

**REPORT ON CAPACITY BUILDING
STUDY TOUR PROGRAMME TO
ZAMBIA**

SEPTEMBER 2006

**SPONSORED BY EUROPEAN UNION -PARTNERSHIP TO
REINFORCE IMMUNIZATION EFFICIENCY (EU-PRIME)**

**ORGANIZED BY HEALTH REFORM FOUNDATION OF
NIGERIA (HERFON)**

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LIST OF ACRONYMS

ANC	Antenatal Care
BCG	Bacillus Callmete Guerine (Vaccine for Tuberculosis)
CAP	Change Agent Programe
CBOH	Central Board of Health
CCE	Cold Chain Equipment
DHMT	District Health Management Team
DFID	Department for International Development (UK)
DPT	Diphtheria-Pertussis-Tetanus vaccine
EPI	Expanded Programme on Immunization
EUP-PRIME	European Union Partnership to Reinforce Immunization Efficiency
GAVI	Global Alliance for Vaccines and Immunization
GIS	Geographic Information Systems
GIVS	Global Immunization Vision and Strategy
GRZ	Government of the Republic of Zambia
HERFON	Health reform Foundation of Nigeria
ICC	Inter-Agency Coordination Committee
IMCI	Integrated Management of Childhood Illnesses
LAPSE	Leadership Accountability, Partnership and Sustainability
LGA	Local Government Area
MCH	Ministry of Child Health
MDG	Millennium Development Goals
MOH	Ministry of health
NIDS	National Immunization days
OPV	Oral Polio Vaccine
PHMT	Provincial Health Management Team
RED	Reaching Every District
RHMT	Regional Health Management Team
SWAp	Sector Wide Approach
UNICEF	United Nations Children Emergency Fund
WHO	World Health Organization

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EXECUTIVE SUMMARY

As part of the efforts and strategies to improve Routine Immunization coverage, services and efficiency in Nigeria, a consortium set up by EPOS Consultant, the European Partnership to Reinforce Immunization Efficiency (EU-PRIME) sponsored sixteen (16) professional health workers on a capacity building study tour programme to understudy the Zambian Immunization system.

This programme was supported under EU-PRIME Change Agent Programme (CAP) component managed by Health Reform Foundation of Nigeria (HERFON), a non governmental think tank organization set up in response to the deplorable health system in Nigeria to initiate, promote, facilitate, support and monitor sustainable reforms in the Nigerian Health Sector towards better outcomes and development in Nigeria.

Participants were drawn from the 6 EU-PRIME focal States (Abia, Cross River, Osun, Gombe, Plateau and Kebbi) and consisted of a combination of PRIME State Programmes Mangers, State Immunization Managers of Abia, Cross Rivers and Osun States, the Director of Primary Health Care Kebbi and State Epidemiologist for Plateau State. Others were the Consultant on Training to Inter-Agency Coordination Committee (ICC) Working Group and CAP Coordinator at the EU-PRIME headquarters office and facilitators from HERFON.

The purpose of the tour was to understudy Routine Immunization best practices in Zambia's health system with a view to adapt the lessons learnt to improve Routine Immunization system and services delivery in States of Nigeria.

The entire study tour programme had three phases. The first phase commenced with a one day pre tour workshop, then followed a one week intensive tour activities in Zambia and a post tour workshop to consolidate tour experiences and develop change projects to be implemented on EU-PRIME States.

At the pre tour workshop in Lagos Friday 01 Sept 2006, participants' knowledge and experience of Nigeria immunization system were consolidated. It facilitated understanding of the tour objectives, how to assess immunization system and foster great interactions among the group.

The tour activities in Zambia lasted for five days, where participants interacted and had several discussion sessions with relevant immunization health personnel. Some of the activities included courtesy visits to the Zambia Minister of Health and Nigeria High Commission in Lusaka. There were also meetings and workshop sessions with Directors in various departments of Ministry of Health, Child Health Unit, Cold Chain department, Cold Chain Maintenance Workshop and Training Centre; Visits to Lusaka District Health

Management Team, Kanyama Health Centre, Southern Provincial Health Department in Livingstone, Kaloma District in rural areas, Arara Health Post and communities.

The group learnt that Zambia Immunization System is effective, efficient, and qualitative. Immunization Service is fully integrated into the Primary Health Care under the Child Health Care Services. The country has achieved high coverage in all antigens with DPT₃ of 93%, Measles 82% and BCG 93%. No measles death since 2005, No indigenous Polio case since 2001 and no Polio case since 2003 and the country is at the verge of receiving WHO Certification as a Polio Free country. High level of commitment and community involvements at all stages contributed to their excellent immunization results which attracted WHO and Task Force on Immunization in Africa (TFI) Award for Effective Measles Campaign and GAVI Awards in 2003 and 2004 for outstanding support to immunization and exemplary measles campaign.

Amongst other peculiar support strategies like LAPSE (Leadership Accountability, Partnership and Sustainability), Sector Wide Approach (SWAp), Reaching Every Districts (RED), Super Market Approach, PULL and PUSH approach for vaccine supply and Public Private Partnership involvement in Immunization service delivery which the group found principally important, they also agreed to adapt the Zambian version of Neighborhood Health Committee, Standardization of Cold chain equipment, the establishment of cold chain equipment maintenance training workshop in the EU-PRIME States of Nigeria.

To consolidate and finalized agreed actions on lessons learnt from Zambia for project implementation in Nigeria, a two-day post tour workshop was held in Abuja on 25 & 26th Sept. 2006. Resolution reached at the workshop led to the development of four principal proposals for implementation in the six PRIME States. These proposals included the establishment of a neighborhood health facility committee, cold chain maintenance workshop, training of cold chain equipment technicians and the standardization of cold chain equipments in PRIME States

These newly initiated Immunization Change Agents Champions collectively concluded that the tour was timely and a good investment as it has increased their capacity to function more effectively as workers in Immunization services. They all confirmed that the tour has made them positively changed persons with personal commitment that would bring about changes in Immunization services in their various States

INTRODUCTION

Against the backdrop that Nigeria still remains one of the countries in Africa with huge challenges in high birth rates and low infant surviving rates, the Routine Immunization Programme in Nigeria is known to be weak. Recent monthly reports shows that more than a fifth of children are still not receiving oral polio vaccine during immunization activities in eight key northern states, leading to increasingly uncontrolled transmission of poliovirus in these areas.

At State level management is very patchy and more than half of the refrigeration equipment is either broken or worn out. At Local Government Area level, the situation is similar. As a result vaccines are unavailable most times. It has been identified that most of these problems include non functioning equipment, deficient knowledge, poor management, fragmented systems, and scarcity of vaccines, unsafe injections practices and inappropriate resource allocations.

Historically, the Expanded Programme on Immunization (EPI) was introduced in 1979 with the aim of providing Immunization Services to children aged 0 – 23 months. It experienced some initial success, but a few years after the programme started it became obvious that it was no longer achieving its stated objectives. It was re-launched in 1984.

In 1990, Nigeria attained Universal Childhood (UCI) with 81.5% coverage for all antigens. But the success was not to last long, and by 1996, Immunization coverage had declined substantially to less than 30% for DPT 3 and 21% for three doses of Oral Poliovirus Vaccines (OPV). The results of 2003 Demographic and Health Survey (DHS) revealed a DPT 3 coverage rate of 21% among children aged 12 – 23 months.

In 2005, the world moved several critical milestones closer to polio eradication, including the successful introduction of the monovalent oral polio vaccines, visible progress in the hardest endemic areas and an end to west and central Africa's epidemic (outside Nigeria).

Today coverage rates for the various childhood vaccines in Nigeria are still among the lowest, even though recent efforts (in 2006) has moved DP3 coverage to about 50% (NPI data). Nigeria is now considered the greatest threat to global eradication of Polio and there is an urgent need to address the problems facing Immunization activities in the country.

According to report from Global Polio Eradication Initiative, stopping polio transmission can be completed rapidly, except in Nigeria, where at least an additional 12 months will be required to finish the job, due to intense transmission in key states.

The resurrection of the Routine Immunization Services is technically feasible but requires systematic re-education, management, training and repair of the system in which

Immunization must function. The new Strategy of immunization Plus days (delivering multiple antigens and other child survival commodities through a combination of door-to-door and fixed-post immunizations in five days) has begun to yield results.

For the efforts of the National Immunization Programme in Nigeria to record any meaningful achievement, huge support is required from the State Health Team. It was in this regards that strategies of increasing Routine Immunization coverage and services in the six EU-PRIME focal States in particular and Nigeria in general was intensified.

In order to further this effort, the European Union Partnership to Reinforce Immunization Efficiency (EU-PRIME) sponsored 16 Health professionals on a capacity building Study Tour of Zambia Immunization System from 1st to 10th September, 2006. The tour was organized under the Change Agent Programme (CAP) component of EU-PRIME project supported and managed by the Health Reform Foundation of Nigeria (HERFON)

OVERALL OBJECTIVES OF THE PROJECT

To develop critical mass of Change Agents that have understanding and capability to consolidate the gains of the EU-PRIME project and sustain such so as to ensure the continuous increase in Routine Immunization services, efficiency and coverage.

SPECIFIC OBJECTIVES

To understudy and provide the Nigerian team with best practices in Zambia's Routine Immunization System with a view to adapt the lessons learnt by the Change Agents on Improving Routine Immunization in their States

METHODOLOGY

Participants who attend this capacity building study tour programme were drawn from the 6 EU-PRIME focal States; Gombe, Kebbi, Plateau, Abia, Osun, and Cross River. The selection took into consideration two immunization health workers per State which composed of PRIME State Programme Managers and a State Immunization Officers or Directors of State Primary Health Care Department or Epidemiologist. The ICC consultant and other Researchers from the Abuja National office were also part of the tour.

To achieve the above targets, European Union Partnership for Reinforce Immunization Efficiency (EU-PRIME) in collaboration with Health Reform Foundation of Nigeria (HERFON) contracted a Zambian consultant PRIMUS MEDIA known for good knowledge of the Zambia health System to organize the technical and logistic aspects of the tour as follows:

- Prepare the tour activities following a guideline which will involve all levels of the Zambia Immunization programme
- Make all necessary protocol arrangements with the government, organizations, facilities and individuals that will facilitate the tour
- Make other local arrangements like hotel accommodation, transportations etc for the tour
- Accompany tour delegates to all appointments in Zambia and facilitate other necessary needs of the team
- Write a report on tour activities at the end of the programmes
- Send letter of appreciation after the visits to various bodies that granted the tour group audience in Zambia

The tour programmes was designed such that it will

1. Develop immunization champions in PRIME focal States through exposure to sites of best Routine Immunization practices nationally and internationally in a focal study tours.
2. Support Change Agent to develop proposals for change projects implementation by the immunization State Change Agents in EU-PRIME States
3. Monitor and supervise immunization change projects in EU-PRIME States
4. Create a forum for sustain interactions among the Change Agents

The tour programme was also designed to expose the Change Agents to

1. Understand Zambia MOH/Government policy and strategies on Immunization services.
2. Study Zambian immunization logistics and technical services
3. Examine EPI materials for training and program management
4. Understand Information System for EPI and linkages with the surveillance process
5. Grasp aspects of RI practices / services at districts, Health facilities and Health post levels.

EXPECTATIONS

Change Agents were expected to

- Learn and apply new strategies of improving RI efficiency and coverage in their States
- Participate in the implementation of the various reformed projects in the States
- Act as advocate to promote and sustain RI practices and services at the State

The capacity building study tour programmes has a Pre tour workshop, Tour activities in Zambia and a Post tour workshop components.

PART ONE PRE-TOUR WORKSHOP ACTIVITIES

The one day Pre tour workshop took place at the Lagos Stopover Hotel on Friday 01 September 2006. It was organized for all delegates. It was also attended by other representatives from EU-PRIME project office Abuja.

The workshop was conducted by Dr. Ibrahim Oloriegbe, Executive Secretary HERFON (lead facilitator) and Mrs. Rebecca Ogbimi, Research Officer, HERFON.

It was to blend participants' knowledge and experiences of Nigeria Immunization system. It was also to brief them on

- The rationale and objectives of the tour
- Expectations after the tour
- The concepts of Change Agent programme and the attributes of Change Agents
- How to assess Immunization services and
- To foster greater interactions among the groups of Change Agents

There were two sessions a didactic and interactive sessions, where participants' understanding on Immunization System Analysis, Health Sector Reform and Concept and Principle of Change Agents were improved. Participants also produced an in depth Analysis of the Strength and Weaknesses of the Immunization System in their States and set personal objectives to address some identified weaknesses which were used as guiding focus for them during the tour. They were also informed of the details of the programme and activities of the tour.

The sessions among others featured presentations on

- Workshop Objectives
- EU-PRIME Project Objectives
- Attributes of a Change Agents
- Assessing an Immunization System
- Principles, Content and Characteristics of an Effective and Efficient Immunization Service
- Tour Expectations

The interactive session with group exercises / presentations, individual tour expectation and media interviews were also part of the one day pre tour activities.

At the pre tour participants expressed their expected desire to learn and focus on specific areas as it affects the situations at their States. These areas include

- a) Community mobilization,
- b) Health Management Information System and surveillance system

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- c) Human Resources Management,
- d) Waste disposal and Injection safety,
- e) Vaccine Distribution & Management
- f) Public Private Partnership in Immunization
- g) Policy and Legislations in Immunization service delivery
- h) Monitoring and supervision

Attached AT the annexes are the following detail information on the pre tour workshop

- *Copies of Pre Tour Workshop Presentations*
- *Comparative Analysis of Immunization System between Nigeria and Zambia*
- *Responsibility Sharing*
- *List of Participants at Zambia Immunization Study Tour*
- *Pre Tour Test*

PART TWO

TOUR ACTIVITIES IN ZAMBIA

INTRODUCTION

The study tour proper took place in Zambia and activities commenced on Monday 04 through Friday 08 September 2006.

Activities were organized on a daily basis to involve workshop sessions, meetings, and visitations to immunization experts and technicians, service delivery personnel, community champions and women at various levels from National, Regional, Districts, Facility, Rural and Community levels in Zambia. These activities include:

1. Courtesy visit to the Zambian Minister of Health.
2. Workshop sessions with the Directors of the 6 departments of Zambia Ministry of Health
3. Interactive Sessions with the officers of Child Health Unit, where Immunization is based in Zambia.
4. Visit and sessions with the Cold Chain Officers, Cold Chain Maintenance Workshop and Training Centre.
5. Interaction with Logistics and HMIS Officers
6. Visit to Lusaka District Health Management Team
7. Visit to Kanyama Health Centre in Lusaka District with focus on Immunization Service delivery, Integrated Child Intervention Services, roles of Neighborhood Health Committees and Immunization Waste management
8. Visit to Southern Provincial Health Department in Livingstone
9. Visit to Kaloma District to understudy Immunization services in rural areas.
10. Visit to Arara Health Post and communities (about 50 km from a Tarmac Road) to understudy Immunization Services in remote and hard to reach areas and to see the community's involvement in Zambian Immunization System.
11. Visit to WHO Zambia

A summary of the daily detail of activities plan in Zambia including information package is attached at the annex below

DAY I: NATIONAL MINISTRY LEVEL TOUR (Monday 04 Sept. 2006)

1.1 COURTESY VISIT TO ZAMBIA MINISTRY OF HEALTH / MEETINGS WITH DIRECTORS

The main focus was to understand and get a good grasp of the baseline information and functionalities involved in the organization of health services in Zambia, health care strategic plan, primary health care system and health education & promotion and the Routine Immunization programme.

At this briefing was

◆	Dr. Simon Miti	Permanent Secretary, Lusaka District
◆	Dr. Moses Sinkala	Director DHMT
◆	Dr. Nathan Kapata	Director Public Health and Research
◆	Dr. Geoffrey Chrishimba	Health Management Specialist
◆	Dr. Christopher Simoonga	Deputy Director M & E
◆	Dr. Felix Phiri	Asst. Director Planning
◆	Henry Kansembe	Director, Budget and Planning
◆	Steve Mtonga	Financial Specialist
◆	N. Chikwenga	Donor Coordinator

The group was briefed on the political, economic and social structure of Zambia. Zambia has total population 10.3 Million, with three pillars of government Parliamentary (150 members), Judiciary (supreme, high, magistrate and local courts), and Executive (23 cabinet members including the Minister of Health). Although there is political stability in the country the economy is generally poor with poverty rate of 68% and per capita income of \$380.

In the health care system stratification, there are 9 Provinces with 9 provincial health offices; 72 Districts with 72 Districts Health Offices; 23 Hospitals (18 second level and 5 third level hospitals; 74 Level one Hospitals; 1210 Health Centres; 20 Health Posts that interact with communities. About 83% of the facilities are owned by the government while the rest in various proportions by Private CHAZ and NGOs.

Administratively, Zambian health system is divided into:

- MOH/CBOH
 - DHMT
 - Hospitals.
- The core level of the reformed Zambian health system is the district which includes Community-based health workers; Health posts and centres; The District hospital and the district health office
 - The next referral level is the General Provincial Hospital with the depts of surgery, medicine, paediatrics and Obs & gyn.
 - The last is the central hospital with the above department and a range of specialist clinics.

87% of the households have access to the nearest health facility within 15 km, although there is however a huge rural-urban discrepancy with 97% of urban households lives within 5 km distance of a health facility compared to 51% for rural areas.

Zambia has a National Health Strategic Plan (2006 – 2010) and a Health Care Finance Policy that treats basic health care as a basic human right availed to all citizens. To this effect they operate a free user fee in the rural areas (1st level). They still depend heavily on external sources of finance, operate a common (single) basket of funding for health with donors for implementation of a jointly agreed upon strategic plan and annual action plans. In the distribution of the health care funds, 60% is allocated to the districts and 20% to hospitals. Resource allocation proffers a quarterly fund request mechanism.

Among other strategies, Public Private Partnerships is taken to be an integral part of the health care strategy as they help in ensuring that resources are maximized in the delivery of health care. The LAPS (Leadership, Accountability, Partnership, and Sustainability) and SWAp (System Wide Approach) strategies are also well utilized to Strengthened the Zambia health System

The System also revealed that the Immunization Service in Zambia is fully integrated into the Primary Health Care housed in the Director of Public Health and Research under the Child Health Care Unit. The service has high community awareness, acceptance and involvement at all stages of Immunization services. The Child Health Unit is directly responsible for immunization activities in Zambia.

1.2 VISITS TO THE CHILD HEALTH UNIT IN ZAMBIA

The visit was aimed to discuss with the Unit about the structure and functions of the Department, the various strategies used in attaining the current records on Immunization in Zambia. The Unit is headed by a Child health specialist Dr. Penelope Kalisha. Also present at this visit were

◆	Mrs. Martha Mulenga	Logistician
◆	Leo Chivundu	EPI Officer
◆	Mrs. Euphrasi Mtonga	NIDS Coordinator
◆	Magdalene Sione	IMCI Focal Person
◆	Akhtar Din	EPI Nation Cold Chain Manger

The Child Health Unit is mainly responsible for Child survival intervention strategies in Zambia. It has the EPI and National Cold Chain sections and coordinates child health activities nation wide from Provincial to the Health post level.

The Unit uses several strategies to achieve its current immunization records of high coverage in all antigens with DPT₃ of 93%, Measles 82%, OPV₃ 79% and BCG 93%, no measles death since 2005, no indigenous Polio case since 2001, no Polio case since 2003 and 3% zero dose of Immunization.

Some of the strategies include

1. Vaccine independent initiative (up to 100%) for traditional vaccine
2. Reaching Every District (RED) Strategy – Piloted in 10 Districts that did not meet the National Immunization target of 85%
3. Super Market Approach -
4. Biannual Child Health Week
5. Injection safety 100%
6. Neighborhood Health Committee
7. Capacity building for Health Workers
8. Community Register for Immunization to track defaulters

Social mobilization is taken seriously with inter sectorial collaboration at the province and district levels

Within the Unit, the National Cold Chain Manager shared the cold chain equipment replacement plans of 50% in 2002 and 50% by 2007.

Zambia has a national cold chain maintenance workshop for maintenance work and training of technician; the cold chain equipments are standardized to facilitate maintenance.

So far, efforts in Routine Immunization in Zambia has translated to several awards such as the GAVI award, Task Force on Immunization in Africa Award, and it is on the verge of receiving WHO Certification as a Polio Free country.

LESSONS LEARNT IN DAY ONE

- That system once established, can function even without the presence of political structures, a typical example in Zambia is where parliament and cabinet were dissolved but health system is functioning very well.
- That resources, for health activities from various quarters, can be put in a common basket (SWAP) and enhance a better services delivery,
- That innovation like child health week can assist in reaching the last unreachable child.
- Nigeria can employ multiple strategies to improve coverage
- Nigeria (or the states at least) should standardize Cold Chain Equipment (CCE) for ease of maintenances.
- Nigeria should establish CCE maintenance workshops at Federal and state levels for efficiency of services.
- The CCE workshop should serve the dual purpose of being training as well as maintenance workshops at state level.

- Technically oriented staff of the state and local government Area (LGA0 health department should be trained (at least 1-2 per LGA) to be CCE technicians in the states and LGAs.
- Social mobilization should be more effectively carried out through community participation and ownership via formation of Neighborhood Health committees to track defaulting children and increase coverage.

DAY II: REGIONAL FACILITY LEVEL TOUR (Tuesday 05 Sept. 2006)

2.1 MEETING WITH COLD CHAIN MAINTENANCE WORKSHOP AND TRAINING CENTRE

The meeting focused on examining the structure and logistics in the cold chain maintenance system. The visit was to familiarize the change agents with the effective running of the Zambian cold chain system.

The system has a national cold chain officer and 9 provincial cold chain officers or technicians who are trained from the national office.

Vaccines are forecasted from the health facilities, districts, and provinces then to national. Vaccine are procured by UNICEF and stored 6 months at National level, 3 months at provincial and 1 month at the Districts. Distribution of vaccines follows a PUSH process (funds from cost sharing in health) due to good storage system.

The training workshop /centre has different types of standardized refrigerators Solar, Electric, Gas and kerosene. Technicians from the provinces are trained on maintenance and repair. 2weeks training is done every 2 years and selection is based on basic knowledge of electrical or mechanical system. The standard training curriculum contained

- Basic theory- refrigeration and compression/ practical
- Kerosene /gas refrigerator absorption system/ Practical
- Photovoltaic system covering batteries, solar panels and charge regulator
- Practical- maintenance, repairs and changing of components
- Reassembling and recompiling of the whole refrigerator

The cold chain training workshop centre has a dry and cold store with inventory record taken quarterly

2.2 VISITS TO KANYAMA HEALTH CENTRE

This visit was meant for Change Agents to experience immunization service delivery; interact with hospital staff (nurses) and patient (women); understand the support systems and discussed how some challenges of RI services are overcome at the facility.

Kanyama Health facility centre, is located within Lusaka Province. It is one of the second level health facilities, providing various health services including immunization services to the community. It caters for a total population of 114,000 people with a 130 catchments areas.

Routine Immunization services are provided Monday to Friday. During postnatal, other related services are provided for children such as weighing and Vit A distribution. The facility has a community register for women and children less than five years which is used for monitoring during each visit. Immunization and ANC services are provided free but they are only required to pay for a registration card.

There is also a Neighborhood Health Committee which monitors and checks immunization defaulters within the community.

It was observed that Kanyama health facility is highly understaffed with over 200 immunization cases per day for only 2 nurses. Despite this the following are responsible for the success of this facility

- Client have confidence
- Service are available
- Qualitative service
- Committed health workers
- Integrated PHC services
- Display health information on noticed board
- Availability of cold chain equipment
- Daily immunization services
- Effective mobilization

The health workers although few, they are well trained, very committed and provide quality services.

2.3 VISIT TO LUSAKA DISTRICT HEALTH MANAGEMENT TEAM (DHMT)

The purpose of the visit was to ensure that Change Agents see an example of how routine immunization services are organized and management and also have an interactive session to understand the roles and responsibilities of Districts in Immunization.

The group met with

Dr. Matilda Chiko	Manager, Planning, Development and Medical Unit
Dr. Anthony Yeta	Manager, Planning, Development and Medical Unit
Mrs. Angnes Csimonga	Assistant MCH
Mrs. Charity Nyambe	District Health Information Officer
Mrs. Florence Mgala	Environmental Health Coordinator

The DHMT comprises of

- Director of Health
- Two Management and Planning Development Managers
- Clinical expert and Manager Administration
- Account Officer
- Environmental Health Unit
- Management Health Information system unit

The District has a population of 1.7 million people with 24 Health facilities which include the Teaching Hospital, Health facilities and sub health Centre. All health facilities provide immunization services except the teaching hospital.

Vaccines are supplied to the District cold store from the Provincial cold rooms on a quarterly basis based on need or forecast. Micro planning is also conducted by all Health centres and the supply of vaccines is based on the push system. Although few groups of Indians and Zionists reject immunization services in the district, the DHMT uses another method of confronting them in their houses to provide RI services.

In the district HMIS system, the management of immunization data is generated monthly through the HMIS focal person. The data is entered into EPinfo and sent by fax to the provincial office. The districts also have a trained technician to maintain and manage the cold chain system.

Each Centre has 8-10 outreach centers. It was observed that factors responsible for high routine immunization coverage in the district was based on

- Prompt delivery of service
- High level of staff commitment
- Child Health week conducted twice yearly and the emphasis of other social mobilization activities within the cities
- Integration of service (Growth monitoring, vit. A, de-worming, ITNS distribution, Health Education) etc
- Incentives to volunteer health workers to augment manpower
- The use of several out reach activities

LESSONS LEARNT IN DAY TWO

- Standardization of cold chain Equipment
- Establishment of cold chain equipment maintenance training workshop.
- Use of Curriculum in Training
- Selection of training by province with consideration to basic knowledge
- Biannual child Health week as a good strategy worthy of emulation
- Regular and prompt service delivery
- Functional out reach for almost all centre (not less than 5 each).
- Incentives to volunteers to augment shortage of staff
- Integration of service and Management of wastages

DAY III: DISTRICT FACILITY LEVEL TOUR (Wed 06 Sept 06)

3.1 MEETING WITH SOUTHERN PROVINCIAL HEALTH TEAM IN LIVINGSTONE DISTRICT

This meeting was to understudy Provincial / district systems and their roles in Immunization. It also focused on the experiences of RI services and the challenges delivering RI in the district. The group traveled to Livingstone district in Southern Province.

Livingstone is the capital of the southern province 475KM from Lusaka. The province has eleven (11) districts and a population of 1.4 million. Dr Syakantu is the Director of Health Team for the Province. Also there were

- | | |
|--------------------------|--|
| 1. Dr. Phiri Cadure | Ex-Director Livingstone Hospital |
| 2. Dr. Fubusha | Pediatrician & Child Health specialist |
| 3. Mr. Sikazwe Chipso | Manager planning, |
| 4. Mr Charda Mukaka | Data Management Specialist |
| 5. Dr. Beks Hans | Provisional Health Adviser |
| 6. Dr. Synakantu Gardner | Director, Provincial H. Service |

The structure has clinical care specialist, data Management specialist, Auditor and other support staff. The district Health Management team is headed by a Director and supported by managers of different programmes.

The district receives direct funding from National. District structure was strengthened to have District Health management Team with varying officers. The Child Health services delivered at the districts level target:

- Vaccine preventable disease
- All childhood illnesses
- Nutrition

The Immunization schedule targets BCG, polio, measles and pentavalent (diphtheria, Pertussis, Hepatitis B and Tetanus).

There are 2 provincial EPI stores that disburse vaccine to the districts (at Livingstone and choma); the district store in turn disburses to the Health facilities. There is a trained cold chain technician for each district. All the districts have surveillances officers and standard forms are available for reports. The province was divided into 2 zones to facilitate distribution.

The district also employed the various national strategies of immunization such as Child health week, RED strategies and Super market approach (During ANC Children are also offered Immunization services).

LESSONS LEARNT IN DAY THREE

1. Well organized, co-ordinate, and committed health management team.
2. Super market approach to immunization services delivery to reduce mis-opportunity.
3. Direct allocation of resources to the districts/ward can effectively increase service delivery as seen in the districts of southern province.

DAY IV: RURAL FACILITY LEVEL TOUR (Thursday 07 Sept. 2006)

4.1 VISITS TO KALOMO DISTRICT / ARARA HEALTH POST

This visit aimed to understudy Immunization services in the rural areas and to seek to understand how immunization service delivery especially in the remote areas are done and also understand and interact with member of the Zambian Neighborhood health committee.

Dr. Mutenso the District Health Medical officer and the District Health Information Officer briefed on Immunization services. The District has 29 Health facilities and 16 Health Post.

In an effort to ascertain the level of awareness of the importance and utilization of the child welfare services rendered in the district the group visited Arara rural area and sampled the opinions of the community members and interacted with the NHC leader in Arara area through interviews.

The following were observed:

- a) Women in the communities had in depth awareness of the availability of child welfare services, where to obtain the services and the importance of the service.
- b) Women were aware of the existence of neighborhood health communities, their members and their role in mobilizing community members for health actions especially on immunization.
- c) Women were seen trekking taken their under one children to a health posts for child welfare services and immunization which is located about 10km away was encountered.
- d) A woman with four children all immunized and still owned an immunization card.

The leader of the Kalomo Neighborhood Health Committee revealed that,

- ❖ she is in charge of households in 7 villages within that area where she supervises and hold monthly health meetings with all the members
- ❖ The Committee has a register to keep track of immunized babies and defaulters

- ❖ She affirmed the commitment of the committee members for their efforts on increase child survival in the area through creating awareness and mobilizing the communities to patronize the services in the 7 villages that form the catchments areas of the health post.
- ❖ The committee meets monthly and undergo some form trainings

4.1.1 ESTABLISHED COMMITTEES TO SUPPORT IMMUNIZATION ACTIVITES IN ZAMBIA

Committees have become an integral part of EPI as well as the entire Zambian health care system. Committees were formed for strategizing, fund-raising, planning, implementing and monitoring EPI NIDs and routine activities. This practice permeates all levels of health delivery from the central to the health facility and to the community levels.

Central Level

- **Child Survival Committee:** The Interagency Coordinating Committee (ICC) has recently been broadened and renamed the Child Survival Committee. This reflects the wider agenda to be addressed by the group. Members consist of the donors to EPI: UNICEF, USAID, WHO and JICA. Currently, the committee is not very strong as it does not benefit from high-level participation.
- **Social Mobilization Committee:** The SMC has intersectoral membership, functions only for NIDs and is disbanded as soon as NIDs are over. Many of the members have been on the committee for the last four years.
- **Intersectoral Coordinating Committee (ICC)** is composed of 14 members from the line ministries, including education, information, defence and agriculture.
- **Information, Education and Communication (IEC) Subcommittee:** This committee was initially set up at the initiative of ZIS and has intersectoral membership. It primarily addresses population issues. It has the potential to address immunization issues especially as some of the members belong to the NIDs committee. Within it is a working group of communication professionals who give direction on technical issues.
- **Emergency Preparedness Committee:** This recently established committee has intersectoral membership, various subcommittees (including for public education and mobilization) and is replicated at district and health facility levels. These committees have great potential for promoting surveillance.

Provincial/ Regional Level

- **NIDs intersectoral committees** address all aspects of NIDs planning and implementation. They are especially crucial for resource mobilization.
- **Emergency Preparedness Committees**
- **Health Centre Committees** composed of representatives from the neighbourhood committees work with health centre staff in planning NIDs
- **Neighbourhood Health Committees** are composed of elected volunteers by the community of a given health zone.

The Neighbourhood Health Committees (NHCs) play an active role in such matters as the development of the DHMT action plans, the use of user fees at health facilities and the development of educational programmes within the community. The NHC reportedly give weight when decisions are made on whether to purchase vaccines or replace faulty cold chain equipment. The NHC plays an important role in promoting immunization in the 'neighbourhood'. Several of the parents interviewed said they preferred and trusted information from the NHC members as they "live with them and trust them."

At such health communication in EPI has been left to the health facility staff and the neighbourhood health committees.

It was however reported that training for health facility staff, neighbourhood health committee members and community outreach volunteers is also lacking in many parts of the country. Most training is being funded through NGOs and Donor agencies, but seems to be limited to certain 'pilot districts' or concentrated programme activity areas

Beyond the NHCs, however, partners included religious groups, women's groups, community based distributors, community health workers, traditional birth attendants, traditional healers, breastfeeding support groups, safe motherhood groups and growth-monitoring promoters.

LESSON LEARNT IN DAY FOUR

1. High degree of trust the community has in Immunization service delivery
2. Commitment of the people to good health and wellbeing of the children
3. Efficient functioning of the Neighborhood Health Committee at the Rural Areas
4. Availability of vaccines in the rural health post
5. High level of awareness, knowledge and acceptance of immunization in the rural area

DAY V: NATIONAL / MINISTRY LEVEL TOUR (Friday 08 Sept 2006)

5.1 VISIT TO WORLD HEALTH ORGANIZATION (WHO) ZAMBIA

The visit to Zambia WHO office aimed to understand its contribution and activities in immunization in Zambia, the various strategies and view of WHO with the current Status of immunization in Zambia.

This was facilitated by

- | | |
|-----------------------------|-------------------------------|
| 1. Mrs. Stella Anyangwe | WHO Country Representative |
| 2. Dr. Matapo Belemu | National Surveillance Officer |
| 3. Mr. Abrahams Mwanamwenge | EPI Logistics Advisor |

Some of the key issues discussed during this visit highlightS and confirmed the fact that Zambia Immunization System is effective, efficient, and qualitative, which is highly supported by the government to have achieved high coverage in all antigens with DPT₃ of 93%, Measles 82% and BCG 93%. Pentavalent vaccine has been introduced to cover DPT, HepB and Hib. No measles death since 2005, No indigenous Polio case since 2001 and no Polio case since 2003. The country won WHO Award for Effective Measles Campaign and GAVI Awards in 2003 and 2004 and also on the verge of receiving WHO Certification as a Polio Free country.

It was revealed further that Zambia has a comprehensive Multi-Year plan (cMYP) for Immunization (2006-2010) developed within the framework of the National Health Strategic Plan (2006-2010), based on the Global Immunization Mission & Strategy (GIVS) - ratified by WHO and UNICEF in May 2005.

The Immunization strategic Programme 2006-2010 was adapted from the Global Immunization Strategy (GIS). The mission of the programme is to reduce the burden of vaccine preventable diseases, by protecting more people in Zambia through the use of safe and effective vaccines, in such a way as to strengthen the overall health system.

The programme

- Overall outcome is to contribute to achieving MDG 4 – Reduce childhood mortality
- Targets linked to the MDGs and in line with the National Health Strategic Plan:
 - Achieve 80% fully immunized children in every district by 2009
 - Maintain polio free status
 - Reduce measles mortality by 90% by 2010 compared to 1999 Estimate
 - Eliminate NT by 2007

Report of Study Tour to Zambia – Sept 2006

At the WHO office the EPI is divided into immunization, surveillance and case investigation. Jointly with the logistics department generate vaccine stock management activities, forecast vaccine usage, purchase order of vaccines and injection materials and report national OPV3 immunization coverage and vaccine distribution management.

The logistic department at WHO concentrates on some key elements such as manpower, Management, materials and Money as it affects immunization system in Zambia. Its records and enter data of immunization statistics, monitor vaccine stock out and forecast/plan for vaccine supply based on a weekly consumption records and also management the cold chain stock capacity. *Attached is a sample of vaccine and cold chain inventory form*

WHO used the GIS plan which itemizes key barriers to immunization in Zambia, to set up Enablers strategies to revert some of the barriers. Some of the Key barriers and key Enablers identifies are attached below.

5.2. SUMMARY OF IMMUNIZATION PROGRAMME ENABLERS AND BARRIERS

	Key Barriers	Key Enablers
Immunization Programme – Specific Issues	Access to immunization and other health services <ul style="list-style-type: none"> • Sustaining outreach visits due to inadequate staff, logistics and funds • Poorly-trained / untrained HF staff, especially at lower levels • Sparse population in some districts 	<ul style="list-style-type: none"> • Availability of wide network of Outreach Sites to support immunization services in rural areas • Strong linkage with communities in many districts • Motivated and committed staff at service delivery level • Availability of review meetings at all levels • Availability of supportive supervision missions from higher levels • RED strategy implementation experience in 10 pilot districts
	Immunization Coverage and Performance <ul style="list-style-type: none"> • 20/72 districts having less than 80% coverage for Measles • 41/72 districts having less than 80% coverage for DPT3 • 35/72 districts having less than 80% TT2+ coverage • High staff turnover in some districts 	<ul style="list-style-type: none"> • Motivated District Health Information Officers • 39/64 districts high-performing districts • Consistent national BCG coverage more than 95% • Improving OPV3 coverage (>80% in 2005)
	EPI Logistics <ul style="list-style-type: none"> • Inadequate training for newly employed or deployed logistics / cold chain staff • Need for coordination with Central Medical Stores department 	<ul style="list-style-type: none"> • Availability of computerized logistics management system • Trained logistics staff in most districts • Relatively strong logistics reporting, requisition, and distribution mechanism in place
	Injection Safety <ul style="list-style-type: none"> • Inadequate waste disposal system • Challenge of securing funds for the continuation of AD syringes at end of GAVI funding • Weak AEFI monitoring system 	<ul style="list-style-type: none"> • Use of AD syringes for all vaccination • Availability of some funding from GRZ/MoH for AD syringes
	Accelerated Disease Control <ul style="list-style-type: none"> • Risk of polio importation from other countries • Significant measles morbidity and mortality • Risk of NT cases from children not protected at birth 	<ul style="list-style-type: none"> • Experience in conducting high quality polio response campaign (during 2002 wild polio virus importation) • Experience in conducting high quality measles and TT supplemental immunization Activities • Strong active EPI surveillance system with consistently high quality indicators
	Financing <ul style="list-style-type: none"> • Huge funding gap likely, with the end of GAVI Phase I funding • Large resource requirements especially for new vaccines introduction • Health reforms and the need for more inter-departmental collaborations • Intense competition for resources from other health and developmental programmes • Low economic situation in the country • Poor social infrastructure in many parts of the country, especially the rural areas • Relatively poor communication networks and internet facilities that impede information transmission and communication between all levels 	<ul style="list-style-type: none"> • GRZ support for immunization through the HIPC and MTEF mechanisms • Opportunities for EPI funding through GAVI Phase II and IFFIM facilities • Strong government commitment to immunization and child health • Availability of Global and national goals and initiatives that relate to immunization • Generally increasing macro-economic status of Zambia

However, in pursuit of the mission of the immunization programme to achieve the global target of Immunization status in Zambia, the WHO country office operates with the following guiding principles

- *Quality and safety.* The immunization programme will deliver immunization services based on best practices in vaccine procurement, storage, distribution and quality-assured service delivery
- *Maximal coverage and reach.* To overcome barriers at all levels, to sustain demand and ensure all pregnant mothers and children are immunized as per the national schedule
- *Equity and gender equality.* To reduce disparities in services by addressing the needs of the underserved and hard-to-reach, regardless of their sex, socioeconomic or political affiliations
- *Sustainability through technical and financial capacity building.* Ensuring sufficient financial and human resources for long-term needs for immunization services, through investments by the GRZ and key partners
- *Excellence in Programme Management.* The Zambia immunization programme, in collaboration with key partner agencies and stakeholders, will optimize the use of resources following result-based principles and evidence-based practices.

LESSONS LEARNT IN DAY FIVE

1. The existence and support in a Common Country Strategic Multi – year work programmes (one strategic programmes adopted by MOH and WHO)
2. Efficient and effective monitoring system
3. The use of the quarterly vaccine forecasting charts and supply chain management system to estimate vaccines and injection materials consumption
4. Functional transport mechanism for the distribution and stockage of vaccines
5. An effective cold chain distribution management
6. Common basket funding for Immunization activities
7. The 10 Commandments of Immunization logistics
8. The use of integrated treatment services i.e. malaria, immunization, TB etc with an integrated health system for RI which recognizes EPI (policy), Logistic (strategies) and Cold chain (logistic arrangements)

5.3. DEBRIEFING SESSION WITH OFFICIALS FROM ZAMBIA MINISTRY OF HEALTH

The debriefing session was done five parts, recapping

- a) The Political and social Structure in Zambia
- b) The Health System in Zambia
- c) Zambian Immunization system
- d) Lessons Learnt from Zambia and Actions for implementation in Nigeria
- e) Challenges observed in the system and Recommendations

A. Political and Social Structure in Zambia

Republic of Zambia is a landlocked country in Southern Africa that is bordered Democratic Republic of Congo to the North, Tanzania on the north – east, Malawi on the east, Mozambique, Zambabwe, Botswana and Namibia to the south, and Angloa on the west. The counrty emerged from the territory of Northern Rhodesia named after the Zambezi river and became a Republic immediately upon attaining independence in October 1964.

Politics of Zambia takes place in a framework of a presidential representative democratic republic, whereby the president of Zambia is both head of state and head of government, and of a pluriform multi-party system. Executive power is exercised by the government. Legislative is vested in both the government and parliament.

The political system is multiparty, unitary parliamentary system with the President elected through a universal adult suffrage. The election of the president and the Parliament is done every five years and the vice president appinted by the President.

It was learnt that the last elections held on 27 December 2001 and compaigns are currently going on for another election scheduled for 28 September 2006 with Movement for Multi-party Democracy (MMD) as the ruling party.

It was gathered that, although the government generally has 140 elected member in adddition to 10 others usually nominated by the president, the current cabinet has been dissolved due to the forthcoming elections. In this case, the ministries are headed by the Permament secretary eg Ministry of Health

We also learnt that Zambia is divided into 10 Provinces, each adminstered by an appointed Minister who essentially performs the duties of the governor. The pronvinces are Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Souther, Western and kafue provinve. These provinces are further divided into 56 disticts.

Zambia also has a variety of culture and about 70 local languages and dialects (Bemba, Lozi, Kaonde, Lunda, Luvale, Tonga, & Nyanja) with approximately 10,462,436 million inhabitants over a land surface of 752,614 sq. Km

The country heavily depends on Copper, cobalt, zinc, lead, coal, emeralds, gold, silver, as it main natural resources and sources of foreign earnings

Amongst other things learnt, it was observed that

- The government of Zambia is committed to improve health Status in Zambia and it's particularly concern with developing a country wide policies and strategic plan, monitoring and supervising and evaluates the development / impact of policies and actions in the provinces and districts.
- The government was also seen to have a good working and collaborative relationship with development partners.
- There is also a good leadership structure that promotes continuity, accountability, and transparency
- The country has a stable political system with no military interventions and enjoys freedom of speech and highly committed citizens

B. Health System in Zambia

The Zambia health system is arranged along the structure of the Zambian government (from the Executive arm) from which the various cabinets and ministries are carved out. Ministry of Health (MOH) is the highest regulating body in charge of National Health issues. The MOH has a unified system which controls from the provincial to the health facility levels. It also regulates and formulates health policies for the country.

The system follows the tiers structure of government as power descends from the Central, Provincial, Districts, Sub districts, Health facility and the Health post levels.

Within the health system, we gathered that, the Provinces and districts have autonomy in terms of service delivery. The health sector reform programme initiated in 1992 has also contributed to the improved quality of services, community acceptability which yielded positive health seeking behaviours in Zambia.

At the central level, the health system operates through the Ministry of Health, which has the following roles and responsibilities.

- Health policy formulation, review and legislation.
- Provision of (tertiary) health services
- Monitoring, Evaluation and supervision and regulation.
- Resource mobilization

- .Co-ordination of donors.
- Data interpretation and analysis

At the Regional / Provincial Health system operates through the Regional Health Management team (RHMT) with the following roles and responsibilities:

- Policy interpretation for the lower levels (districts, sub-districts and facilities).
- Monitoring, evaluation and supervision of the lower level health systems/facilities
- Data collation from the lower levels and communication with the central level
- Service delivery through the hospitals (secondary)
- Integration with the private sector (the institution of Private public partnership)

At the District Health system operates through the District Health Management Team (DHMT). DHMT carries out the following functions:

- Health Planning
- Implementation of Health policy
- Data Collection
- Provision of services through health facilities and dispensaries

Similarly, in the sub-district health system, which operates through the health dispensaries, their roles and responsibilities include:

- Provision of health services
- Data generation.
- Community motivational activities and co ordinations

The last tier of the health system is the health facility which operates through the health post, they mainly

- Provide / deliver health services
- Coordinate and monitor community health activities
- Supervise and keep record of users in the rural area.
- Generate health data

Besides other approaches used to strengthen the health system, Zambia uses the

- = Sector Wide Approach (SWAp)
- = Common Basket Fund Approach
- = Cost Sharing Mechanism
- = Community participation Approach
- = Public Private Partnership

C. **Zambian Immunization System**

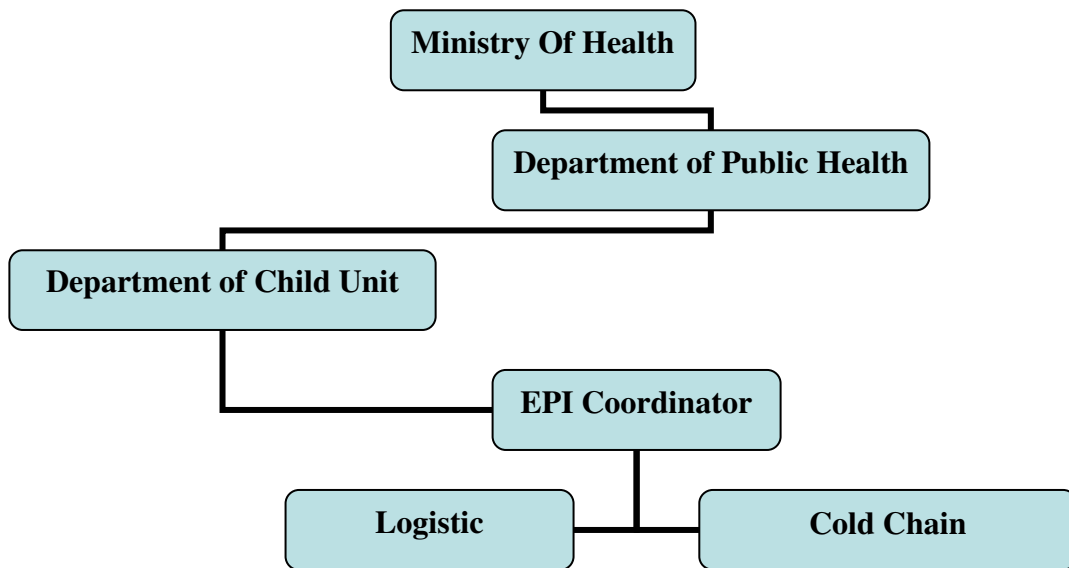
The Immunization system in Zambia was found to be very strong, effective and efficient which justify the purpose of the study tour to Zambia. The Immunization Service is fully integrated into the Primary Health Care under the Child Health Care Services. The service has full Community involvement at all stages. There is high community awareness and acceptance of Immunization services.

The country depends heavily on external / donor funds for immunization programmes.

Within Zambia our visit to 2 Provinces, districts and health facility and health level has so far confirm that Zambians are committed to provide excellent RI services and equally show high degree of acceptability.

The structure of the Ministry of Health, the child health department is directly responsible for RI activities. This is classified as follows

The structure of the Ministry of Health and the Child Health Department



The group learnt that Zambia sets National Immunization target to its provinces and also apply other strategies like

- Reaching Every District strategy
- Super market Approach
- Neighbourhood health Committee
- Vaccine Independent Initiative
- Global Alliance for vaccine and immunization
- Biannual Child Health Week

It was also observed that Vaccine procurement is through two approaches: the Vaccine Independent Initiative and Global Alliance for vaccine and immunization. The vaccines quality and security are assured through a proper storage at different levels with functional cold chain equipment, availability of backup generators and regular electricity supply. The distribution is based on a PULL system and occasionally PUSH –based on consumption rates.

Immunization service delivery is done on

- i. Static Services at the health facilities
- ii. Out reach Services
- iii. Full integration into maternal & child health care services
- iv. Community Involvement
- v. Regular availability of vaccines

A computerized HMIS was in place and data is generated from Health facilities to District, to provinces then to the Ministry of Health. There was an effective surveillance system.

It was found that the National Immunization coverage was as high as 93% of all antigens while Measles, BCG and OPV were 82%, 93% and 79% respectively.

Factors responsible for this fascinating achievement in Zambia despite their lean resources and simple structural setup were attributed to the fact that Immunization was consider as public good, mechanisms for planning, procurement, logistics, supervision and monitoring and evaluation were strictly adhered to, to sustain the system.

D. Lessons learnt from Zambia and Actions for Implementation in Nigeria

The Nigerian delegation learnt several immeasurable things from Zambia. This is seen in terms of policy / political, funding, cold chain equipment facilities, services and community participation.

- Zambia public service operates and run independently from politics. Although political campaigns were on, the system and its activities were not interrupted with the permanent Secretary in the position of the Minister functioning effectively
- The existence of a National Strategic Plan which becomes a national working document used at Province, Districts and by development partners
- The decentralization and devolution of power to provinces and districts became a strength that promoted effective and efficient service delivery
- Immunization is considered as a public good hence it is rendered free to all beneficiaries
- Public private ownership is encouraged and sustained
- The use of a common basket of funding for health programmes.

- The use of vaccine independent initiative for purchase of traditional vaccines
- Provision of Cold chain Maintenance and training workshop at the National level was quite commendable
- Regular training of provincial and district cold chain officers
- The standardization of cold chain equipments promote longevity of equipment's and easy maintenance
- The existence of a strong M&E coordination from National – Provincial – Districts – Community
- Effective community mobilization via – neighbourhood health committee, Community health workers (voluntary services) and community drama groups and NGOs.
- There is public confidence in the health care system and all staff of the health cares system are staff of the MOH
- Strong commitment of staff at facility level with good work attitudes
- There is a strong partner cooperation and collaboration in health especially in relations to planning, funding, surveillance and M&E.

KEY LESSONS FOR NIGERIA

1. Strengthening Community Ownership / Collaboration using Neighbourhood health Strategy
2. Display of outreaches services dates/ Neighbourhood catchments area map
3. Improve the integration of routine immunization with other child survival interventions
4. Establishment of a cold chain equipment Maintenance and training workshop at Federal and State level in Nigeria

Achieving the above, the team agreed that it will be helpful for Nigeria to

- a) Borrow a leaf from the Zambia experience in order to put similar structures in place or reinforce existing ones.
- b) Introduction of Health Facility community committee to over sees immunization service delivery through active participation and ownership.
- c) Integrate service delivery to prevent missed opportunity.
- d) Inculcate high level of commitment of health staff through payment of staff emoluments.
- e) Effectuate the computerization of immunization data reporting system

E. Challenges Observed in the System and Recommendations

- i. Zambia relied heavily on donor or external sources of funding for health. This in our opinion could not be sustained and the government is advise to increase their budget allocation for health especially on immunization
- ii. The abolition of cost sharing in all the rural districts health facilities is a good strategy to encourage access of health services to the populace but we noticed that some districts are challenged with non availability of funds to obtain vaccines from district stores
- iii. It was noticed that, Zambia is experiencing extreme shortages of health personnel. An example of this was seen in Kanyama health centre with 200 patients for only 2 staff nurses. We are however recommending that the Zambia government should establish a training institutes for lower cadre of staff (nurse or midwives) with a retain mechanism for the Zambian market. They may also institute a community health training programmes.
- iv. Although we noticed that the moral of health workers Zambia are relatively good, the group still finds this as a challenge to the system. As such, the government is encourage to extend same package of incentives offer to doctors (transport, rural station and school enrollment allowances) to other cadre of staff in the country to boost health workers moral (this may prevent the huge exodus of health workers to Europe)
- v. Make use of existing skills: Zambia may have several unemployed youths who are willing to make an impact in the system. The government may provide scholarship to enthusiastic Zambians among then with an agreement to work or serve the system for a stipulated number of years e.g. 5years before gaining employment elsewhere
- vi. The un-immunized proportion of the population which constitute 7% of a national coverage of 93% may eventual become a threat to achieving the immunization coverage attainment in Zambia. The group recommends that the government should intensify its efforts on strategies beings adopted to overcome this.

PART 3

POST TOUR WORKSHOP

The two-day intensive post tour workshop took place on 25 and 26 September 2006. This held at Top Rank Hotel Abuja and was attended by Change Agents who participated in the current and previous tour to Zambia, Tanzania Tour and other staff and key officials in EU-PRIME and HERFON offices Abuja

The workshop was planned to consolidate lessons learnt during the tour, develop change proposals for implementation in EU-PRIME States and equally foster further interactions amongst the Change Agents

I. RECOUNTING EXPERIENCES AND LESSONS LEARNT

Participants recounted experiences and lessons learnt which may be implemented in Nigeria to reverse / change RI coverage. In the experiences shared few inferences were made to compare Nigeria to Zambia and the main key to high RI success rates in Nigeria considering their political and socio cultural dynamism, the structure of the Health system, Immunization system and also their strength and weakness.

A. *Politically* Zambia has a stable political atmosphere irrespective of the forthcoming election. There is one parliament compared to two in the case of Nigeria. Political commitment to health issues especially on immunization is very high (Structures to ensure sustainability, funding, advocacy and mobilization). Passage of bills especially on health matters are usually easier whereas in Nigeria such bills will have to go through three layers the Senate, House of Rep. and Executive. Zambia operates a top down approach of administration where decisions from the top are passed down for implementation. Nigeria, the local government is another tier of its own so decisions do not easily absorbed in the system. Although Zambia is relatively small country with per capita income far below than Nigeria, it is imperative to make this comparative analysis to understand the strength and weakness of both countries

B. Zambian health system is well organized to have direct impact of actions and policy on the health status. Approximately 60% of health activities depend on donor support. All health workers are staff in the Ministry of Health and policies are formulated directly from the Ministry. Zambia Provincial management teams are equivalent to Nigeria State health Ministries and the District health management teams are also available with autonomy to plan for health and make forecast of needs in the districts. Zambia uses the Sector Wide Approach (SWAp), and also has a common 'basket' pool of funds for funding health activities and programmes.

The Ministry of Health is responsible for

- Formulating Policies,
- Monitoring and Evaluation,
- Resource mobilization for health programmes
- Legislation,
- Finance and Budgeting,
- External Relations,
- Bilateral & Multisectoral Collaboration and
- Strategic Planning Advocacy.

The structure consist of the Minster, Permanent Secretary and 6 departments (see oragnogram in Annex)

At the Provincial level, the Provincial Health Management Team (PHMT) Supervise and Monitor the district, interpret National health policies for implementation by the districts, apply and simplified administrative roles and policies on from national to district levels and becomes the coordinating body for health programmes at the districts. The structure is composed of

- Directors
 - » Managers: MCH, Admin, Planning
 - » Officers: HMIS

At the Districts Level, the district Health Management Team (DHMT) carry out the Implementations of all health activities, Planning /Financing, Data Collection and analysis, Staff capacity building. The structure consist

- DHMT (Director) all doctors with Public Health Training
 - » Managers in charge of MCH, ENV, DATA, Clinical, Finance

At the community level villages are combined to form Zones. There is community ownership and participation. There are Neighbour hold Health Committees for every health centre

C. Zambia has an outstanding performance for support to Immunization and an exemplary measles campaign as confirmed by the Task force on Immunization in Africa (Zambia EPI Partners), GAVI and WHO Awards. Currently the National coverage of DPT3 stood at 93%. The Zambia Ministry of Health played remarkable roles in these achievements such as in Finance mobilization, Vaccine procurement, Policy formulation (5year National strategic plan) and M & E the impact.

Immunization activities are handled by the Child Health Unit under the department of Public health in the MOH. Vaccines are financed through the Vaccine independence initiative and no donor is allowed to implement parallel programmes.

The success in RI service delivery programmes could be attributed to

- Standardized cold chain maintenance w/shop and store at provincial level
 - Stable Power supply
 - Effective 'PUSH' of vaccines from National to District level and 'PULL' by the community
 - Adequate supply of quality Vaccines
 - Computerized system of information management
 - Implementation of RED strategy in low performing Districts
1. Implementation of Biannual child Health week to supplement Routine service delivery

LESSONS LEARNT FOR IMPLEMENT IN NIGERIA

1. Establishment of a Neighbourhood Health Committee in all EU-PRIME States
2. Establishment of Cold Chain Equipment Maintenance Workshop in 6 EU-PRIME States
3. Establishment of Cold Chain Equipment Training Centre in the Workshop
4. Training of at least Two cold chain equipment maintenance Personnel for each LGA in 6 EU-PRIME States
5. Institution of Public Private Partnership for Immunization through "Support" to Private Providers in Osun, Abia, Cross River and Plateau States
6. Data Management Project
7. Waste Management Project
8. Advocacy for Sustainable Funding
9. Advocacy for Vaccine availability

II. PROPOSALS DEVELOPMENT

Change Agents agreed to use the above key lessons to develop four reformed proposals in the first four areas for implementation in Nigeria.

Attached in the annexes below are

- Comparative Analysis of Zambia Nigeria Health System
- List of Post Tour Participants
- Post tour Programme in Nigeria
- Post test Assessment Questionnaire

PART IV PROPOSALS FOR IMPLEMENTATION

I. ESTABLISHMENT OF A COLD CHAIN MAINTENANCE WORKSHOP IN ALL EU-PRIME STATES

Background

Nigeria, the giant of Africa is situated in the Western part of Africa and is thickly populated. The projected population is about 130,000,000. It operates a Federal system of Government, the Federal, State and Local. The health system is coordinated by these three tiers of Government. Immunization, a sub- system of the health system is under the Directorate of public health. At the National level, there is one strategic cold store and six zonal stores, all the State and LGAs have one cold store each. PRIME (Partnership to Reinforce Immunization Efficiency) is an European Union supported project in Nigeria. It collaborates with the National Programme on Immunization to strengthen the Routine Immunization programmes in six states namely Abia, Cross River, Gombe, Kebbi, Plateau and Osun.

The Project commenced operations in June 2004 with the following objectives:

- Improving visibility and communication
- Providing technical assistance
- Providing equipment for immunization
- Providing support to immunization activities
- Instituting change Agent Programmes

In line with the last objective, State Programme Managers and Ministry of Health officials from EU states went on a study tour to Zambia to understudy the country's immunization programme with a view to incorporating its best practices into the various States immunization programme.

One of the best practices observed in the country was the existence of a National cold chain maintenance workshop. This has really contributed to effective and efficient management of the country's cold chain equipment and vaccines with a resultant effect on its immunization coverage (91% DPT3).

Justification

It is a known fact that Nigeria Government and other partner agencies procured cold chain equipment with occasional support from LGAs/ States. These equipments are distributed to the States and LGAs. Most of these equipment are poorly maintained and as such the frequency at which they breakdown increases. At inception in the various states, one of the major challenges of immunization programme is broken down cold chain equipment with inadequate fund/skilled technician to repair them. This situation has impacted negatively on the potency and availability of vaccines at LGAs / health facilities. As shown by the poor coverage in some LGAs (DPT3 21%).

With the establishment of the workshop, the maintenance culture will be re-established that will address the above situation, in addition to improving immunization coverage in the States and LGAs.

Goal: To have an effective, efficient and sustainable cold chain maintenance system at all levels

Objectives

- To ensure all newly purchased equipment are functional in the first two years
- To ensure all available cold chain equipment in LGAs and health facilities are functioning within first one year of the establishment of the workshop
- To reduce to zero level ,vaccine wastage due to loss of potency
- to ensure that broken down cold chain equipment are repair and return to location within 7 days
- to reduce the cost of maintaining cold chain equipment by at least 30%

Outcome:

Existence of cold-chain workshop
 Workshop provided with all necessary equipment to function
 Availability of two trained personnel to man the workshop

Methodology

- 1). Baseline data assessment on cold chain (cold chain inventory)
- 2). Design and costing of the workshop: this will consist of a large hall for practical, an office, a store and a toilet. (by Architects and Quantity Surveyors)
- 3). Construction: Engage the services of builder to construct the center. Renovation and restructuring where there is an existing building.
- 4). Procurement of necessary equipment in the workshop
- 5). Training of 2 personnel to manage the workshop
- 6) Monitoring and evaluation (*see logical frame work matrix*)

Monitoring and Evaluation

Monitoring activities will start as soon as the workshop is commissioned. This will be carried out by staff of the National strategic cold store, State MOH and partner agencies on monthly basis. Evaluation will be conducted bi- annually to assess the impact of the workshop on cold chain equipment at State and LGA levels.

S/N	Activity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Budget
1	Design	←		→													
2	Baseline data collection																
3	Construction of workshop						←		→								
4	Procurement of equipment/ spare parts				←							→					
	Training of 2 experts							←			→						
5	Monitoring				←										→		
6	Evaluation							←			→						

GANNT CHART

NOTE: Budget to be determined by EDF regulation
LIST OF COLD CHAIN EQUIPMENT (see attachment)
LOGICAL FRAME WORK MATRIX FOR MONITORING/ EVALUATION

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S/N	ACTIVITIES	RESPONSIBLE	TIME FRAME	INDICATOR	BUDGET
1	Baseline data assessment on cold chain (cold chain inventory)	CAM, SMOH SPT	March–May 2007 3mths	Report on CCE baseline data available	
2	Design and costing of the workshop	CAM, SMOH SPT	Oct-Nov'06 1mth	Workshop design with cost available	
3	Construction	CAM, SMOH SPT	Jan- July 2007. 7mths	Completed workshop building	
4	Procurement of necessary equipment in the workshop /Spare parts	CAM, SMOH SPT	May- July 2007 3mths	Adequately equipped workshop/available spare parts	
5	Training of 2 personnel to manage the workshop	CAM, SMOH SPT	May- July 2007 3mths	Trained CCE managers available	

Requirements for Setting up a Cold Chain Workshop

1. WELL VENTLATED ROOM APPROXIMATELY 100SQ.M
2. NUMBER OF POWERPOINTS. 6 TO 8
3. ONE WOODEN WORK BENCH NORMAL HEIGHT(96CM) X WIDTH 70 CM. LENGHT 250 CM OR 300 CM
4. TWO WORK BENCHES FOR EQUIPMENT REPAIRS. SIZE. LENGTH 200 CM, WIDTH 100C M HEIGHT 50CM
5. TWIN 4FT FLOURSCENT TUBE LIGHT. 6
6. THREE SMALL WOODEN STOOLS HEIGHT 40CM O0 50 CM. THESE ARE FOR THE TECHNICIAN TO SIT AND WORK ON THE EQUIPMENT.

6. Maintenance workshop and tools.

To have good cold chain maintenance set up, it is necessary to have a fair sized room to set it up as a workshop. It should have adequate natural lighting by way of secured windows, ventilators and a secured door. It should have a number of power points and artificial lighting, such as light bulbs or florescent light fittings. A wooden workbench and a chair is also necessary for the technician to work comfortably and a secure locker or cupboard for storing the tools and consumables.

Tools

It is good practice to have a variety of necessary tools to carry out the maintenance, repair and installation jobs.

Start with the basic tools and start procuring tools as required. It may take some time to have a fully equipped workshop. It is a good investment to buy quality tools that they last a long time.

To start up maintenance work it is necessary to have the basic tools as listed from 1 to 20 List of workshop tools, test equipment and instruments required maintaining and repair cold chain equipment is follows:-

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No.	Description	size	quantity	Remarks
1	Pair of pliers	18cm	1	Insulated handle
2	Pair of side cutters	18cm	1	Insulated handle
3	Pair of long nose pliers	18cm	1	Insulated handle
4	Pair of angle nose pliers	18cm	1	Insulated handle
5	Screw driver-flat	15cm	1	Insulated handle
6	Screw driver-flat	18cm	1	Insulated handle
7	Screw driver-flat	22cm	1	Insulated handle
8	Screw driver-flat	26cm	1	Insulated handle
9	Screw driver- cross	15cm	1	Insulated handle
10	Screw driver- cross	18cm	1	Insulated handle
11	Screw driver- cross	22cm	1	Insulated handle
12	Screw driver- cross	26cm	1	Insulated handle
13	Flat file-medium cut	18cm	1	With handle
14	Half round file- medium cut	18cm	1	With handle
15	Adjustable spanner	15-18cm	1	
16	Soldering iron	30w x220V	1	
17	Roll of soldering wire	1.5mm	1	
18	Digital multi-meter	Volt/amp/ohm	1	Medium sized
19	Insulation tape	½"	1	
20	Metal tool box for tools	medium	1	
21	Set of (6) open ended spanners		1	
22	Set of (6) ring spanners		1	
23	Set of (6 or 8) hexagon keys	standard	1	
24	Adjustable spanner		1	
25*	Adjustable pliers		1	
26*	Soldering iron	60w x 220	1	
27	Pinch tool			
28	Set compound gauges	For R134a	1	
29	with charging lines			
30	Vacuum pump	220v	1	
31	Electric drill machine	220v	1	5/8 chuck size
32	Battery operated drill machine	12VDC	1	
33	Battery charger	12/24 volts	1	
34	Emery cloth/sand paper	Fine/medium	6	
35	Heat seal stick		1	
36	Pratley epoxy-twin tube		1	Steel bonding
37	Portapak oxy-act. Welding and brazing set		1	
38	Refrigerant recovery set		1	
39	Lock-ring kit			
40	Measuring tape-steel	3m	1	
41	Level gauge	20cm		
42	Refrigerant R1341	1		
43	Copper tube	6mm	1roll	
44	Copper tube	12mm	5m	
45	Copper tube		5m	
46	Flare nut	6mm	6	
47	Union-double end	6mm	4	
48	Copper to copper brazing rods		10	
49	Brass brazing rods		10	
50	Easy flow flux		1 tin	For brazing work
51	Steel bench vice	10cm	1	
52	Stanley knife		1	
53	Hacksaw frame	12"	1	
54	Blades for hacksaw frame		12	
55	Electronic leak detector		1	For checking leaks
56	Small container/soap/sponge		1	For checking leaks

II. NEIGHBOURHOOD HEALTH COMMITTEE IN THE FOCAL EU-PRIME STATES

Introduction

Until recently the principal focus of the immunisation services has been on the programmatic issues such as how to improve coverage, how to decrease wastage, and how to reach hitherto unreached populations or populations group especially in the rural areas. While there was considerable interest in cost and cost effectiveness issues especially in the 80s when a large number of cost and cost effectiveness studies were conducted. the issue of immunisation financing was not dealt with as an independent subject until the mid 90s.

The timing of this shift was related to several changes, the emergence in the development of community as a whole, of concerns for the sustainability of development projects and for issues such as “donor dependence”. The realisation by donors in immunisation programmes funded largely using donor resources were PRIME example of unsustainable development for many low middle income countries and the concomitant realisation that witnesses increasing arsenal of potential vaccines and their ever increasing prices; the continuation of substantial donor support would not be sustainable unless community involvement, participation and ownership becomes the prime mover of the donor agencies so as to make Routine Immunisation services everlasting, effective and “community owned” as this project is intended to pursue it.

Community involvement and participation on RI Programme

Community involvement is the process by which people become actively concerned in the taking decisions, responsibilities and activities for promoting their wellness. It is the process of getting committed to achieving a goal. It is aimed at assisting the community to become more aware of their own health, identify their needs and belief that something can be done by themselves to relieve such needs and that most of the resources to achieve their needs are within the community.

Community participation is the process by which individuals and families assume responsibilities for their won health and welfare. Community participation helps in developing the capacity to contribute to the co immunity development. By understanding the community better, community members are motivated toward solving their common problems because they will become agents of their own development through community ownership; thus this can be done when they are motivated and sensitised though training and awareness campaign to various groups such as the:

- Community Leaders (Chiefs, Village Heads and Wards Heads)
- Traditional Leaders
- Religious Leaders
- Political Groups
- Pressure Group
- Associations and Voluntary Social Groups
- Youths
- Women

Goal

To make Routine Immunisation community owned, community driven and to improve accessibility of service as well as coverage.

Objective

- to establish neighbourhood health committee in ten (10) Health Facilities
- to hold monthly meetings within six (6) months in each state
- to increase awareness / acceptance of immunisation service by the communities
- to increase the functionality of the communities

Expected Outcome

To promote community participation, involvement and ownership for sustainable RI services in order to reduce by 80% high morbidity and mortality rate of children under one year due to vaccine preventable disease in the focal LGAs of EU-PRIME.

Methodology

With the existing change Agent Movement at the state level, a technical/implementation committee will be saddled with the responsibility of planning, organisation and coordination of CAP project. A work plan would be drawn by the committee guided by the EU-PRIME team specifying activities to be implemented according to state needs.

Formation / Constitution of NHC Implementation Team

The steps for the methodology are:

1. formation of the NHC implementation committee at the state level consist 9 members based on the selection criteria
2. inauguration of NHC committee who will be responsible for the managing of the NHC at the LGAs and Health Facility levels
3. identify Ten (10) Health Facilities for CAP (develop criteria for selection as below):
 - Poor performing LGA with coverage below 30%
 - Hard to reach LGAs
 - Absence of community structures
4. Advocacy meeting / visit
5. Orientation / Community Empowerment
6. Monitoring and supervision
7. Evaluation

Training Curriculum for NHC

- The importance of NPI targeted diseases and routine immunisation schedules
- Cold Chain management
- Importance of a child completing RI schedules
- Data management register i.e. Child Immunisation card, community register
- Community mobilisation
- Advocacy kits
- Basic concept of integration of PHC
- Resource mobilisation by community for developmental projects

- Duration of training – 3 days
- Orientation session with NHC at the LGA level.

The training will be interactive targeting community leaders, Religious leaders, women groups, traditional leaders etc in the ten (10) Health Facilities in order to strengthen community involvement and participation towards community ownership of RI.

Location of the training

All training sessions will be conducted at the LGA headquarters and Ward level respectively.

Monitoring and Supervision

The service delivery points will be monitored and supervised to ensure efficiency. The NHC will constantly monitor the performance of the health facilities, motivate staff, collect data, and link the health facility with the community. this committee will meet at least once monthly to discuss issues concerning the community and the health facility with a focus on routine immunisation. Reports generated from these meetings shall then be forwarded to LGA and SPIT.

The SPIT shall monitor and supervise the health facility, performance of the NHC at least twice quarterly, and forward a comprehensive report to HERFON, SMOH and LGA.

Evaluation

The project shall be evaluated as determined by evaluators. The outcome of the mid term evaluation will give a better focus of the project, best practices documented and disseminated.

Membership of NHC

- A mature male or female residence within the community
- Share the community's cultural, attitude and beliefs
- Command the respect of the community, approachable and willing to make self-sacrifices for the communities
- Influential people, Retired and committed civil servant, lawyers, professionals, judges, politicians with credible character
- Representative of NGOs, Social and cultural groups
- Members should be visionary
- Members should not be more than 10 people

Terms of Reference / Roles of NHC

- Identification of problems and felt needs of the community
- Identification of catchment areas and zoning the villages
- Determine the target population of WCBA, under 1 and 5 years, orphans, widows, male and female ratio, educational status, number of households etc
- Planning, decision making, implementable budget, M&E and feed back to community on any activities executed
- Monitoring defaulters
- Keeping records / Registers etc

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- Arrange meetings with the community to discuss on developmental projects to provide better living condition for all
- Coordinate the activities of NHC with HFWS, LGA and state
- NHC to enlighten the community on importance of the community in making financial contribution toward relevant health related activities
- To assist in providing total community involvement and demand for quality service and accessible service to the community
- Monitoring of work plan and budget spent
- Rendering assistance at HFS activities during immunisation session

Work plan for implementation of NHC

S/N	Activity	Objective	By Whom	Time Frame	M&E Indicators
1.	Selection of 10 Health Facilities for project	To create focal points for implantation	Tech sub-committee of CAM and SMoH CAM member	October	Poor coverage of RI in PRIME States LGAs
2.	Constitute LGA neighbourhood community based on developed criteria in 5 wards	To have a workable pilot cluster	Community member LGA Social Mobilisation	November	Giving of orientation on Neighbourhood Health Services
3.	Conduct advocacy with LGA and community leaders	To create awareness and give understanding of the community	CAM Member, LGA Social Mobilisation	December	Get facts and figures for messages
4.	Conduct Orientation / Training of the neighbourhood members	To acquaint them with their roles and responsibilities	CAM member	January	Training of NHC members maybe analysed
5.	Support for the monthly NHFC meeting	To discuss matters arising from implementation and proffer solution	LGA, Community, EU-PRIME, HERFON	Monthly (12 Times a year)	Incentives (transport allowance, refreshment) performance
6.	Support for quarterly review meeting	To review the NHFC activities	State, EU-PRIME	Every 3 months, 4 times a year	Performance evaluation of the programme / committee so far

III. STANDARDISATION OF COLD CHAIN EQUIPMENTS IN EU-PRIME FOCAL STATES

Background

Standardization can be said to putting in place a set of measurable norms to be followed in achieving a set objective. The management of the cold chain system in Nigeria is poor. Other things include the non durability and non availability of spare parts for the equipments which make them obsolete and in turn make service delivery ineffective.

One of the best practices employed in running the cold chain system is standardization of all cold chain equipments. This is possible through training and re training of cold chain technicians and officers, adequate funding and proper maintenance of cold chain equipments.

The need for the standardization of our cold chain equipment is necessary for the following reasons:

- Easy management and maintenance
- Adaptability to the environment
- Achieving a long life span
- Cost effectiveness
- Adaptability to source of energy
- Simplicity and easy utilization for training purposes.

In standardizing the cold chain equipments, the system will be more effective and thereby have a positive effect on the delivery of routine immunization services.

Justification

The justification for the standardization of cold chain equipments is necessary because the standard of our cold chain equipment is not harmonized at all level. These leads to the following situations;

- High cost involved in cold chain equipments management
- Absence of durable and tropicalized equipments with reference to the WHO guidelines.

Goals: Ensure the existence of effective cold chain equipment at all levels

Objectives: To produce the policy that will guide the purchase of equipments that are cost effective and serviceable

Expected Outcome: Developing of policies guiding the procurement of cold chain equipment

Methodology

- Determining the standard and type of the cold chain equipment presently in use
- Developing policies and guidelines on procurement of cold chain equipment according to the WHO Guidelines.

Monitoring and Evaluation

- Proper monitoring of the equipments should be carried out periodically to ensure strict compliance in order to achieve the set objectives.

Work plan for Standardization of Cold Chain Equipments

S/N	Activity	Objective	Responsible	Time frame	Indicator	Budget (N)
1.	Hiring of qualified consultant to look into the standard and types of cold chain equipments.	To determine the standard and type of the cold chain equipment presently in use	Consultants and SPT	One month	- availability of standard cold chain equipment	
2.	Gathering of information for the development of the policies & guidelines	Developing policies and guidelines on procurement of cold chain equipment according to the WHO Guidelines.	Consultants/	One month	- Policies & guidelines on procurement of cold chain equipment in place	

IV. TRAINING OF COLD CHAIN EQUIPMENT TECHNICIANS

Background

The importance of a maintenance workshop in any state can not be overemphasized Plateau State is one of the 36 states in Nigeria with its headquarters situated in Jos. It is one of the states situated in the North-central Geo-political Zone. The state was created in 1976 from the former Benue-Plateau State by the Murtala Mohammed regime. Plateau State is located in the middle-belt zone and lies within latitude 8°22' and 10°24' North and longitude 8°32' and 10°38' East. Plateau is bordered on the East by Bauchi State, northwest is Kaduna State. On the southwest is Nasarawa State while Taraba State borders the state to the southeast. Plateau State has an approximated population of about 3 million people.. The state has 17 LGAs The state lies in the tropics with an almost temperate climate with temperatures ranging from 18.7° F and 51.7° F. Annual rainfall varies from 131.75cm to 146cm. The weather is always very cold during the Harmattan period (December – February). Most inhabitants of Plateau State are farmers. Crops such as ach, corn, Irish potatoes and lots of vegetables are grown all the year round.

Most LGAs are linked to the national grid (Power Holding Company of Nigeria- PCHN) with the exception of Qua'an pan, Langtang- South, Mikang, Jos-East, Kanam and Wase. Most roads linking the LGA headquarters are tarred but some are in bad shape. There are several hard to reach areas mostly in Bassa, Kanam, Pankshin, Kanke, Wase, Qua'an pan, Jos-East among others. Most cold chain facilities are inadequate and in some areas they are either obsolete or non-functional.

Justification

The current situation now is that 30% of all cold chain equipment are broken down and their repairs by external Technicians gulp a lot of money and unnecessary delay resulting in reduction of storage capacity and at times vaccine wastage. The need to train cold chain equipment maintenance Technicians in all the LGAs in the state can not be over emphasized. Well trained Technicians will curtail the frequent breakdown of these equipment thereby minimizing maintenance cost, in order to ensure capacity building, full ownership and sustainability of the programme at the end of Donor support. Moreover unnecessary delays resulting in contracting repairs will be eliminated.

Goal

The main goal of this exercise is the availability of at least 2 trained technicians in every LGA.

Specific Objectives

- i. At the end of November 2006 at least 2 Cold Chain Equipment Maintenance Technicians in each LGA would have been trained.
- ii. At the end of the training, participants will be able to demonstrate how to repair a broken down cold chain equipment.
- iii. At the end of the training, Technicians will be able to effect repairs of broken down cold chain equipment within three days.
- iv. At the end of the training, participants will be able to understand the cold chain equipment in the system.

Expected Outcome

36 well trained cod chain technicians in the state.

Methodology

Setting criteria for selection of trainees in consultation with Technical Officers (DPHC/ SIO).

- Qualifications:
Environmental Health Technicians or Assistants

Trained Community Health Extension Workers

- Training

A qualified consultant on cold chain equipment to conduct the training for 2 weeks (one week theory and one week practical)

- Development of training curriculum

Monitoring and Evaluation

The exercise will be evaluated using a standard checklist on cold chain equipment maintenance by senior officers from the state, LGAs and partners on monthly basis and quarterly reports.

TRAINING WORKPLAN AND BUDGET

ACTIVITY	OBJECTIVES	RESPONSIBLE PERSONS	TIME FRAME	EXPECTED OUTCOME	BUDGET
Development of Curriculum	To produce a standard curriculum	Trained cold chain technicians	1 week	A standard curriculum in place	N50,000
Criteria for the selection of trainees	To select competent and relevant personnel	SMoH, State technicians	1 st week of October 06	Relevant and competent personnel selected	
Preparation of training	To put in place training materials	SMoH, State technicians /SPT	1 week	All arrangements in place	N50,000
Training implementation	To train 2 Cold Chain technicians in each LGA and 2 from the state	State Trainers	6 th -18 th November 06	36 trained cold chain technicians	N2,000 x 14days=N x 2 Trainers=N56,000
Venue		SPT	6 th -18 th November 06		N15000x14 days=210,000
Trainees per diem			6 th -18 th Nov. 06		participants 2000 x36x 14days= N1008000
Transport allowance			6 th -18 th Nov. 06		N10/kilometer= 2000x36=72,000
Feeding : lunch and 2 tea breaks			6 th -18 th Nov. 06		N500x36x14 days= N252,000
Workshop materials			1 st -5 th Nov.06		N1000x 36= N36,000
Monitoring and Evaluation	To ensure skills acquired are put into practice	State trainers, SMoH, partners	Monthly	Availability of Functional coldchain equipment	N60,000.00
GRAND TOTAL					N1,542,000.00

ANNEXURES

- Annex 1: Participants Information Package
List of Participants
Tour Programme of Activities in Zambia*
- Annex 2: Pre Tour Workshop Programme and Presentations*
- Annex 3: Comparative Analysis of Zambia Nigeria Health System*
- Annex 4: Responsibility Sharing*
- Annex 5: Pre and Post Tour Assessment Questionnaire*
- Annex 6: Post tour Workshop Programme in Nigeria*
- Annex 7: List of post Tour Participants*
- Annex 7: Press Release*