the laudable goal of its health policies, Nigeria continues to spend below the WHO-stipulated 5 per cent (less than $5 per capita) of its annual budget on health care (Centre for Disease Control, 2002).

Furthermore, findings from the study indicated that a good proportion of the respondents from Ardo-Kola ward (39.0%) and Sunkani Ward (48.0%) said that the health partnership between the government and private organizations was another factor that influences the child survival strategies and it was very inadequate while most of the respondents from Lamido Borno ward (65. 1%) and Zango Kombi ward (38.3%) reported that it was inadequate. Majority of the respondents from Ardo-Kola ward (50.0%) and Zango Kombi ward (55.0%) agreed that resource distribution (electricity, water, good roads, etc) were factors that influence the child survival strategies and it was inadequate while most of the respondents from Sunkani ward (74.0%) and Lamido Borno ward (95.3%) said that it was very inadequate. This view is in line with the NDHS (1999) that the health system has been plagued with a lot of problems of decaying infrastructure, unavailable equipment, as

well as acute drug shortage. Other factors include financial barrier to access from poorly designed cost recovery mechanisms, lack of effective community participation, weak referral systems among primary, secondary, and tertiary care, reduced national funding, and weak information systems. In addition, there are others who regarded the public health services poorly; 26% of people surveyed in Taraba State using the Core Welfare Indicator Questionnaire Survey of 1999, conducted by the Federal Office of Statistics as part of the National Integrated Survey of Households, reported dissatisfaction with the public health services because of cost (56%), unavailability of drugs (33%), and long waiting periods (33%).

As regards the influence of mothers' educational background knowledge and practice of child survival strategies, the findings from the study showed that some mothers in Ardo-Kola ward (37.8%) and Sunkani ward (42.0%) gave birth to their youngest children at home, a good proportion of the mothers in Ardo-Kola ward (45.1%) and Zango Kombi ward (48.3%) gave birth to their first children in the hospitals while most other mothers in Sunkani ward (56.0%) and Lamido Borno ward (72.1%) gave birth to their first children at home. Most mothers in all the wards; Sunkani Ward (58.0%), Lamido Borno ward (69.8%) Zango Kombi ward (48.3%) and Ardo-Kola ward (40.2%) gave birth to their second child at home. Findings from the study also showed that a greater porportion of the women from Sunkani Ward (46.0%), Lamido Borno ward (46.5%) and Zango Kombi ward (40.0%) gave birth to their third children at home. Furthermore, the mothers from Sunkani ward (42.0%) gave birth to their fourth children at home too.

The results of this study showed that most of the mothers in all the wards Ardo-Kola ward (64.6%), Sunkani ward (60.0%), and Zango Kombi ward (66.7%) said that they attended antenatal care clinic during pregnancy while most mothers in Lamido Borno ward (72.1%) said they did not attend. The study further revealed that a good proportion of the

respondents from Ardo-Kola ward (41.5%) and Zango Kombi ward (40.0%) said that they were given drugs during antenatal. A good proportion of the respondents from Ardo-Kola ward (41.5%) and Zango Kombi ward (40.0%) agreed that they were given drugs during the antenatal period. This finding agrees with Caldwell (1979) who suggested that there are several pathways whereby mother's education might enhance child survival in the society. There is also a shift from 'fatalistic' acceptance of health outcomes towards implementation of simple health knowledge; an increased capability to manipulate the modern world, including interaction with medical personnel; and a shift in the familial power structures, permitting the educated women to exert greater control over the health choices for their children.

The finding from the study reveals that some mothers in wards Ardo-Kola (46.3%) gave birth to their first children when they were less than 18 years old, while majority of the mothers in Sunkani (54.0%), Lamido Borno (51.2%) and Zango Kombi (65.0%) wards said that they gave birth to their first children when they were between 18 and 22 years old. Mothers in Ardo-Kola ward (40.2%) had between 1 and 3 pregnancies, while fewer mothers in Sunkani ward (40.0%), Lamido Borno ward (41.9%) and Zango Kombi ward (35.0%) said that they had between 4 and 6 pregnancies. The findings from the study further revealed that majority of the women in Ardo-Kola ward (42.7%), Sunkani ward (76.0%), Lamido Borno ward (60.5%) and Zango Kombi ward (48.3%) said they had between 2 and 4 live births. While the study also revealed that majority of the women in all the wards Ardo-Kola (62.2%), Sunkani (68.0%), Lamido Borno (55.8%) and Zango Kombi (78.3%) said that they had not lost any of their children. This finding is in tandem with Cleland (1990) who posited that education may have a modest effect on people's health knowledge and beliefs, but a pronounced effect on the propensity to use modern medical facilities, and adopt modern health practices. This is because of a closer social identification with the modern world,

greater confidence at handling bureaucracies or a more innovative attitude to life among women who have some experience of school.

Findings from the study showed that majority of the mothers in Ardo-Kola ward (62.2%), Sunkani ward (68.0%), Lamido Borno ward (55.8%) and Zango Kombi ward (78.3%) said they had not lost any of their children. Most mothers in all the wards Ardo-Kola (54.9%), Sunkani (76.0%), Lamido Borno (37.2%) and Zango Kombi (46.7%) had between 2 and 4 living children. This view is in line with Hobcraft *et al.* (1984) whose study demonstrated that socio-economic differentials in child survival widened with increasing age of the child and found the greatest consistency in mortality between ages one and five, where there were strong suggestions that a model that included both mother's and father's levels of education had widespread applicability in the survival of the child.

The study showed that a significant proportion of the respondents in Ardo-Kola ward (68.3%) Sunkani ward (72.0%) and Zango Kombi ward (66.7%) said well water is their source of drinking water while majority of the respondents in Lamido Borno ward (62.8%) said that the stream and river found in their community were their source of drinking water. Most respondents in all the wards, Ardo-Kola (41.5%), Sunkani (34.0%), Lamido Borno (30.2%) and Zango Kombi (40.0%) said that malaria is the disease that has ever affected their children. The respondents in Ardo-Kola ward (76.8%), Sunkani ward (86.0%), Lamido Borno ward (86.0%) and Zango Kombi ward (83.3%) said that they had ever practiced exclusive breastfeeding. The finding of this study buttresses the research carried out in Bangladesh, for instance by Lindenbaum (1990) who stressed the apparent role of greater cleanliness among educated women in explaining differentials in child mortality.

Furthermore, a few respondents in Ardo-Kola ward (30.5%), Sunkani ward (26.0%) and Lamido Borno ward (30.2%) said government should provide adequate medical facilities and personnel to reduce child mortality while most respondents in Zango Kombi ward

(25.0%) said regular utilization of antenatal care and other healthcare would reduce child death. An larger proportion of the respondents in all the wards, Ardo-Kola (98.8%), Sunkani (94.0%), Lamido Borno (100.0%) and Zango Kombi (93.3%) thought that child healthcare can be improved. This view is in contrast to the findings of the Ministry of Health and Child Welfare (2007) which stated that the condition is centred on drugs, equipment and essential supply but they are not forthcoming. Other common challenges include low capacity of surgical and laboratory services, problems with maintenance of available equipment and obsolescence of some. Others are severe shortages of blood and blood products at district hospital level, autoclave machines and oxygen cylinders either absent or non-functional resulting in increased numbers of referrals requiring caesarean sections, and neonatal units in central and districts hospitals without functional resuscitation equipment and incubators. Referral systems and community outreach programmes are being severely compromised by lack of transportation. Ambulance services are severely compromised from district to central hospital while fixed communication equipment such as telephones and radio services are significantly limited. The lack of fixed telephones has affected access to electronic mail through the health net system which had been established earlier. Other challenges faced by community in accessing health services including: distance to the clinic; some mothers walk 30km to the nearest clinic, financial barriers such as user fees and transport costs, shortages of health commodities such as vaccines and drugs and acute shortage of human resources. The Federal Ministry of Women Affairs and Youth Development (2000) also stated that the challenges facing the health of some Nigerian children are enormous, ironically amidst voluminous mineral and human resources, the country is endowed with. In terms of health infrastructure, Nigeria had about 18,258 PHC facilities, 3,275 secondary facilities, and 29 tertiary facilities (NHMIS). Although these numbers seem adequate, the 1999 NDHS reports

that 9% of households that were surveyed had no access to any modern health facility, 34% had no private medical practitioner and 24% had no access to a pharmaceutical centre.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major findings

This study investigated the implementation of child survival strategies in Ardo-Kola Local Government Area of Taraba State, Nigeria. The study revealed that poverty increases exposure and reduces resistance to diseases, a synergy that contributes to wide inequities in child survival and makes poor children more likely to become sick and die. The study verified that the delays in care-seeking due to late/non recognition of danger signs in ill children, women's lack of power to make decisions to take the children to health facilities for care, lack of access to health facilities for quality care and the resources to provide the care largely affects child survival in the studied area. This supports the need for universal coverage with Community Integrated Management of Childhood Illness (C-IMCI) with the integration of home based treatment of malaria, pneumonia and diarrhoeal diseases, the Home Based Newborn care and other strategies aimed at improving child survival within the studied communities of Ardo Kola LGA.

The Summary of major findings from the study is as follows that respondents have good knowledge of child survival strategies particularly of vaccine immunization. The attitude of respondents towards appropriate child survival strategies was positive. Socio-cultural factors such as household structure, social network, belief systems, marriage patterns and pathways to care greatly influenced mothers on their adoption of child survival strategies. In addition to that, Socio-economic factors such as educational level, age, income, occupation, residential area, and involvement in decision making had mixed influences on utilization and access to health care facility by mothers.

5.2 Conclusion

In spite of significant global achievements in the areas of policy, strategy and plan development; capacity building; partnerships and communication strategies; operations

research, documentation, monitoring and evaluation; child survival in resource-limited settings especially Nigeria, has been affected by a number of challenges which have continued to contribute to their high U5 deaths. Findings from this study revealed that there are multiple constraints in health systems that hamper effective scaling up of interventions. Insufficient human, financial and material resources coupled with limited managerial capability and inadequate mechanisms for families to access health care are just some of the factors that lead to poor service delivery and low coverage of interventions. Insufficient availability of essential drugs and supplies, and inadequate supervision of health-care providers are among the persistent problems of the health systems in Ardo Kola LGA. Financial resources for child survival programmes are far from adequate for reaching every community in every district with low-cost interventions.

Known interventions that can reduce U5 deaths and improve their survival exist but the children have continued to die because the coverage with most interventions is less than 100%.

5.3 Recommendations

Child survival is affected by multiple factors including remote/distant contributors to child deaths, intermediate and proximal/immediate causes that can be largely addressed through the health sector. The survival of children requires the implementation of strategies that can reduce the impact of these factors. There is need for strong inter-sectorial and multi-sectorial collaborations in the implementation of strategies for their synergistic effects to be harnessed. The following recommendations are therefore made towards further improving the implementation of child survival strategies

1. General health education programme in the Antenatal clinic should include and focus more on other child health services (Growth monitoring, ORT and Post natal checkups)

since the mothers make effective use of Antenatal services, it should be used as a contact point to educate mothers on the need for the use of other child survival strategies.

2. Findings in the study and literature did show a synergy between education and literacy levels of women and their practice of child survival strategies. It is therefore recommended that awareness programmes of women education should be focused on local communities.
3. Birth intervals have been shown to affect child survival and therefore health education for women should emphasize the advantages of birth intervals in reducing child mortality rates across local communities.
4. Monitoring and supervision of health workers in facilities and institutions should be strengthened as this will increase efficiency, compliance to global standard and practice.
5. Antenatal Care clinic attendance should be strengthened and during its provision discourage mothers giving birth at home and encourage them to practice exclusive breast feeding and adopt proper family planning measures.
6. There is urgent need for improvement in the funding of health programmes by rechanneling government spending on other trivial issues to important areas.
7. Government and non-governmental organisations in charge of vaccines should endeavor to produce and make them always available to the Primary Health Care facilities for use.
8. The government at all levels should ensure access to quality health services with skilled and motivated staff; potable water and environmental sanitation and protection; housing, food, good roads, electricity, transport, education, employment, health insurance scheme and other social supports especially for the less privileged.
9. The Communities should be mobilized to develop self-reliance and participate actively in sustainable delivery of the interventions. Care seeking, use of Insecticide treated bed nets, complementary feeding and food fortification programmes all

require a community with behaviour change for their utilisation. This is because no strategy for improving child health and development will be effective unless it addresses the behaviour of families and communities. It can be noted that families and communities have the responsibility to take decisions and actions that will improve their children's survival, growth and development.

10. The government should ensure access to quality health services with skilled and motivated staff; potable water and environmental sanitation and protection; housing, food, good roads, electricity, transport, education, employment, health insurance scheme and other social supports especially for the less privileged, particularly in the rural areas.
11. Training and Re-training of health workers: The realization of the importance of health workers in the successful delivery of interventions and their utilization should serve as the bases for training and retraining of health workers particularly those in the rural areas to address prevalence of child health related problems in the rural areas as earlier revealed from the findings of this study.
12. The Communities should be mobilized to develop self-reliance and participate actively in sustainable delivery of the interventions. Care seeking, use of Insecticide treated bed nets, complementary feeding and food fortification programmes all require a community with behaviour change for their utilisation. Community health workers should promote the use of the Key Household and community practices, Home Based Care for Newborns, Growth Monitoring and Promotion and Community based management of different conditions-Malnutrition, Pneumonia, Diarrhoea, Malaria, etc. This is because no strategy for improving child health and development will be effective unless it addresses the behaviour of families and communities following from the assertion. It should be noted that families and communities have

the responsibility to take decisions and actions that will improve their children's survival, growth and development.

5.4 Contribution to Knowledge

This study has made concerted efforts to:

- It has been observed that focus on cultural factors geared towards child survival affects the implementation of orthodox child survival strategies, thus there is the need for enlightenment and behavioural change orientation on this**.**
- The study established that girl child education is critical to the over-all general well-being of maternal health and the chances of child survival.
- Findings of the study verified the validity of the adopted theory. The theoretical position of Mosley and Chen Model of child survival strategies is understood within the context of the findings as the findings are situated within the confine of the model.

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APPENDIX I
QUESTIONNAIRE

Dear Respondent,

I am a student in the Department of Sociology, Ahmadu Bello University, Zaria. I am conducting a research on the topic: **The Implementation of Government Policy on Child Survival Strategies in Ardo-Kola LGA.** I wish to seek for your maximum cooperation and responses to this study. Any information you provide shall be treated with utmost confidentiality and use for academic purposes only. Thanks for your co-operation.

Yours faithfully,

INSTRUCTION: Please tick [√] option or write down answers where they are required.

SECTION A: SOCIO-DEMOGRAPHIC DATA

1. Sex (a) Male [ ] (b) Female [ ]
2. Age: _____
3. Marital status (a) Single [ ] (b) Married [ ] (c) Divorced [ ] (d) Widowed [ ]
4. If married, for how long have you been married?: _____
5. Number of children you have?: _____
6. Educational status (a) None [ ] (b) Primary school [ ] (c) Secondary school [ ] (d) Qur'anic school [ ] (e) NCE/OND [ ] (f) Tertiary education [ ]
   (g) Others (specify) _____
7. Religion (a) Christianity [ ] (b) Islam [ ] (c) Traditional [ ]
8. Your occupation (a) Farming [ ] (b) Large business [ ] (c) Petty trading [ ] (d) Artisan (blacksmith, carpenter, sculpture, designer) [ ] (e) Civil servant [ ] (f) Others (specify) _____

9. What is the occupation of your Husband? (a) Farming [ ] (b) Large business [ ] (c) Petty trading [ ] (c) Artisan (blacksmith, carpenter, sculpture, designer) [ ] (d) Civil servant [ ] (e) Others (specify) _____
10. Your average monthly income (a) I don't know [ ] (b) Below N10,000 [ ] (c) N10,000 – N19,000 [ ] (d) N20,000 – N29,000 [ ] (e) N30,000 – N39,000 [ ] (f) N40,000 – N49,000 [ ] (g) N50,000 and above [ ] (h) Non [ ]
11. What is your husband's average monthly income? (a) I don't know [ ] (b) Below N10,000 [ ] (c) N10,000 – N19,000 [ ] (d) N20,000 – N29,000 [ ] (e) N30,000 – N39,000 [ ] (f) N40,000 – N49,000 [ ] (g) N50,000 and above [ ]

SECTION B: NATURE AND PATTERN OF THE IMPLEMENTATION OF CHILD SURVIVAL STRATEGIES ACROSS SOCIO-ECONOMIC GROUPS IN ARDO-KOLA LGA

12. Are you aware of policies governing child survival strategies in Ardo-Kola LGA? (a) Yes [ ] (b) No [ ]
13. If yes to question 12 above, which of the policy(s) are you aware of?

_____

_____

14. Are these policies properly enforced? (a) Yes [ ] (b) No [ ]
15. How do you perceive the government policies on child survival strategies in Ardo-Kola? (a) Very effective [ ] (b) Effective [ ] (c) Fairly effective [ ] (d) Not effective [ ] (e) Undecided [ ]
16. Are some of the members of your LGA involve in the formulation and implementation of the policies on child survival strategies? (a) yes [ ] (b) No [ ]
17. Are there programmes set on maternal education in the LGA? (a) Yes [ ] (b) No [ ] (c) Don't know [ ]

18. Are there any initiatives on disease oriented awareness programmes put in place to enhance child survival in the LGA? (a) Yes [ ] (b) No [ ](c) Don't know [ ]
19. If yes to question 18 above, name them? _____
20. Which of the following government policies on child survival strategies do you know and how effective are they?

Government Policies on Child Survival Strategies	**Effective**	**Very effective**	**Fairly effective**	**Not effective**
Safe mother initiatives and its follow-up making pregnancy safer				
Baby Friendly Hospital Initiatives (BFHI)				
The Village Health Workers (VHW) programme				
Supplies of drugs and equipment				
Communication equipment				
Ambulance services				
Referral services				

SECTION C: FACTORS INFLUENCING THE IMPLEMENTATION OF CHILD SURVIVAL STRATEGIES

21. What is your assessment of the following factors that influence child survival strategies in Ardo – Kola LGA?

To what extent do you agree on the following factors that influences child survival strategies in Ardo – Kola LGA?

S/no	Factors	Adequate	Very adequate	Inadequate	Very inadequate	Neutral
A	Mother/female education					
B	Basic health services: vaccination, community outreaches					
C	Family planning					
D	Antenatal care					
E	Hospital facilities					
F	Skilled health personnel					
G	Government funding, policies and implementation					
G	Government funding, policies and implementation					
H	Monitoring and supervision					
I	Health partnership between the government and private organisations					
J	Resource distribution (electricity, water, good roads etc)					

SECTION D: INFLUENCE OF MOTHER'S EDUCATIONAL BACKGROUND ON KNOWLEDGE AND PRACTICE OF CHILD SURVIVAL STRATEGIES

22. Where did you give birth to your children i.e hospital, home, traditional attendant?

    (a) First child: _____

    (b) Second child: _____

    (c) Third child: _____

    (d) Others (specify) _____

23. Have you ever had CS before? (a) Yes [ ] (b) No [ ]

24. If yes to the above question (13), how many times? (specify) _____

25. What is the sex of your first child? (a) Male [ ] (b) Female [ ]

26. Do you attend anti-natal care clinic for your pregnancy? (a) Yes [ ] (b) No [ ]

27. If yes to the above question (26), how many times? (specify) _____

28. What kinds of education do you receive during anti-natal period?

_____

_____

29. What kind of items or materials do you receive in the hospital during anti-natal care periods? _____

30. Have you ever paid for medical facility? (a) Yes [ ] (b) No [ ]

31. If yes to the above question (39), what did you pay for? (specify)

_____

32. From question 31, what is the cost? _____

33. At what age did you first give birth? ……

34. Please fill the following

- Number of pregnancies _____
- Number of live births _____
- Number of dead children _____
- Number of living children _____

35. What is the sex of the child you have loss? (a) Male only [ ] (b) Female only [ ] (c) Male and Female [ ]

What is your source of drinking water? (a) Tap [ ] (b) Well [ ] (c) Stream/river [ ] (d) Bottle/pure water [ ] (e) Others (please specify): __

36. Which of the following has ever affected your child? Please tick as many as possible;

(a) Pneumonia [ ] (b) Malaria [ ] (c) Diarrhea [ ] (d) Meningitis and tetanus [ ] (e) Low vaccination [ ] (f) Poor hygiene [ ]

(g) Inadequate feeding [ ] (h) Poor maternal education [ ]

38. How far is the health facility (hospital) from your area; in Kilometers (KM)?

_____

SECTION E: POSSIBLE WAYS OF IMPROVING CHILD HEALTH IN ARDO-KOLA LGA

1. Do you think child health care can be improve in Ardo – kola? (a) Yes [ ] (b) No [ ]
2. What do you think should be done to reduce child death in Ardo – Kola LGA?

APPENDIX II
IN-DEPTH INTERVIEW GUIDE
The Implementation of Child Survival Strategies across Socio-economic Groups in Ardo – Kola LGA

Bio-data

1. What is your occupation _____
2. What is your highest education attainment _____

Nature and Pattern of the Implementation of Child Survival Strategies across Socio-economic Groups in Ardo-Kola LGA

3. What do you understand by child survival strategies?
4. Are you aware of any government policies on child survival strategies in the LGA?
5. How are the government policies on child survival strategies being implemented in the LGA?
6. Are there any initiatives on disease oriented awareness programmes put in place to enhance child survival in the LGA?

Probe:

- Safe motherhood initiatives and its follow-up making pregnancy safer
- Baby Friendly Hospital Initiatives (BFHI)
- The Village Health Workers (VHW) programmes
- Referral services

Factors Influencing the Implementation of Child Survival Strategies

7. What are the factors influencing the implementation of child survival strategies in Ardo-Kola LGA?

Probe:

- Mothers/female education
- Basic health services; vaccination
- Anti-natal care
- Health facilities
- Skilled health personnel

Influence of Mother's Educational Background on Knowledge and Practice of Child Survival Strategies

8. In what ways do you think mother's education is relevant for child survival?
9. What kind of education do you receive during anti-natal period?
10. What are the items you receive in the hospital during anti-natal; how effective are the items?
11. What are the factors responsible for the death of children in your community?
12. Which disease do you think are most dangerous to children health?

    Probe:

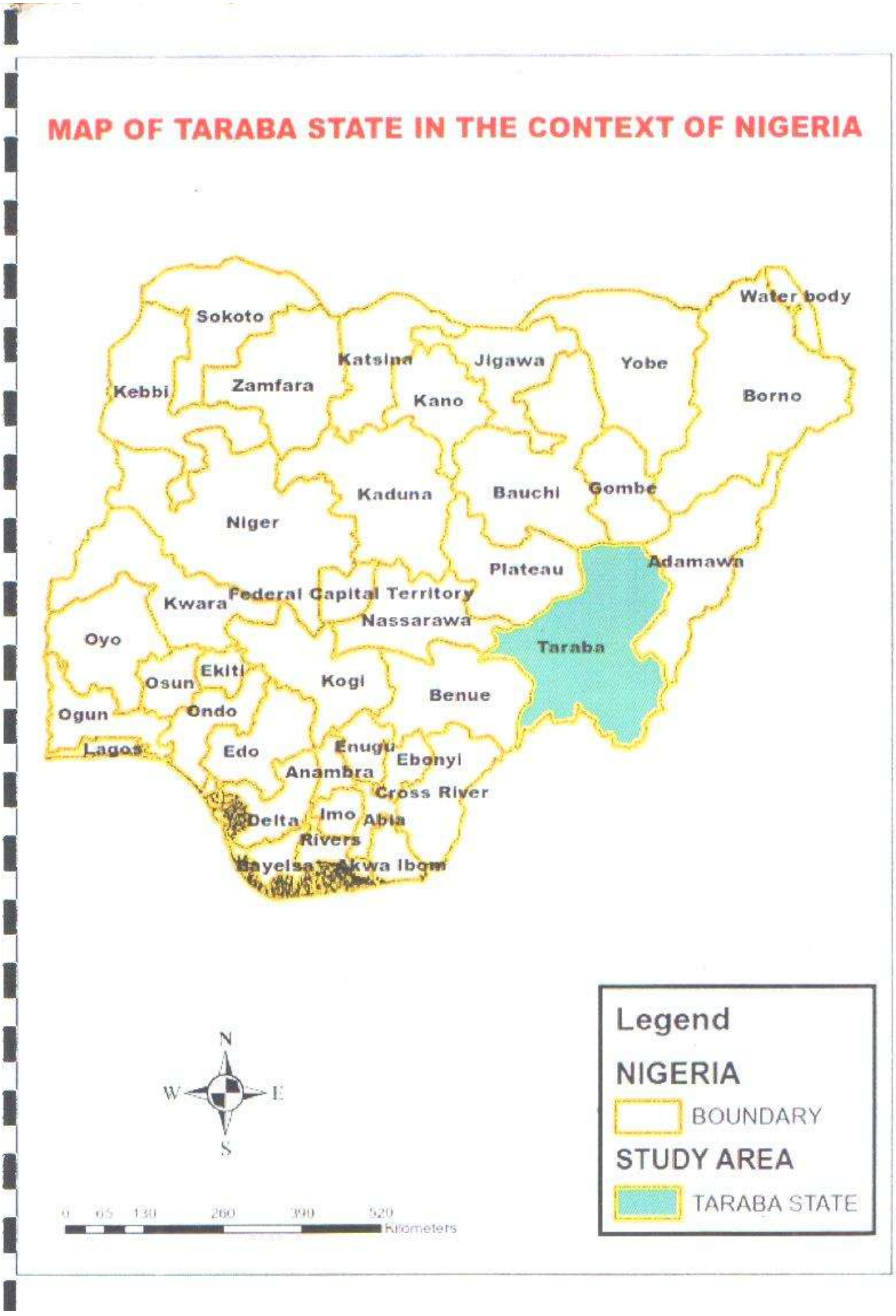
    - Pneumonia
    - Malaria
    - Low vaccination
    - Low hygiene
    - Poor maternal education

13. If you have lost a child, which of the disease(s) do you think caused the death?

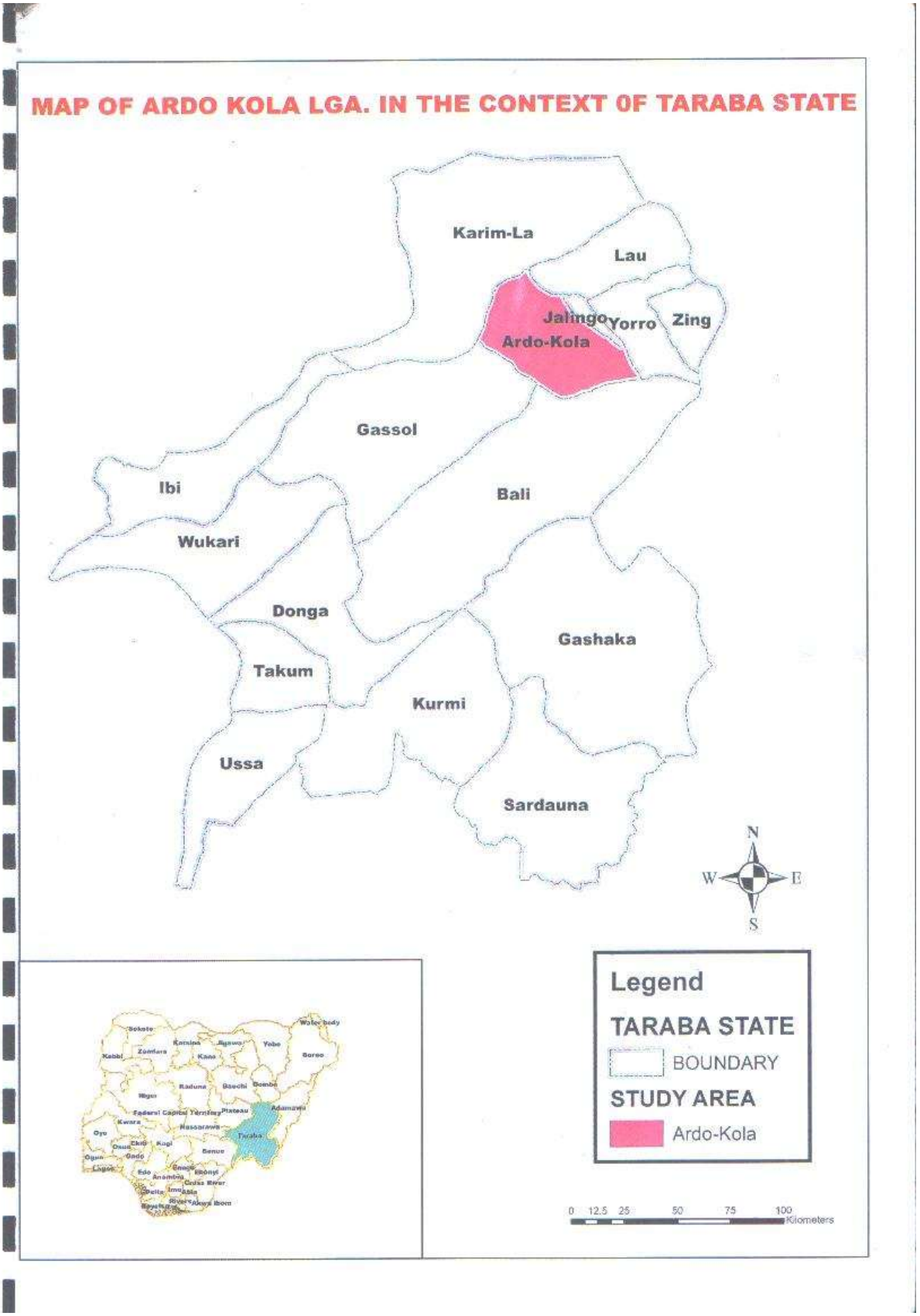
Possible ways of Improving Child Health in Ardo-Kola LGA

14. What are your suggestions in which child survival can be enhance in Ardo – Kola LGA?

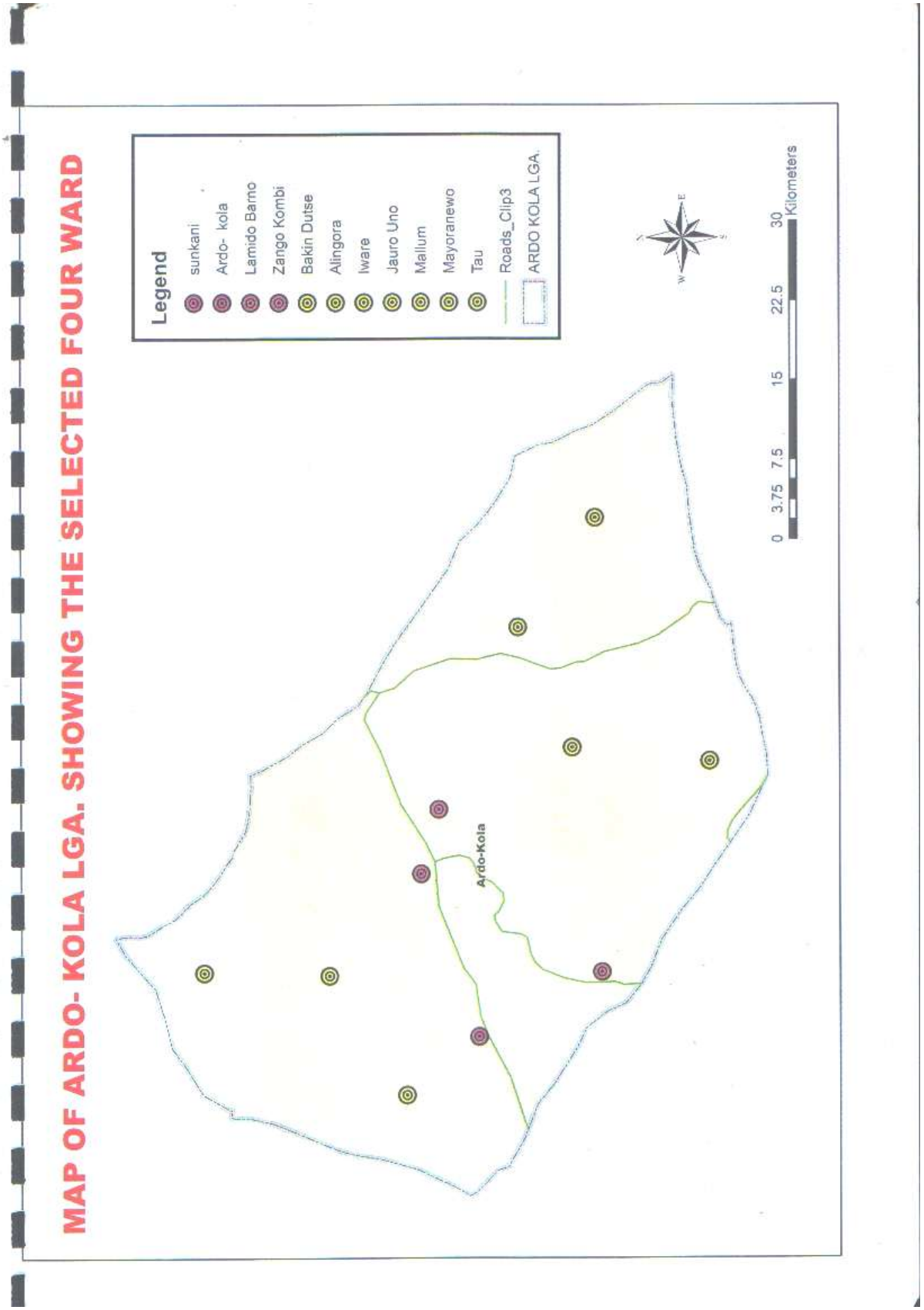
APPENDIX III



APPENDIX IV


MAP OF ARDO KOLA LGA. IN THE CONTEXT OF TARABA STATE
Karim-La
Lau
Jalingo
Yorro
Zing
Ardo-Kola
Gassol
Ibi
Bali
Wukari
Donga
Gashaka
Takum
Kurmi
Ussa
Sardauna
N
W
E
S
Legend
TARABA STATE
BOUNDARY
STUDY AREA
Ardo-Kola
0 12.5 25 50 75 100
Kilometers

APPENDIX V


MAP OF ARDO- KOLA LGA. SHOWING THE SELECTED FOUR WARD
Legend
sunkani
Ardo- kola
Lamido Barno
Zango Kombi
Bakin Dutse
Alingora
Iware
Jauro Uno
Mallum
Mayoranewo
Tau
Roads_Clip3
ARDO KOLA LGA.
Ardo-Kola
0 3.75 7.5 15 22.5 30
Kilometers