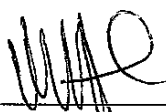
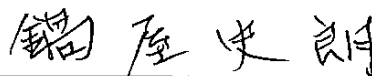


RECORD OF DISCUSSIONS
ON
STRENGTHENING TEACHERS' PERFORMANCE AND SKILLS
THROUGH SCHOOL BASED CONTINUING PROFESSIONAL
DEVELOPMENT PROJECT
IN
THE REPUBLIC OF ZAMBIA
AGREED UPON BETWEEN
MINISTRY OF EDUCATION
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

Lusaka, 13th September 2011



James S. Mulungushi (Dr.)
Permanent Secretary, Education Services,
Standards and Curriculum
Ministry of Education
The Republic of Zambia



Shiro Nabeya (Mr.)
Resident Representative
Japan International Cooperation Agency
Zambia Office
Japan

Based on the Minutes of Meetings on the Detailed Planning Survey on the Strengthening Teachers' Performance and Skills through School Based Continuing Professional Development Project (hereinafter referred to as "the Project") signed on 15th March 2011 between the Ministry of Education (hereinafter referred to as "MoE") and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with MoE and relevant organisations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that MoE, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organisations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward the social and economic development of the Republic of Zambia (hereinafter referred to as "Zambia").

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on 27th June 2006 (hereinafter referred to as "the Agreement") and the Note Verbale exchanged on 8th June 2011 between the Government of Japan (hereinafter referred to as "GOJ") and the Government of the Republic of Zambia (hereinafter referred to as "GRZ").

Appendix 1: Project Description

Appendix 2: Project Document

PROJECT DESCRIPTION

Both parties confirmed that there are some minor changes in the Project Description agreed on in the Minutes of Meetings concerning the Detailed Planning Survey on the Project signed on 15th March, 2011.

I. BACKGROUND

GRZ attaches great importance to teacher education and MoE has established a system, which is called "School Programme of In-service for the Term (SPRINT)," in order to regularize Continuing Professional Development (CPD) of teachers. JICA has supported MoE's efforts in various ways, one of which is extending technical assistance through "SMASTE School Based Continuing Professional Development Project Phase I" from 2005 to 2007. SMASTE Phase I successfully injected Lesson Study in the framework of SPRINT in Central Province, targeting science teachers at Grade 8-12. SMASTE Phase II (2008-2011) expanded the programme to all Grades and subjects in Central Province and added two provinces as target provinces, namely Copperbelt and North-western provinces. The Joint Terminal Evaluation conducted in October 2010 found that Lesson Study was contributing to the improvement of the various aspects of teaching and learning in classrooms. Building upon these achievements, GRZ requested the Government of Japan to provide technical assistance towards the expansion of the programme to the remaining six Provinces, namely Eastern, Luapula, Lusaka, Northern, Southern and Western Provinces.

II. OUTLINE OF THE PROJECT

Details of the Project are described in the Project Design Matrix (PDM) (Annex I), Tentative Plan of Operation (PO) (Annex II) and the Project Document (Appendix 2).

1. Implementation Structure

The Project Organization Chart is given in the Annex III. The roles and assignments of relevant organizations are as follows:

(1) MoE (National Level)

(a) Project Director

The Director of Planning and Information, MoE will bear overall responsibility for the policy and coordination of the Project.

(b) Project Manager

The Director of Education and Specialized Services, MoE will be responsible for the managerial and technical matters of the Project.

(c) Project Coordinator

The Chief Education Officer, Teacher Education, Directorate of Education and Specialized Services, MoE, as National Project Coordinator, will be responsible for the coordination of the Project

between the MoE Headquarters and Provincial Education Offices.

- (d) Project Administrator
The Principal Education Officer, Teacher Education, In-Service, Directorate of Education and Specialized Services, MoE, the National Project Administrator, will be responsible for the administration and implementation of the Project at National Level.
- (2) MoE (Provincial Level)
 - (a) Project Manager
The Provincial Education Officers in all provinces will be responsible for the implementation of the Project in their respective provinces.
 - (b) Project Coordinator
The Principal Education Standards Officers in all provinces, as Provincial Project Coordinators, will be responsible for the coordination of the Project in their respective provinces.
 - (c) Project Administrator
The Education Officers, Teacher Education in all provinces, as Provincial Project Administrators, will be responsible for the administration and implementation of the project in their respective provinces.
- (3) JICA Experts and Local Technical Advisor
The Japanese experts and the local technical advisor will give necessary technical guidance, advice and recommendations to MoE on any matters pertaining to the implementation of the Project.
- (4) Administrative Committee and Education Support Teams
 - (a) National Education Support Team (hereinafter referred to as "NEST")
Administrative Committee
NEST Administrative Committee is established in order to facilitate inter-organisational administration and coordination of School Based Continuing Professional Development (SBCPD). NEST Administrative Committee meetings will be held at least once a year and whenever it is deemed necessary. NEST Administrative Committee approves the annual work plan and the budget, reviews overall progress, and exchanges major issues that arise during the implementation of the Project. The terms of reference and a list of proposed members of NEST Administrative Committee are shown in the Annex IV-1.
 - (b) NEST Coordinating Sub-Committee
NEST Co-ordinating Sub-Committee is established in order to facilitate coordination of SBCPD. NEST Coordinating Sub-Committee meetings will be held at least quarterly. The terms of reference and a list of proposed members of NEST Co-ordinating Sub-Committee are shown in the Annex IV-2.
 - (c) National Core Technical Team

The National Core Technical Team will deal with the quality aspects of the implementation of the Project. The terms of reference and a list of proposed members of NEST Coordinating Sub-Committee are shown in the Annex IV-3.

(d) Provincial Education Support Team (hereinafter referred to as "PEST")
PESTs will be established in each province for provincial coordination of SBCPD. PEST will meet at least once a term. The terms of reference and a list of proposed members of PEST are shown in the Annex IV-4.

(e) District Education Support Team (hereinafter referred to as "DEST")
DESTs will be established in each district for coordination of SBCPD activities at the district level. DEST will meet at least once a term. The terms of reference and a list of proposed members of DEST are shown in the Annex IV-5.

(5) Facilitators

Facilitators will be responsible for mentoring Lesson Study at cluster or school level. For the effective and successful implementation of SBCPD through Lesson Study, facilitators will be assigned whose functions are described in Annex IV-6.

2. Project Site(s) and Beneficiaries

The target schools of the Project are government schools and Grant Aided schools (private and community schools are not included in the target schools). Japanese technical assistance extended through the Project focuses on the following Grades and subjects, although all teachers are involved in regular SBCPD activities:

- 1) Teachers teaching science and mathematics at Grade 8 – 12 in all provinces
- 2) Grade 1-7 teachers in Central, Copperbelt and North-western provinces

The number of target districts is fifty-four (54) out of seventy-four (74) districts in all nine provinces.

3. Duration

The duration of the technical cooperation for the Project under this Attached Document will be from the date of first assignment of a JICA Expert to the end of December 2015.

4. Reports

The Project team (NEST Coordinating Sub-Committee and JICA Experts) will prepare and submit the following reports to JICA in English for disclosure.

- (1) One copy of Progress Report every 6 months after the commencement of the Project
- (2) One copy of Final Report at the end of the Project

5. Environmental and Social Considerations

- (1) MoE agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF MOE AND GRZ

1. MoE and GRZ will take necessary measures to:

- (1) ensure that the technologies and knowledge acquired by the Zambian nationals as a result of Japanese technical cooperation contributes to the economic and social development of Zambia, and that the knowledge and experience acquired by the personnel of Zambia from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to the JICA experts referred to in II-1 (3) above and their families, which are no less favourable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in Zambia.

IV. EVALUATION

JICA and MoE will jointly conduct the following evaluations and reviews.

1. Mid-term review at the middle of the cooperation term
2. Terminal evaluation during the last six (6) months of the cooperation term

JICA will conduct the following evaluations and surveys to mainly verify sustainability and impact of the Project and draw lessons. MoE is required to provide necessary support for them.

1. Ex-post evaluation three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, MoE will take appropriate measures to make the Project widely known to the people of Zambia.

VI. MUTUAL CONSULTATION

JICA and MoE will consult each other whenever any major issues arise in the course of Project implementation.

VII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA and MoE.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

Annex I	Project Design Matrix: PDM
Annex II	Tentative Plan of Operation: PO
Annex III	Project Organization Chart
Annex IV-1	National Education Support Team (NEST) Administrative Committee on School Based Continuing Professional Development
Annex IV-2	National Education Support Team (NEST) Co-ordinating Sub-Committee on School Based Continuing Professional Development
Annex IV-3	National Core Technical Team on Strengthening Teachers' Performance and Skills Project
Annex IV-4	Provincial Education Support Team on School Based Continuing Professional Development
Annex IV-5	District Education Support Team on School Based Continuing Professional Development
Annex IV-6	Facilitators on School Based Continuing Professional Development



Duration of the Project: the date of the first assignment of a JICA Expert - 31st Dec. 2015
Version No.: PDM Ver.0
Date: 12th September 2011

Annex 1 : Project Design Matrix
Name of the Project: Strengthening Teachers' Performance and Skills through School Based Continuing Professional Development (STEPS)
Executing Bodies: Ministry of Education and JICA
Target Area: All nine (9) Provinces in Zambia (54 selected districts out of 74 districts)
Target Group: 1) Teachers teaching science and mathematics at Grade 8-12 in all provinces
2) Grade 1-7 teachers in three provinces (Central, Copperbelt, and North-western)

Narrative Summary	Objectively verifiable Indicators	Means of Verification	Important Assumptions
<p>Support Goal Quality of science and mathematics education is improved.</p> <p>Overall Goal Students' learning process in science and mathematics is improved.</p> <p>Project Purpose: Teaching skills are enhanced under School-based Continuing Professional Development (SBCPD).</p> <p>Outputs 1. SBCPD is strengthened through Lesson Study. 2. Capacity of resource persons for implementing SBCPD is enhanced. 3. Reference materials for implementing SBCPD are developed.</p> <p>Activities Preparation and Orientation Stage 1-1 Prepare materials for induction WS 1-2 Conduct induction WS for PESTs and DESTs on Lesson Study 1-3 Identify facilitators 1-4 Orient the PEST task team in conducting Baseline Survey 1-5 Train facilitators/DESTs in conducting Baseline Survey 1-6 Conduct necessary surveys for project evaluation 1-7 Mentor six provinces by National Core Technical Team Implementation Stage 1-8 Plan Stakeholders workshop 1-9 Conduct Stakeholders workshop 1-10 Implement Lesson Study in schools 1-11 Monitor implementation of Lesson Study 2-1 Conduct Facilitators WS 2-2 Conduct Stakeholders WS 2-3 Provide technical support to Lesson Study activities at school level 2-4 Conduct International Technical Workshop 2-5 Conduct International Technical Exchange 2-6 Conduct local technical exchange visits between provinces 3-1 Revise the Teaching Skills book 3-2 Revise the Management skills book 3-3 Produce of Lesson Study journals 3-4 Print Teaching, management skills books and journals 3-5 Distribute Teaching, management skills books and journals 3-6 Organise a contest on good practices of Lesson Study for schools 3-7 Document all good practices in journals</p>	<p>Subject Goal i. Scores in national assessment (Grade 9 Numeracy, Grade 9 Science & Mathematics) ii. Examination pass rate in Grade 9 and Grade 12 iii. International comparative study (SACMEQ)</p> <p>i. Result of lesson observation (Science and Mathematics) (students' activities) ii. Students' perception towards their learning</p> <p>i. Result of lesson observation (Science and Mathematics) (demonstration of teaching skills) ii. Self-evaluation of teachers in teaching skills iii. Students evaluation of teaching</p> <p>i. % of schools implementing Lesson Study (target figure: 70% in all target grades) ii. Quality of Lesson Study verified through a prepared check list.</p> <p>i. Number of resource persons (stakeholders and facilitators) trained in lesson study (target figure will be determined later) ii. Self-evaluation of resource persons on their performance iii. Evaluation of resource persons by beneficiaries iv. Availability of developed reference materials in schools (Skills books, Journals, Guidelines, etc.) v. Users' (teachers') evaluation on the developed reference materials</p> <p>Input from Zambian Government • Human resource i. NEST, National Core Technical Team, PEST and DEST members in all nine (9) provinces ii. College/University lecturers iii. NSC staff iv. Trained resource persons (facilitators and stakeholders) through SIMASTE Phase I and II • Materials i. Offices and other buildings used for activities under the project ii. Office Equipment iii. Vehicles and fuel iv. Teaching/learning materials used for Lesson Study • Finance i. Funds for implementation of the Lesson Study activities, including Stakeholders and Facilitators Workshops ii. Allowances for travel of local staff for project activities</p> <p>Input from JICA • Human resource i. Three (3) long term experts - Chief advisor / Management of Lesson Study, Science Education - Management of Lesson Study, Mathematics Education - Coordination and Monitoring of Lesson Study Activities ii. Short term experts when need arises in relation to the project activities. iii. Local technical advisor • Training - Administration and Management of SBCPD i. Provide opportunities for overseas training and conferences for Zambian counterparts and core resource persons in relation to the project activities. • Materials i. Office equipment (computers, printers, LCD projectors, video cameras etc.) used for project activities ii. Vehicles used for monitoring the project activities iii. Reference materials for teaching and learning science and mathematics • Finance i. Local expenses and other necessary allowances for JICA experts</p>	<p>i. National Assessment Survey Report published by Ministry of Education ii. Examination Results published by Zambia's Examination Council iii. SACMEQ result (if available)</p> <p>Baseline and Endline Survey Report i. Results of lesson observations ii. Students questionnaires</p> <p>Baseline and Endline Survey Report i. Results of lesson observations ii. Self-evaluation of teachers iii. Evaluation by Students</p> <p>i. Progress reports submitted by PEST ii. Baseline and Endline Survey Report</p> <p>i. Progress reports submitted by PEST (List of trained facilitators and stakeholders) ii. Self-evaluation of resource persons iii. Evaluation by beneficiaries iv. Reference materials v. Result of users' evaluation</p>	<p>Learning environment is not adversely deteriorated. Learning time of students is secured. Head teachers ensure that students are learning. Teachers continuously apply improved teaching skills to teaching. Trained teachers remain in school system.</p> <p>SBCPD is continuously implemented. The motivation of teachers and all related stakeholders in participating SBCPD is maintained. Head teachers support SBCPD. Facilitators continue to offer technical support to lesson study not only in their own schools but also in assigned schools.</p> <p>• There is consistency of core officers.</p> <p>Pre-conditions: • Zambian Government policy for strengthening and implementing CPD activities of teachers does not change adversely. • There will be political will. • Budget allocation at national, provincial and district levels is adequate and timely for SBCPD activities.</p>

Annex II: Tentative Plan of Operation

Year	2011												2012												2013											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Project	Baseline and Endline Survey																																			
Report	MISSION																																			
Phase	Training in Outside of Country																																			
Output	1-1 Prepare materials for induction workshop																																			
Output	1-2 Conduct induction workshop for PESTs and DESTs on Lesson Study																																			
Output	1-3 Identify facilitators																																			
Output	1-4 Orient the PEST task team in conducting Baseline Survey																																			
Output	1-5 Train facilitators/DESTs in conducting Baseline survey																																			
Output	1-6 Conduct necessary surveys for project evaluation																																			
Output	1-7 Mentor six provinces by National Core Technical Team																																			
Output	1-8 Plan stakeholders' workshop																																			
Output	1-9 Conduct stakeholders' workshop																																			
Output	1-10 Implement Lesson Study in schools																																			
Output	1-11 Monitor implementation of Lesson Study																																			
Output	2-1 Conduct facilitators' workshop																																			
Output	2-2 Conduct stakeholders' workshop																																			
Output	2-3 Provide technical support to Lesson Study activities at school level																																			
Output	2-4 Conduct International Technical Workshop																																			
Output	2-5 Conduct International Technical Exchange																																			
Output	2-6 Conduct local technical exchange visits between provinces																																			
Output	3-1 Revise the Teaching Skills book																																			
Output	3-2 Revise the Management skills book																																			
Output	3-3 Produce Lesson Study journals																																			
Output	3-4 Print Teaching, management skills books and journals																																			
Output	3-5 Distribute Teaching, management skills books and journals																																			
Output	3-6 Organise a contest on good practices of Lesson Study for schools																																			
Output	3-7 Document all good practices in journals																																			
Output1	1. SBCPD is strengthened through Lesson Study.																																			
Output2	2. Capacity of resource persons for implementing SBCPD is enhanced.																																			
Output3	3. Reference materials for teachers and managers (Skills books, journals, Guidelines) are developed.																																			

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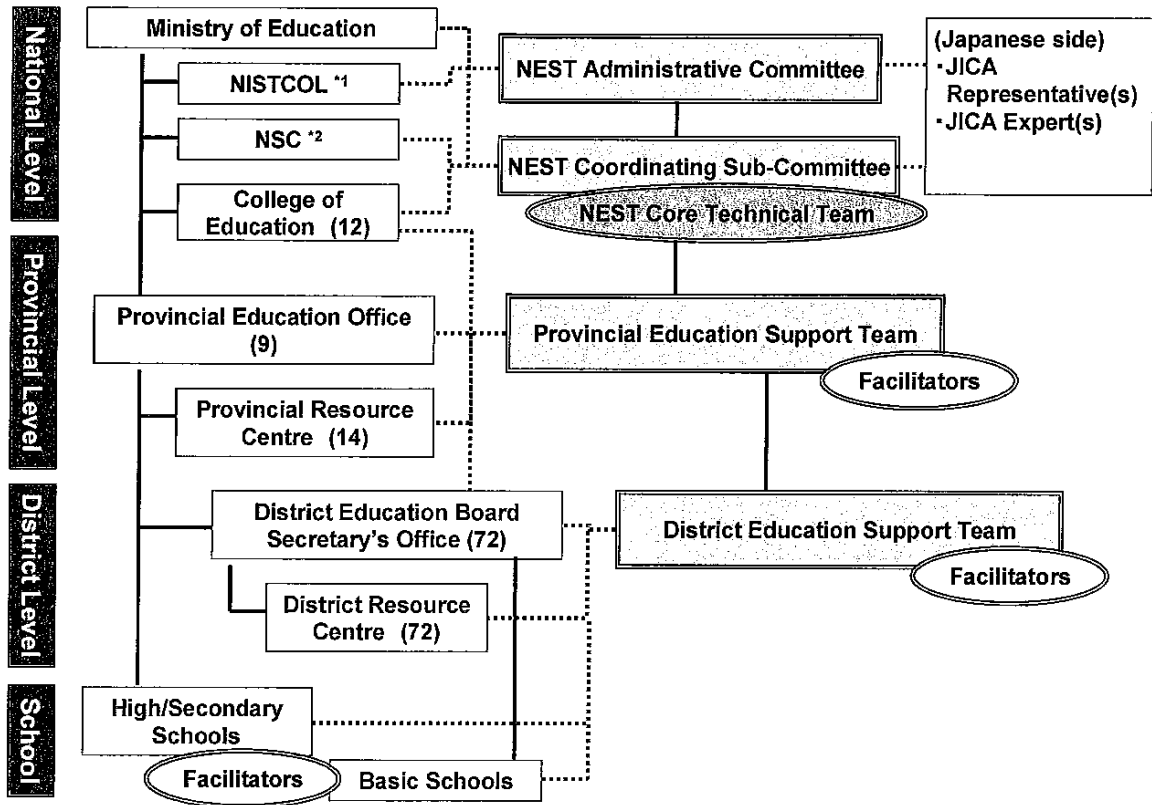
Annex II: Tentative Plan of Operation

Year	2014												2015											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
M&E Implementation	Period of Project Report																							
	Baseline and Endline Survey Mission																							
OUTPUT 1	1. SBOPD is strengthened through Lesson Study. 2. Capacity of resource persons for implementing SBOPD is enhanced. 3. Reference materials for teachers and managers (Skills books, journals, Guidelines) are developed																							
OUTPUT 2	Training in Outside of Country 1-1 Prepare materials for induction workshop 1-2 Conduct induction workshop for PESTs and DESTs on Lesson Study 1-3 Identify facilitators 1-4 Orient the PEST task team in conducting Baseline Survey 1-5 Train facilitators/DESTs in conducting Baseline survey 1-6 Conduct necessary surveys for project evaluation 1-7 Mentor six provinces by National Core Technical Team 1-8 Plan stakeholders' workshop 1-9 Conduct stakeholders' workshop 1-10 Implement Lesson Study in schools 1-11 Monitor implementation of Lesson Study 2-1 Conduct facilitators' workshop 2-2 Conduct stakeholders' workshop 2-3 Provide technical support to Lesson Study activities at school level 2-4 Conduct International Technical Workshop 2-5 Conduct International Technical Exchange 2-6 Conduct local technical exchange visits between provinces 3-1 Revise the Teaching Skills book 3-2 Revise the Management Skills book 3-3 Produce Lesson Study journals 3-4 Print Teaching, management skills books and journals 3-5 Distribute Teaching, management skills books and journals 3-6 Organise a contest on good practices of Lesson Study for schools 3-7 Document all good practices in journals																							
OUTPUT 3																								

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Annex III

Project Organisation Chart



*1 National In-service Teachers' College
 *2 National Science Centre

ANNEX IV-1

NATIONAL EDUCATION SUPPORT TEAM (NEST) ADMINISTRATIVE COMMITTEE ON SCHOOLBASED CONTINUING PROFESSIONAL DEVELOPMENT (SBCPD)

The NEST Administrative Committee shall meet at least once a year.

1. Functions

- a) To approve the Annual Work plan and Budget of the Project
- b) To review the overall progress and annual expenditure of the Project
- c) To review and exchange views on major issues related to the Project

2. Chairperson: Permanent Secretary, Education Services, Standards and Curriculum

3. Membership

Zambian Side

- Director of Planning and Information
- Director of Education and Specialized Services
- Director of Standards and Curriculum
- Director of Human Resources and Administration
- All Provincial Education Officers
- Chief Education Officer, Teacher Education
- Two representatives of Universities
- Teachers' Union representatives
- Representative(s) of Grant Aided Institutions

Japanese Side

- JICA Resident Representative
- JICA Assistant Resident Representative
- JICA Local Consultant for Education Sector
- JICA Long-term Experts
- JICA Local Technical Advisor for the Project

Secretariat: In-service Unit

Note:

- 1) NEST is an existing structure in MoE at national level that is composed of the representatives of directorates. NEST will be in charge of coordinating all existing projects / programme under the SPRINT framework – CPD Programme.
- 2) Officials of the Embassy of Japan may attend the NEST Administrative

Committee meetings as observers.

- 3) Other persons who are invited by the Chairperson may attend the NEST Administrative Committee meetings.

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ANNEX IV-2

NATIONAL EDUCATION SUPPORT TEAM (NEST) CO-ORDINATING SUB-COMMITTEE ON SCHOOL BASED CONTINUING PROFESSIONAL DEVELOPMENT (SBCPD)

The NEST Coordinating Sub-Committee shall meet at least quarterly.

1. Functions

- a) To undertake overall coordination and supervision of the programme following the national policy of In-service Training and CPD
- b) To plan, review and revise the master plan for SBCPD
- c) To facilitate and support workshops under the programme held at provincial, district and zonal level
- d) To monitor activities under the programme in coordination with PESTs and DESTs

2. Chairperson: Chief Education Officer, Teacher Education, Directorate of ESS

3. Membership

Zambian Side

Headquarters

- Chief Curriculum Specialist, Curriculum Development Centre, Directorate of Standards and Curriculum
- Chief Education Standards Officer, Directorate of Standards and Curriculum
- Chief Planning Officer, Directorate of Planning and Information
- Chief Human Resource Development Officer, Directorate of HRA
- Principal Education Officer, INSET, Directorate of ESS
- Principal Education Officer, PRESET, Directorate of ESS
- Principal Education Officer, National Science Centre
- Senior Education Officer, Basic Schools, Directorate of ESS
- Senior Education Officer, High Schools, Directorate of ESS
- Senior Education Officer, Resource Centres
- Colleges/Universities representatives (2)
- Head, Advisory Unit for Colleges of Education, UNZA
- Deputy JETS/STEPS Secretary

Provinces

- Principal Education Standards Officer
- Senior Education Standards Officer, Natural Science/Mathematics
- Education Officer, Teacher Education

Japanese Side

- JICA personnel including Long-term Experts

Note: PEST and DEST are existing structures in MoE at provincial and district level that are composed of the representatives of officers at Provincial and District level. The terms of reference for PEST and DEST are stated in the Annexes VI-4 and VI-5.

ANNEX IV-3

NATIONAL CORE TECHNICAL TEAM ON STRENGTHENING TEACHERS' PERFORMANCE AND SKILLS PROJECT

The National Core Technical Team will deal with the quality aspects of the implementation of the Project, whose terms of reference are as follows:

1. Functions

- a) To identify and pool human resource and categorize them in areas of specialization for the purpose of mentoring six provinces
 - b) To develop curricula/ content for Lesson Study
 - c) To develop training packages/manuals for facilitators/institutions
 - d) To review and develop relevant SBCPD materials / Lesson Study materials (skills books, guidelines, journals, etc)
 - e) To review and develop monitoring instruments
 - f) To monitor SBCPD / Lesson Study activities at all levels
 - g) To initiate research to assess impact and other identified SBCPD / Lesson Study issues
 - h) To initiate establishment of databases that will be periodically updated on SBCPD / Lesson Study activities
 - i) To encourage establishment of Provincial Core Technical Teams that will feed into the National Core Technical Team and be accountable to PEST
2. Chairperson: Principal Education Officer, Teacher Education – In-service, ESS

3. Membership

- Dominic Nyambe
- Samson Njapau
- Allan Lingambe
- Charles A. Chisanga
- Lisulo Moosho
- Viston Machiko
- Grace Chilekwa
- Catherine S. Kunda
- Roger Kapyololo
- Hector Swazi

Note: JICA Expert(s) and JICA Local Technical Advisor will provide technical advice to the team

ANNEX IV-4

PROVINCIAL EDUCATION SUPPORT TEAM ON SCHOOL BASED CONTINUING PROFESSIONAL DEVELOPMENT (SBCPD)

The Provincial Education Support Team shall meet at least once a term.

1. Functions

- a) Overall coordination of the programme
- b) Planning of activities under the programme
- c) Preparing budget and undertaking procurement of workshop materials
- d) Issuing and filing official communication
- e) Recording activities and producing minutes of meetings
- f) Conducting baseline and other surveys on the programme
- g) Encoding data on the implementation and surveys
- h) Monitoring activities

2. Chairperson: Provincial Education Officer

3. Membership

- Provincial Education Standards Officers
- All Senior Education Standards Officers
- The Principals – Colleges of Education
- Senior Planning Officers
- Education Officer, Teacher Education
- Subject Coordinators for Basic and High Schools
- Representative of District Education Board Secretaries

ANNEX IV-5

DISTRICT EDUCATION SUPPORT TEAM ON SCHOOL BASED CONTINUING PROFESSIONAL DEVELOPMENT (SBCPD)

The District Education Support Team shall meet at least once a term.

1. Functions

- a) Planning of activities under the programme
- b) Preparing budget and undertaking procurement of workshop materials
- c) Issuing and filing official communication
- d) Recording activities and producing minutes of meetings
- e) Conducting baseline and other surveys on the programme
- f) Encoding data on the implementation and surveys
- g) Monitoring activities

2. Chairperson: District Education Board Secretary

3. Membership

- District Education Standards Officers
- All Education Standards Officers
- District Planning Officers
- District Resource Centre Coordinator
- 1 Head Teacher from High Schools
- 1 Head Teacher from Basic Schools
- 2 Facilitators from High Schools
- 2 Facilitators from Basic Schools
- Zone In-service Coordinator(s)
- Representative(s) of Heads' Association(s)

ANNEX IV-6

FACILITATORS ON SCHOOL BASED CONTINUING PROFESSIONAL DEVELOPMENT (SBCPD)

Facilitators are District Resource Centre Coordinators (DRCCs), classroom teachers, lecturers and Zone In-service Coordinators (ZICs)/School In-service Coordinators (SICs), who have facilitation skills or have potential to obtain facilitation skills for Lesson Study activities at school or cluster level. The expected number of facilitators to be appointed is 40 (30 in science and 10 in mathematics) per district.

1. Functions

- a) Assigning/mentoring teachers in the planning of SBCPD activities in the schools assigned
- b) Offering technical support to teacher groups on lesson plans before lesson demonstrations are conducted
- c) Effectively participating in the lesson planning stage
- d) Observing demonstration lessons
- e) Facilitating discussions after lesson demonstrations
- f) Offering pedagogical and content support to teachers
- g) Preparing and submitting facilitation reports
- h) Participating in stakeholders' and facilitators' workshops



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**MINISTRY OF EDUCATION
TEACHER EDUCATION DEPARTMENT**



**JAPAN INTERNATIONAL
COOPERATION AGENCY**

**Strengthening Teachers' Performance and Skills
through School Based Continuing Professional
Development
(STEPS)**

**PROJECT DOCUMENT
(2011 – 2015)**

August 2011

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ABBREVIATIONS AND ACRONYMS

BESSIP	Basic Education Sub-Sector Investment Programme
CBO	Community Based Organisation
CBU	Copperbelt University
CDC	Curriculum Development Centre
CE	College of Education
CP	Cooperating Partner
CPD	Continuing Professional Development
DEBS	District Education Board Secretary
DEMC	District Education Management Committee
DEST	District Education Support Team
EBS	Educational Broadcasting Services
ECCDE	Early Childhood Care, Development and Education
ECZ	Examinations Council of Zambia
ELM	Education Leadership and Management
ESO	Education Standards Officer
ESS	Education and Specialized Services
ETAZ	English Teachers' Association of Zambia
FBO	Faith Based Organisation
FTI	Fast Track Initiative
HIM	Head Teachers' In-service Meeting
HOD/HOS	Head of Department / Head of Section
HOTS	Higher Order Thinking Skill
HRA	Human Resource and Administration
FNDP	Fifth National Development Plan
GCE	General Certificate of Education
GRACE	Grade Meeting at Resource Centre
GRZ	Government of the Republic of Zambia
ICT	Information and Communication Technology
IRI	Interactive Radio Instruction
IU	In-service Unit, Teacher Education Department
JICA	Japan International Cooperation Agency
JOCV	Japan Overseas Cooperation Volunteers
MoE	Ministry of Education
MoFNP	Ministry of Finance and National Planning
MSTVT	Ministry of Science, Technology and Vocational Training
NEST	National Education Support Team
NGO	Non-Governmental Organisation
NIF	National Implementation Framework
NISTCOL	National In-service Teachers' College
NSC	National Science Centre
OD(e)L	Open, Distance (and e-) Learning
PDM	Project Design Matrix
PE	Personal Emoluments
PEO	Provincial Education Officer / Principal Education Officer
PEMC	Provincial Education Management Committee
PESO	Principal Education Standards Officer
PEST	Provincial Education Support Team
PO	Plan of Operation
PRSP	Poverty Reduction Strategy Paper

PS	Permanent Secretary
PTA	Parent-Teacher Association
PTDDL	Primary Teachers' Diploma by Distance Learning
PTTC	Primary Teacher Training College
SACMEQ	Southern Africa Consortium for Monitoring Educational Quality
SBCPD	School Based Continuing Professional Development
SESO	Senior Education Standards Officer
SIMON	School In-service Monitoring
SMARC	Subject Meeting at Resource Centre
SMASE-WECSA	Strengthening of Mathematics and Science Education – West, East, Central and Southern Africa
SMASTE	Strengthening of Mathematics, Science and Technology Education
SNDP	Sixth National Development Plan
SPRINT	School Programme of In-service for the Term
STEPS	Strengthening Teachers' Performance and Skills through School Based Continuing Professional Development
SWAp	Sector Wide Approach
TE	Teacher Education
TGM	Teacher Group Meeting
TICC	Teachers' In-service Credit Card
TOR	Terms of Reference
TRC	Teacher Resource Centre
UNZA	University of Zambia
USAID	United States Agency for International Development
VVOB	Flemish Association for Development Cooperation and Technical Assistance
ZAME	Zambian Association of Mathematics Education
ZASE	Zambian Association of Science Education
ZATE	Zambian Association of Technology Education
ZEST	Zone Education Support Team
ZIC	Zone In-service Coordinator
ZITEP	Zambia – Ireland Teacher Education Partnership

1. Background Information on the Zambian Education Sector

1.1. Overview of the Education Sector

From a Zambian Government perspective, the classification of the Education Sector by the Ministry of Finance and National Planning (MoFNP) includes the Ministry of Education (MoE) and the Ministry of Science, Technology and Vocational Training (MSTVT), hence the education chapter of both the *Fifth National Development Plan, 2006-2010* (FNDP) and the *Sixth National Development Plan, 2011-2015* (SNDP) is titled "Education and Skills Development". For the purposes of this project document, however, the focus is on MoE.

MoE is mandated to guide education delivery as well as provide education from early childhood, to basic (Grades 1-9), high school (Grades 10-12)¹, college (teacher education) and university levels. It is also responsible for Schools for Continuing Education, the National Science Centre (NSC), Educational Broadcasting Services (EBS) and the Curriculum Development Centre (CDC). The Examinations Council of Zambia (ECZ), which is responsible for the preparation, conducting and coordination of national examinations, also falls under the auspices of MoE.

In addition to public educational institutions, there are several other providers of education and training at all levels from the private sector and from Non-Governmental Organisations (NGO), Faith Based Organisations (FBO) and Community Based Organisations (CBO).

1.2. Education Policy

Education in Zambia is guided by the national policy on education, *Educating our Future*, which was developed in 1996.² The policy addresses the entire education system, paying particular attention to democratisation, decentralisation, curriculum relevance and diversification, efficient and cost-effective management, capacity building and cost-sharing. The Zambian Government recognises the basic right of every Zambian to education, hence emphasis in the national policy has been placed on such key factors of educational provision as access, equity and quality at all delivery points in the system.

Before 1996, the structure of the education system was primary (Grades 1 to 7), followed by secondary (Grades 8 to 12) and tertiary (colleges and universities). With the new policy, the structure was transformed to basic education (Grades 1 to 9), high school education (Grades 10 to 12) and tertiary. This change brought about a number of challenges, such as the inadequacy of appropriately trained teachers for Grades 8 and 9, as these Grades were moved from the secondary to the basic level as well as such teaching and learning facilities as laboratories for science subjects.

At the commencement of the implementation of the *Educating our Future* policy, in basic education the immediate issues to be addressed were access and equity from Grades 1-7; this was addressed through the Basic Education Sub-Sector Investment Programme (BESSIP), which ran from 1999 to 2002. BESSIP was useful in laying the foundations for further education reforms by focussing on increased enrolments at the primary school level.

Under the *Poverty Reduction Strategy Paper, 2002-2004* (PRSP), the focus was to extend the issues of access and equity to Grades 8 and 9. From 2003 to 2007, actual implementation of the national education policy was based on the Education Sector *Strategic Plan, 2003-2007*. Since 2006, implementation has been based on the Zambian Government's *Vision 2030* aiming at "A Prosperous Middle Income Nation by 2030", which is

¹ The restructuring of the school system to 9 years basic and 3 years high school was introduced in the education policy document, *Educating Our Future* (1996) from the previous 7 years primary and 5 years secondary. However, the transition to the new system has not entirely been completed.

² In September 2009, MoE organised a national Education Sector policy review consultation meeting. One of the purposes of the meeting was to start the process of reviewing the national education policy.

to be achieved through successive national development plans and MoE's *National Implementation Frameworks* (NIFs). Currently implementation is based on the SNDP and MoE's *National Implementation Framework, 2011-2015* (NIF III³).

During the FNDP period, there were significant achievements in increasing access: pupil enrolment increased to 3.6 million in 2009 as compared to 2.9 million in 2005 for basic education; at high school, enrolments rose from 162,019 in 2005 to 257,100 in 2009. There were also efforts to improve the quality of education. However, achievements in this respect were marginal, resulting in continuing low learning achievements, especially in science and mathematics.

The SNDP focuses, among other issues, on increased access, efficiency and equity to quality Early Childhood Care, Development and Education (ECCDE), Basic and High School Education. This will contribute to the attainment of the Vision of the SNDP in the Education and Skills Development Chapter, "*Innovative and productive lifelong education and training for all by 2030*". According to the SNDP, "*education and skills development play a critical role in socio-economic development. They provide opportunities for growth, employment, productivity and human development.*"

In order to achieve the above objectives, one of the strategies will be to strengthen Continuing Professional Development (CPD) for teachers and to improve school management through capacity building of school managers. The CPD strategy stems from the *Educating our Future* MoE policy document, which stresses the importance of CPD as a lifelong learning process that should culminate in improved teacher performance and subsequently improved learning outcomes of the pupils. Alongside this development, the SNDP stresses the need to review the curriculum at all levels to make it relevant and responsive to national aspirations and education needs.

The delivery of quality and relevant education as visualised in the NIF III will enhance knowledge, skills, attitudes, values and lifelong learning among the pupils. The strategic objectives reflected in the NIF III related to quality education delivery, learning achievements and teacher motivation have clear performance indicators to assess performance against the stated objectives.

NIF III (draft as of June 2011) indicates that strengthening the systems for CPD, management and support at Basic and High School level will improve the quality of education, which will translate into improved teacher performance, improved pupil performance and will promote efficiency. Essentially this translates into strengthening MoE's in-service training framework. This Project Document is firmly anchored on NIF III.

³ Under development as of June 2011 and to be launched at the beginning of January 2012 since the implementation of NIF II has been extended to 31st December 2011.

2. Zambian Education System

2.1. Organisational Structure of the Ministry of Education

MoE is the largest Ministry in the Government, employing approximately 72,000 teachers and lecturers and about 5,000 administrative and other support staff. At the political level, the Ministry is headed by the Minister; the administrative head is the Permanent Secretary.⁴ The Ministry is structured along five directorates, each headed by a Director, as follows:

- Planning and Information;
- Standards and Curriculum Development;
- Education and Specialized Services;
- Human Resource and Administration;
- Distance Education.

In addition, there are three support units: Accounts, Audit and Procurement and Supply.

Currently, the major sub-sectors in the education system are ECCDE; basic education; high school; and tertiary education. In accordance with the national policy, the Basic Education sub-sector (Grade 1 to 9) is oriented towards the final goal of Universal Basic Education, and has three levels: Lower Basic, from Grade 1 to 4; Middle Basic, from Grade 5 to 7; and Upper Basic, from Grade 8 to 9. High School is from Grade 10 to 12. Tertiary Education caters for learners who have completed Grade 12, and includes 12 Colleges of Education (CEs) (including the National In-Service Teachers' College – NISTCOL); 3 public universities, while 2 CEs are being upgraded to university status.

MoE is organised according to the following levels: the Headquarters in Lusaka, 9 Provincial Education Offices (PEOs); 74 District Education Boards (DEBs)⁵; and 837 zones. Annex 1 shows the organisational structure of MoE⁶.

2.2. Key Players in the Education Sector

Organisationally, the education system has been gradually decentralised, since the mid-1990s. Key functions and power points have been devolved to points of delivery. In the decentralised system, MoE Headquarters has retained responsibility for key national functions, such as:

- Legislation;
- Policy formulation;
- Planning;
- Resource mobilisation and allocation;
- National curriculum development;
- Standards and evaluation;
- Data collection and analysis;
- Accountability oversight at the various levels.

The decentralisation of education services has placed more functions and roles in the provinces as well as in institutions and schools. The Education Board Services unit, which

⁴ Currently MoE has two Deputy Ministers and two Permanent Secretaries.

⁶ In April 2011, a new Act of Parliament came into effect – the Education Act, 2011. The Act has introduced a few structural changes in MoE. However, these changes have not yet begun to be effected; there may also be further changes in the coming years, as the National Decentralisation Policy is implemented.

oversees education boards at college, school and district level, is based in the Directorate of Planning and Information. Education boards manage and account for the funds disbursed to them. The procurement of education materials for schools has also been decentralised.

In order to strengthen education decentralisation and facilitate the deconcentration and devolution process, MoE has created Provincial Education Management Committees (PEMCs) and District Education Management Committees (DEMCs). These committees at provincial and district levels respectively are responsible for management and administration of education. Membership to the committees comprises representatives from all the five directorates (Standards and Curriculum, Human Resource and Administration, Education and Specialized Services, Planning and Information and Open and Distance Learning).

The process of funding is as follows;

- 1) PEMCs and DEMCs develop the annual work plan;
- 2) MoFNP releases allocated funds towards PEMCs' and DEMCs' annual work plans, through the PEO and DEBS;
- 3) PEMCs and DEMCs decide on how to use the funds based on the priority areas and the annual work plans;
- 4) Sections are allocated agreed upon funds.

However, the release of these funds is sometimes irregular and insufficient, so that PEMCs and DEMCs have to adjust their programmes.

School Based Continuing Professional Development (SBCPD), is supported by the following structures

- National Education Support Team (NEST) Administrative Committee: to approve the SBCPD annual work plan and budget; review the overall progress and annual expenditure; and review and exchange views on major issues related to SBCPD;
- NEST Coordinating Sub-Committee: to undertake overall coordination and supervision of the programme following the national policy of In-Service Training (INSET) and CPD; plan, review and revise the Master Plan for SBCPD; facilitate and support workshops under the programme held at provincial, district and zonal level; and monitor activities under the programme in coordination with Provincial Education Support Teams (PESTs), District Education Support Teams (DESTs), and Zonal Education Support Teams (ZESTs);
- PEST: overall coordination of the programme; planning of activities under the programme; preparing the budget and undertaking procurement of workshop materials; issuing and filing official communication; recording activities and producing minutes of meetings; conducting baseline and other surveys on the programme; encoding data on the implementation and surveys; monitoring activities;
- DEST: planning of activities under the programme; preparing budget and undertaking procurement of workshop materials; issuing and filing official communication; recording activities and producing minutes of meetings; conducting baseline and other surveys on the programme with the support of PEST; encoding data on the implementation and surveys with the support of PEST; monitoring activities.

3. Teacher Education in Zambia

3.1. Teacher Education System in Zambia

The format and objectives of teacher education in Zambia are directly related to the structure of the education system and have been influenced by successive policy directions, both in terms of the curriculum and the structure of the teacher training system. The two components of teacher education are Pre-Service and In-Service.

3.1.1. Pre-Service Training

Table 3.1 below shows teacher qualifications by level and gender. The initial teacher education is characterized by three levels – Certificate, Diploma and Degree – each representing a particular level of the education system. This is despite the fact that teacher training programmes are delivered by different providers.

Table 3.1: Numbers of Teachers by Qualifications and Gender, at All Schools Run by All Agencies⁷

School level	BASIC SCHOOLS ⁸			SECONDARY SCHOOLS ⁹			ALL SCHOOLS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Pre-School Teacher's Certificate	286	1,125	1,411	25	123	148	311	1,248	1,559
Primary Teacher's Certificate	17,828	20,761	38,589	1,134	1,747	2,881	18,962	22,508	41,470
Certificate in Special Education	219	218	437	15	12	27	234	230	464
Diploma (Basic or Sec. Teacher's)	5,083	4,586	9,669	4,933	3,042	7,975	10,016	7,628	17,644
Special Education Diploma	327	284	611	83	83	166	410	367	777
Advanced Diploma	117	49	166	239	56	295	356	105	461
Education Bachelor's Degree	168	124	292	830	386	1,216	998	510	1,508
Other Bachelor's Degree	18	19	37	43	24	67	61	43	104
Master's Degree	43	22	65	32	20	52	75	42	117
Special Education Degree	13	28	41	14	8	22	27	36	63
Untrained	3,727	1,799	5,526	38	27	65	3,765	1,826	5,591
Unknown	1,470	776	2,246	148	84	232	1,618	860	2,478
Total	29,299	29,791	59,090	7,534	5,612	13,146	36,833	35,403	72,236

Source; ED*Assist Zambia 2009, Version 1.0.0 – Preliminary Data for Planning – July 6, 2009, MoE

⁷ All agencies include GRZ, Grant-aided, Church, Private and Community.

⁸ The schools offering Grade 1-4, 1-7 and 1-9 are categorised under Basic School on this table.

⁹ The schools offering Grade 1-12, 8-12 and 10-12 are categorised under Secondary Schools on this table.

- **Certificate level training** is designed to prepare teachers for ECCDE, lower and middle basic school teaching (Grades 1-7) and is offered by CEs, formerly known as primary teacher training colleges (PTTCs). Admission requirements are full Grade 12 or General Certificate of Education (GCE) with a minimum of five credits including mathematics and English language. It is a two-year programme which is examined and certified by ECZ.
- **Diploma level training** follows a three-year programme and prepares teachers for upper basic school teaching (Grades 8-9). The secondary teachers' colleges (STCs), which prepare these teachers, are affiliated to universities which underwrite the diplomas.
- **Degree level programmes** prepare teachers for high school teaching (Grades 10-12). These have durations of three or four years.

3.1.2. In-service Training

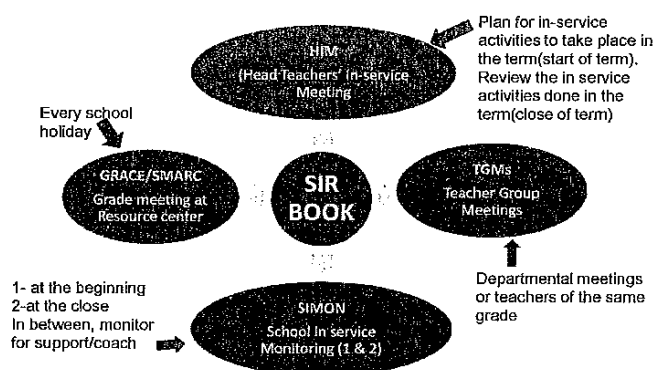
MoE considers CPD as an important tool for enhancing knowledge and skills for teachers. In-service training in Zambia is offered in two categories;

(a) School Based CPD

School based in-service training is conducted within the school, through the framework of the School Programme of In-service for the Term (SPRINT). Under SPRINT, all teachers are encouraged to participate in CPD activities as these are based on local needs and conducted within the school. In this way, CPD programmes are institutionalized (school owned).

Sometimes this is done at Teachers' Resource Centres (TRCs) which are at the province, district and zone level. Lesson Study is incorporated in the SPRINT framework, as is shown in Annex 2, and used as a major tool for teachers' CPD and because of this Lesson Study is not considered as a new programme.

Diagram 3.1: The SPRINT Framework



The personnel that are directly involved in the management, administration and implementation of SBCPD is shown on the organogram in Annex 1.

(b) College Based CPD - This is divided into two categories:

- **Long term** – Offered by several CEs and universities as full time or distance programmes running for a prescribed period.
- **Short term** – Includes short courses conducted through seminars or workshops organised in CEs or universities. In addition all CEs play a role in the delivery of CPD in collaboration with TRCs.

3.2. Statistics of Schools and Teachers

There are 8,783 schools in Zambia of which 5,348 are Government of the Republic of Zambia (GRZ) and Grant Aided categorized as follows: Under Basic Schools - Lower Basic: 173, Middle Basic: 2,095, Full Basic: 2,635, Under Secondary Schools - Mixed: 195, Full : 128 and High: 122. There are more middle and upper basic schools most of which are located in rural areas. The total percentage of rural schools in Zambia is 88% while only 12% of the schools are located in urban areas. The numbers of teachers at GRZ and Grant Aided schools by province is shown in Table 3.3

Table 3.2: Numbers of All Levels of Schools by Geographical Location - GRZ and Grant Aided (2009)

Province	Area	Basic Schools			Secondary Schools			Total	%
		Lower	Middle	Full	Mixed	Full	High		
		(Grades 1-4)	(Grades 1-7)	(Grades 1-9)	(Grades 1-12)	(Grades 8-12)	(Grades 10-12)		
Central	Rural	8	179	273	14	2	9	485	88.7%
	Urban	0	9	33	5	3	12	62	11.3%
	Total	8	188	306	19	5	21	547	
Copperbelt	Rural	14	114	124	13	10	2	277	55.8%
	Urban	4	21	139	14	35	6	219	44.2%
	Total	18	135	263	27	45	8	496	
Eastern	Rural	15	374	288	11	16	9	713	95.4%
	Urban	0	7	18	0	9	0	34	4.6%
	Total	15	381	306	11	25	9	747	
Luapula	Rural	19	99	248	24	2	11	403	92.2%
	Urban	0	2	26	0	1	5	34	7.8%
	Total	19	101	274	24	3	16	437	
Lusaka	Rural	2	15	85	4	3	4	113	48.7%
	Urban	0	8	94	6	3	8	119	51.3%
	Total	2	23	179	10	6	12	232	
North-western	Rural	41	236	232	13	10	14	546	96.1%
	Urban	1	7	10	1	1	2	22	3.9%
	Total	42	243	242	14	11	16	568	
Northern	Rural	35	506	339	11	8	11	910	94.9%
	Urban	4	3	29	2	5	6	49	5.1%
	Total	39	509	368	13	13	17	959	
Southern	Rural	12	233	367	53	10	5	680	90.2%
	Urban	4	13	32	14	5	6	74	9.8%
	Total	16	246	399	67	15	11	754	
Western	Rural	12	263	281	10	3	8	577	94.9%
	Urban	2	6	17	0	2	4	31	5.1%
	Total	14	269	298	10	5	12	608	
National Total	Rural	158	2,019	2,237	153	64	73	4,704	88.0%
	Urban	15	76	398	42	64	49	644	12.0%
	Total	173	2,095	2,635	195	128	122	5,348	
Basic and Secondary	Rural	4,414			290				
	Urban	489			155				
	Total	4,903			445				
	Rural	90.0%			65.2%				
	Urban	10.0%			34.8%				

The numbers of teachers at GRZ and Grant Aided schools by province is shown below.

Table 3.3: Numbers of Teachers by Geographical Location in GRZ and Grant Aided Schools (2009)

Province	Area	Basic Schools			Secondary Schools			Total	%
		Lower	Middle	Upper	Mixed	Full	High		
		(Grades 1-4)	(Grades 1-7)	(Grades 1-9)	(Grades 1-12)	(Grades 8-12)	(Grades 10-12)		
Central	Rural	16	825	3,138	187	60	197	4,423	63.6%
	Urban	0	100	1,541	230	94	562	2,527	36.4%
	Total	16	925	4,679	417	154	759	6,950	
Copperbelt	Rural	25	751	1,791	298	320	46	3,231	27.4%
	Urban	8	125	5,957	460	1,761	269	8,580	72.6%
	Total	33	876	7,748	758	2,081	315	11,811	
Eastern	Rural	34	1,875	2,746	123	301	136	5,215	81.5%
	Urban	0	118	675	0	387	0	1,180	18.5%
	Total	34	1,993	3,421	123	688	136	6,395	
Luapula	Rural	16	346	2,028	199	22	214	2,825	78.1%
	Urban	0	12	558	0	32	192	794	21.9%
	Total	16	358	2,586	199	54	406	3,619	
Lusaka	Rural	11	99	1,294	72	123	72	1,671	25.9%
	Urban	0	107	3,855	306	147	358	4,773	74.1%
	Total	11	206	5,149	378	270	430	6,444	
North-western	Rural	52	846	2,381	141	256	153	3,829	85.8%
	Urban	7	37	385	85	19	101	634	14.2%
	Total	59	883	2,766	226	275	254	4,463	
Northern	Rural	56	2,068	3,062	125	227	225	5,763	79.9%
	Urban	10	41	926	69	186	217	1,449	20.1%
	Total	66	2,109	3,988	194	413	442	7,212	
Southern	Rural	29	1,299	3,735	768	295	102	6,228	73.7%
	Urban	15	115	1,125	517	158	291	2,221	26.3%
	Total	44	1,414	4,860	1,285	453	393	8,449	
Western	Rural	21	923	2,441	64	76	129	3,654	79.9%
	Urban	16	40	605	0	76	180	917	20.1%
	Total	37	963	3,046	64	152	309	4,571	
National Total	Rural	260	9,032	22,616	1,977	1,680	1,274	36,839	61.5%
	Urban	56	695	15,627	1,667	2,860	2,170	23,075	38.5%
	Total	316	9,727	38,243	3,644	4,540	3,444	59,914	
Basic and Secondary	Rural	31,908			4,931				
	Urban	16,378			6,697				
	Total	48,286			11,628				
	Rural	66.1%			42.4%				
	Urban	33.9%			57.6%				

Table 3.4: Teachers by Gender in GRZ and Grant Aided Schools (2009)

Provinces	Basic Schools				Secondary Schools				Total			
	Male	Female	Unknown	Total	Male	Female	Unknown	Total	Male	Female	Unknown	Total
Central	2,857	2,763	0	5,620	757	573	0	1,330	3,614	3,336	0	6,950
Copperbelt	2,568	6,086	3	8,657	1,556	1,594	4	3,154	4,124	7,680	7	11,811
Eastern	3,040	2,382	26	5,448	638	301	8	947	3,678	2,683	34	6,395
Luapula	1,713	1,244	3	2,960	503	155	1	659	2,216	1,399	4	3,619
Lusaka	1,733	3,631	2	5,366	535	543	0	1,078	2,268	4,174	2	6,444
North-western	2,159	1,543	6	3,708	522	233	0	755	2,681	1,776	6	4,463
Northern	3,520	2,630	13	6,163	680	368	1	1,049	4,200	2,998	14	7,212
Southern	3,191	3,121	6	6,318	1,102	1,027	2	2,131	4,293	4,148	8	8,449
Western	2,105	1,937	4	4,046	346	179	0	525	2,451	2,116	4	4,571
	22,886	25,337	63	48,286	6,639	4,973	16	11,628	29,525	30,310	79	59,914

Source: ED*Assist Zambia 2009, Version 1.0.0 – Preliminary Data for Planning – July 6, 2009, MoE

3.3. Budget for Teacher Education

3.3.1. Financing

The total MoE budget for 2010 stood at K3.25 trillion of which K2.922 trillion was from GRZ while K328 billion was from Cooperating Partners (CPs). In 2009, the Ministry had a total of K 1.252 trillion for non- Personal Emolument related activities whereas in 2010 only K 1.157 trillion was available leaving a deficit of K 94 billion, as per 2010 Budget (Yellow Book).

External financing contributes significantly to the expenditure in the Education Sector. During the BESSIP period, from 1999 to 2002, much of the financing was directed at basic education, specifically at the lower and middle basic grades. Since 2003, particularly with the adoption of the sector wide approach (SWAp) contributions have also increased to the other sub-sectors, through the pool funding provided by CPs.

Table 3.5: Analysis of Funding of Pledges against Releases as at December 2009

Funding Agency	Pledge ZMK000	Release ZMK000	Percentage
GRZ Counterpart Funding	95,754,995	95,754,995	17%
NIF balance brought forward from 2008	17,151,582	17,151,582	3%
Netherlands	92,525,400	108,974,401	19%
Denmark	27,000,000	45,472,845	8%
Germany	54,135,803	54,135,803	10%
Ireland	94,054,000	101,609,462	18%
FTI	135,000,000	140,400,000	25%
USAID	4,500,000	5,000,000	1%
Total	520,121,781	568,499,089	100%

Source: Estimates of Expenditure and Revenue (Activity Based Budget) for the Year 1st January, 2010 to 31st December, 2010

Funding to the Education Sector from external agencies is through three funding modalities: pooled funding, designated support funds and project funding. During the FNPD period, as a percentage of direct CP funding to the Education Sector, CP funding

was falling in relation to the funding from the Zambian Government. Details of CPs with a presence in the Education Sector in 2011 are given in Annex 3.

3.3.2. Allocations to Programmes

The Education Chapter in the FNDP has 8 programmes which embrace all the activities of the Ministry. Therefore, funds from both GRZ and CPs are allocated to the 8 programmes. Distribution of resources across programmes has a historical perspective and is driven by both the policy and priority choices of the Ministry.

Table 3.6 below is a summary of all the funds allocated across sub-sectors and operational levels appearing in the national budget in the Yellow Book. The table shows how funds were allocated to the 8 programmes in 2010 including Personal Emoluments (PEs), which took up 63.62% of the total budget. The infrastructure programme continued to take up the largest percentage of the non-PEs allocation because government prioritised the creation of classroom space at both basic and high school levels in order to improve access at these levels. Grants to basic education including funds for Free Basic Education materials were provided for within the Equity programme taking up 3.76% of the total budget. This programme also caters for bursary support for vulnerable children. The University and Research programme took up huge portions (8.77%) of the budget because of increased demand for university education. Bursary support for university students is also provided for within this programme.

Funds for procurement of education materials are provided for in the Curriculum and Education Materials programme, which took up 1.32% of the total budget. This allocation would help to improve the pupil:text book ratio particularly in the core subjects. Funds for the Teacher Education programme were provided at ZMK17 billion, which was 0.52% of the total budget.

Table 3.6: Overall Budgetary Allocation by Programme (2010)

Programme	GRZ (ZMK)	Pool (ZMK)	Total (ZMK)	% Share
Personal Emoluments	2,092,540,292,230	0	2,092,540,292,230	63.62%
Management and Administration	87,149,672,081	35,192,274,595	122,341,946,676	3.72%
Infrastructure Development	312,140,987,419	278,020,097,120	590,161,084,539	17.94%
Curriculum and Education Materials	28,449,454,602	14,895,579,907	43,345,034,509	1.32%
Equity	95,568,998,217	28,163,283,344	123,732,281,561	3.76%
Standards and Evaluation	5,362,903,089	2,487,473,605	7,850,376,694	0.24%
Teacher Education	10,502,689,829	6,612,886,462	17,115,576,291	0.52%
Distance Education	1,869,974,992	1,659,075,967	3,529,050,959	0.11%
University and Research	288,506,906,417	0	288,506,906,417	8.77%
Total	2,922,091,878,876	367,030,671,000	3,289,122,549,876	100.00%

Source: Estimates of Expenditure and Revenue (Activity Based Budget) for the Year 1st January, 2010 to 31st December, 2010

According to the MoE 2010 Budget, the Pre-service Unit at HQ was allocated ZMK290,000,000 while the In-service Unit was allocated ZMK270,566,160 from the budget for Teacher Education. These allocations are the same in 2011.

Table 3.7 and Chart 3.1 below show how each province allocated the budget in 2010. Each province allocated the provincial budget for 4 programmes; Provincial Headquarters,

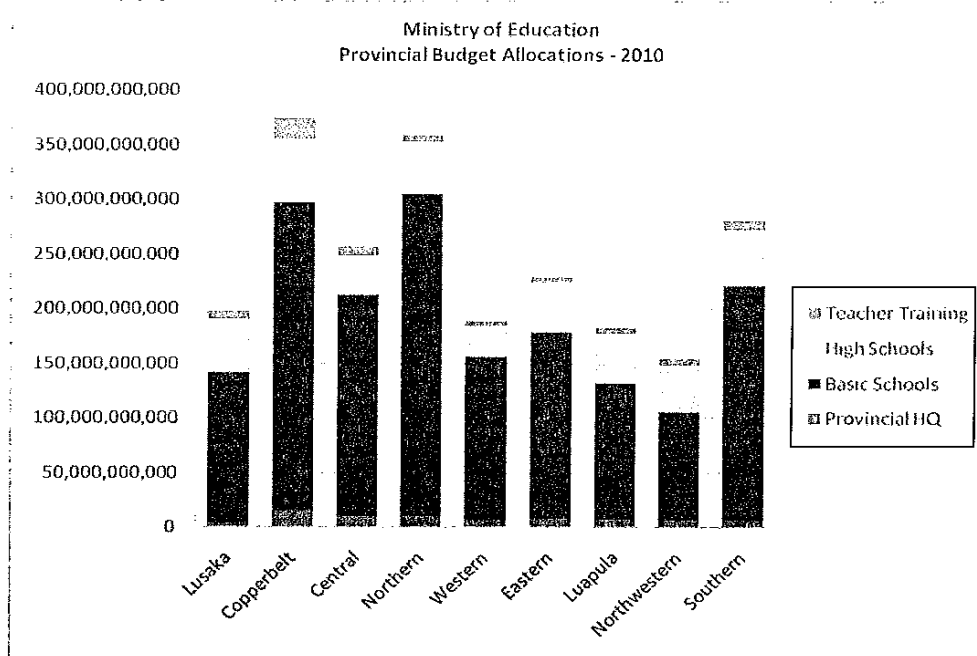
Basic Schools, High Schools and Teacher Education.

Table 3.7: Provincial Budget Allocation (2010)

Province	Provincial HQ	Basic Schools	High Schools	Teacher Training	total	%age
Lusaka	4,680,889,815	136,942,449,366	48,850,093,234	7,731,992,425	198,205,424,840	8.9%
Copperbelt	15,556,528,939	281,786,451,103	58,292,492,676	18,506,786,977	374,142,259,695	16.8%
Central	10,030,112,866	202,504,925,779	36,322,843,940	8,722,035,101	257,579,917,686	11.6%
Northern	10,428,471,667	294,661,916,913	47,899,287,586	6,087,105,775	359,076,781,941	16.1%
Western	6,847,158,762	149,794,605,100	27,722,368,497	4,268,771,547	188,632,903,906	8.5%
Eastern	8,307,961,407	169,975,489,883	46,664,507,024	4,508,600,577	229,456,558,891	10.3%
Luapula	7,939,680,866	124,495,240,666	45,715,713,667	4,469,077,302	182,619,712,501	8.2%
North-western	6,540,221,992	99,712,053,245	42,640,514,209	6,167,931,115	155,060,720,561	7.0%
Southern	6,857,093,177	214,388,588,402	51,444,136,862	8,836,371,949	281,526,190,390	12.6%
Total	77,188,119,491	1,674,261,720,457	405,551,957,695	69,298,672,768	2,226,300,470,411	100%
%age	3.5%	75.2%	18.2%	3.1%	100%	

Source: Estimates of Expenditure and Revenue (Activity Based Budget) for the Year 1st January, 2010 to 31st December, 2010.

Chart 3.1: Provincial Budget Allocation (2010)



3.4. Issues, Challenges and Constraints in Education Delivery

Major causes of ineffective education delivery, which are related to the implementation of the Teacher Education programme, are discussed below.

3.4.1. Inadequate Qualifications and Competences of Teachers and Teacher Educators in Science, Mathematics and Technology

It is universally accepted that the qualifications and competences of teachers have the most critical impact on the overall quality of education. In Zambia, the issue of inadequate qualifications of teachers and teacher educators has been chronic since independence in 1964. The economic malaise of the 1980s and 1990s further worsened the situation. However, with the recent improvements in the economy the picture is changing.

3.4.2. Limited Access to Teacher Education and Training / Development

The following factors have contributed to limited access to in-service and pre-service teacher education and training:

- The physical infrastructure in CEs and universities has not expanded in proportion to the demand for initial teacher education;
- The cost of teacher education is high;
- MoE is progressively reducing the number of bursaries that it provides to support university level education for teachers;
- Lack of degree programmes in practical subjects like Industrial Arts and Commercial subjects for teachers;
- Absence of an institution that specialises in CPD;
- Limited capacity of NISTCOL to be a fully fledged institution that specialises in CPD.

3.4.3. Insufficient Teacher Incentives System

Professional development programmes by themselves do not fully cater for the concerns of teachers. These programmes need to be linked to a clearly defined personnel policy that offers suitable incentives in terms of salaries, promotion and professional upgrading to those teachers who have improved their teaching skills and competencies. Without such a policy in place, CPD programmes will not be attractive enough to teachers, nor will the objective of improving the quality of teaching through teacher development initiatives be achieved.

3.4.4. Remoteness of Most Regions

In Zambia, most of the remote and rural schools do not have electricity, suitable buildings, safe drinking water and satisfactory living conditions including accommodation for teachers. The hardship allowance provided is not enough to compensate for the difficulties they have to endure in these difficult locations. Many rural schools are several kilometres away from the main roads and markets, and teachers have to walk the whole distance to procure the supplies to meet their daily needs. This situation has resulted in a perceptible imbalance in the deployment of teachers between urban areas and rural areas because teachers deployed to work in the rural areas run away in the first two years of service. Therefore, there are wide disparities in the teaching loads between those in the urban and rural schools.

3.4.5. Fragmented Curriculum Development in Teacher Education

While decentralization of authority to deliver teacher education programmes is necessary and desirable, a nationally uniform core curriculum for teacher education is still an inescapable necessity. Presently, the practice seems to be that each CE prepares its own curriculum and seeks the approval of the university to which it is affiliated, for implementation. While a certain level of quality is maintained in these processes, each curriculum is developed with different emphasis, priority and concerns.

The responsibility for producing degree holders in secondary and basic education is vested in the University of Zambia (UNZA) and the Copperbelt University (CBU). Currently, neither the Secondary Teachers' Diploma nor the Primary Teachers' Diploma by Distance Learning (PTDDL) have appropriate curriculum linkage with the degree programmes offered by UNZA. Similarly, there is no link between the two-year Teachers' Certificate and the three-year Secondary Teachers' Diploma in terms of their curricula. Under these circumstances, credit transfer is basically impossible. In addition to the absence of linkage to degree programmes at UNZA, the curriculum and programmes of CEs are not synchronized among themselves. Without any institutional mechanism to harmonize the teacher education curriculum across the country, teachers face serious problems in upgrading their professional qualifications through systematic training.

One more serious issue is the missing linkage between the teacher education curriculum and the school curriculum. It is not uncommon that the school curriculum has gone through frequent changes, while teachers are educated under a relatively static curriculum in the CEs. When the teachers graduate from the CEs, they often find that what they have learned in CEs is not what they are required to teach.

3.4.6. Ineffective and Low Quality Support to SBCPD

Effective SBCPD depends on the quality of support to activities like supervision, reference materials, mentoring, etc. The aspects of quality that are lacking are as follows:

- Commitment by teachers to take full responsibility for their own professional development;
- Limited management and supervision skills of head teachers;
- Inadequate professional support from INSET Coordinators and Standards Officers in areas of coaching, mentoring and regular monitoring;
- Content for Lesson Study activities in schools not well defined (Questioning Techniques, Problem Solving Approach etc.);
- Ineffective use of Skills Books
- Lack of harmony in the lesson observation instruments in use. There are a variety of instruments in use for lesson observations by Teacher Education and Standards Officers.

3.4.7. Ineffective Lesson Delivery

The policy document *Educating our Future* states that teaching is the key factor to promoting pupils' learning and motivation. However, poor learning achievements result from lack of teaching competencies by teachers. Most teachers rely heavily on methods that put the teacher at the centre of everything that happens in the classroom. They rely on the chalk and talk method through which factual information is transmitted while learners just recall or remember the facts. The result of this is that pupils' thinking is restricted to the Lower Order Thinking Skills domain which places them in a passive role and limits their activity. Many teachers have rather limited capacity in the following aspects:

- Creating clear, well defined learning objectives based on the curriculum;
- Using a variety of teaching methods such as practical tasks, inquiry approach, problem solving approach etc.;
- Pacing lessons appropriate to students' abilities to learn;
- Achieving an orderly environment with few distractions;
- Using an orderly sequence to teach lessons by specifying learning objectives, reviewing skills needed to learn new materials, presenting new concepts, providing various kinds of practice and assessing what learners have gained;
- Organising instructional aids and assessment in direct support of learning objectives rather than treating them as independent components;
- Establishing a system for continuously assessing learning, reflecting on their teaching and improving results.

3.5. MoE's Initiatives to Address the Challenges

3.5.1. Upgrading of Colleges

MoE is currently in the process of upgrading two CEs to university status, while the remaining ten will offer a teaching diploma qualification. In addition, teachers with diploma qualifications teaching in high schools will be upgraded to first degree through the Fast Track Teacher Education Course. The course will be offered using the distance learning mode of delivery.

3.5.2. Promotion Based on Participation in CPD

The Ministry plans to align promotion to higher position to effective participation in CPD activities.

3.5.3. Support to Teachers in Rural Areas

The Government has introduced the 'remote allowance' for teachers posted and serving in rural and remote parts of the country as an inducement to teachers to serve in these areas. In addition, teachers from these areas are given first priority for sponsorship to in-service training.

3.5.4. Curriculum Review

MoE is currently reviewing the existing curriculum in order to make it relevant to the needs of society.

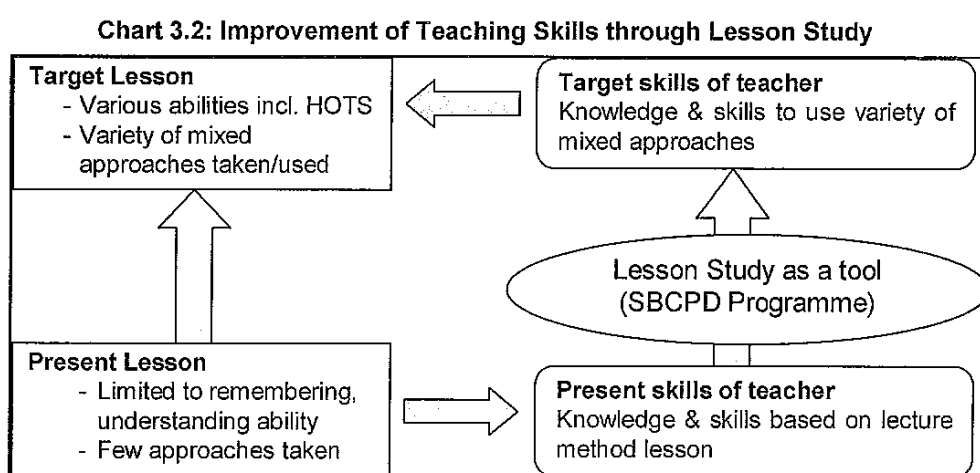
3.5.5. Improving Lessons through SBCPD

The Ministry has developed a Master Plan for the strategic expansion and implementation of SBCPD in the country as reflected in the NIF. The Master Plan is a roadmap for CPD initiatives with a staged approach to implementation.

Under the Master Plan, SBCPD is being implemented through SPRINT, which is a school based system for CPD of teachers. It is managed by head teachers and revolves around small Teacher Group Meetings (TGMs) supported by In-service Coordinators through a network of TRCs at provincial, district and zone levels.

One of the key interventions under SPRINT is the Strengthening of Mathematics, Science and Technology Education (SMASTE) through SBCPD. SMASTE aims at improving the quality of teaching and learning of science and mathematics through the Lesson Study approach. It was first piloted in Central Province (2006 – 2007) and later extended to Copperbelt and North-western Provinces (2008 – 2011). In NIF III (Section 5 on High School Education and Section 8 on Teacher Education, Supply and Management) it is stated that one of the key SBCPD activities will be the rolling out of Lesson Study to all provinces.

The chart below illustrates how teaching skills will be improved through Lesson Study.



The objective of a science or mathematics lesson is to promote and develop the following in pupils:

- An analytical, innovative, creative and constructive mind;

- An appreciation of the relationship between scientific thought, action and technology on the one hand and sustenance of the quality of life on the other;
- A demonstration of free expression of one's own ideas and exercising tolerance for other pupils' views;
- Independent, inquiry, collaborative and active learning;
- Manipulative skills development.

In order for the above to be realised, teachers need to have the following skills:

Subject teaching skills

- Subject content knowledge;
- Pedagogical skills (ability to take into account learner diversity, learners' prior knowledge, emotional, psychological and cognitive needs, curriculum requirement, etc.);
- Planning skills (ability to prepare the termly scheme, weekly forecasts and lessons based on knowledge of subject matter, pupils, the community/society values and curriculum objectives).

General teaching skills

- Eclectic skills (ability to vary learner centred methods to encourage pupil development of critical thinking, problem solving and performance skills as the situation demands);
- Lesson facilitation skills:
 - encourage individual and group motivation and behaviour to create a learning environment that promotes positive social interaction, independent thinking, active engagement in learning, self esteem and motivation
 - promote effective communication to foster active inquiry, collaboration, and supportive interaction in the classroom
 - provide learning opportunities that support a pupil's intellectual, social and personal development;
- Evaluation skills (conduct formal and informal assessment and evaluation of the learning).

The above skills will be achieved by a **positive attitude to CPD**, through engaging in reflective practice and seeking opportunities to grow professionally. All these skills will be developed based on curriculum requirements.

MoE's Lesson Study initiative is aimed at improving education quality through SBCPD. It is intended to encourage teachers to adopt a variety of teaching approaches through learner centred methodologies.

4. School Based CPD Master Plan

The SBCPD Master Plan presents the Ministry's roadmap for the strategic expansion and improvement of SBCPD in order to enhance the overall quality of education in Zambia. The Master Plan also spells out the strategies and roles and responsibilities of the various stakeholders, such as MoE, CPs and the private sector.

The following sections present the salient aspects of the Master Plan. For details please refer to the full Master Plan document.

4.1. Scope of the Master Plan

The Master Plan is for the period from 2006 to 2023 and covers:

- a) all 9 provinces;
- b) all grades and subjects/learning areas;
- c) NISTCOL and the National Science Centre (NSC);
- d) Colleges of Education and other relevant tertiary institutions;
- e) all components and aspects of SPRINT.

4.2. Strategies of the Master Plan

In view of the challenges highlighted in Section 3 above, the strategies for the implementation of the Master Plan will be as follows:

- a) the anchor will be the MoE SPRINT framework;
- b) review and strengthen SPRINT, in order to adequately support the Master Plan;
- c) a 4-staged approach will be used as follows:
 - Stage I (2006 – 2009): establishment of model and guidelines;
 - Stage II (2009 – 2012): Upgrading of content and skills through the development of the teaching skills book and the management skills book in collaboration with NISTCOL and NSC;
 - Stage III (2013 – 2017):
 - i) Use of skills book to improve CPD in schools and colleges;
 - ii) Conduct mid-term impact assessment and evaluation
 - Stage IV (2018 – 2023):
 - i) Application of skills books in schools, Colleges of Education and other teacher training institutions
 - ii) Conduct Final Evaluation;
- d) a graduated roll-out over the entire country, starting with pilot provinces.

The roll-out will be based on the following activities:

 - Orientation of Standards Officers, PEST, DEST and other levels of implementation;
 - Introduction of Lesson Study Approach into the SPRINT framework;
 - Selection of Lesson Study facilitators;
 - Training of Facilitators and induction of teachers;
 - Management Training;
 - Conducting of stakeholders' workshops;
 - Support monitoring;
- e) MoE working in partnership with CPs;
- f) recruitment and capacity development of required personnel;
- g) capacity development of key institutions, such as NISTCOL and NSC (development of a CPD strategy, national teachers resource centre);
- h) provision of adequately equipped specialized rooms in schools.
- i) production of teaching/learning and reference materials;

- j) lobby and advocate for increased and regular funding to teacher education programmes and activities, as an aspect of improving the quality of education;
- k) strengthen networking through participation in relevant regional professional organizations, such as SMASE-WECSA.

4.3. Support from CPs to the Master Plan

As indicated earlier, the Master Plan will be implemented in partnership between MoE and a number of CPs. Currently, a number of project activities are supported with funds from the Sector Pool (for details of the major CPs in the Education Sector, refer to Annex 3).

The following are the details of CPs' support to the Master Plan:

Cooperating Partner	Area(s) of Focus	Geographical Coverage	Direct Beneficiaries	Contribution to Sector Pool
Ireland/Irish Aid	The Zambia-Ireland Teacher Education Partnership (ZITEP) operates in two CEs – Charles Lwanga and Kitwe Colleges of Education – (but with intention to spread to all CEs in phase 2). The project supports capacity building of lecturers in order to meet identified pedagogical needs. Its specific objectives include strengthening the pedagogical skills of lecturers; informing policy in the area of teacher education; contributing to enhanced CPD; and strengthening linkages between CEs and TRCs.	Copperbelt and Southern Provinces	96 college lecturers at the two CEs	Yes
Japan/JICA - Please refer to 4.6 below				
Save the Children, Norway	Save the Children, Norway serves under the mission of 'fulfilling children's right to education' and on aspects of quality. Support has been given for training teachers and Standards Officers in qualitative methodology and action research, including reflective teaching. In-service training is conducted in the area of the Primary Reading Programme.	Southern Province	19 ESOs, 400 teachers and 27 teacher educators	No

Cooperating Partner	Area(s) of Focus	Geographical Coverage	Direct Beneficiaries	Contribution to Sector Pool
United States Agency for International Development (USAID)	USAID supports MoE through capacity building programmes for Head Teachers and Deputy Head Teachers, through the Education Leadership and Management (ELM) course. ¹⁰ NISTCOL is the lead institution in this although all CEs and TRCs are involved in the delivery of the course.	The ELM course covers the whole country	3,587 Head Teachers and Deputy Head Teachers	Yes
VVOB (Flemish Office for Development Cooperation and Technical Assistance)	VVOB is conducting a multi-year programme from 2011 and 2013. The programme's overall objective is "To contribute to the improvement of basic school teacher's capacity (beginning and in-service) to facilitate quality learning and to continuously improve their practice". The programme includes CEs, TRCs and community schools. The areas of support include capacity development in specific areas of training, materials provision and development, ICT, OD(e)L and the provision of technical assistance for specific technical skills, such as ICT.	Northern, Central and Copperbelt Provinces for regular and community schools, the entire country for CEs	College lecturers, GRZ and school and CS teachers.	No

4.4. Challenges under the Master Plan

The following are the challenges in implementing the SBCPD Master Plan:

- Monitoring of Lesson Study activities will be difficult in the remote areas where the terrain is difficult with some parts becoming inaccessible in the rainy season;
- Specialized rooms and laboratories to facilitate the teaching and learning of science, mathematics and technology in most schools are either dilapidated or non-existent, especially in the upper basic schools;
- Understaffing, coupled with long distances between schools, which characterize remote areas, has the potential to adversely affect the implementation of Lesson Study;

¹⁰ USAID support to the ELM course ended in the first half of 2011; however, USAID is in the process of setting up new projects of support to MoE; it is expected that some of the interventions will support teacher education.

- Insufficient numbers of qualified teachers of mathematics and science in upper basic and high schools;
- Poor management and administrative skills by head teachers to effectively organize the human and other resources under their charge;
- Insufficient monitoring activities by Zone INSET Coordinators (ZICs) due to their full teaching loads.

4.5. Core Areas of the Master Plan in Stage II and Stage III (2009-2017)

The core areas in Stage II and Stage III covering 2011 – 2015, which is the proposed project period, are discussed here. A phased approach in rolling out the School Based CPD programme in the provinces will be adopted. Central, Copperbelt and North-western Provinces will be given the challenge of developing a mentoring model arising from their experiences during the earlier phase of the project. Although currently the focus is on science and mathematics, in future interventions, technology will also be developed. The core areas of the Master Plan in Stage II and Stage III are determined in view of the challenges raised above.

Part A: Roll out to the 6 new provinces (Eastern, Lusaka, Luapula, Northern, Southern and Western Provinces) with a focus on mathematics and science – Grades 8-12 including CEs and Universities. Roll out to the 6 provinces will involve the following categorised activities:

- Preparation and authorisation of project documents, which will include other relevant documents for teachers, managers, facilitators and TRC / INSET coordinators;
- Orientation of all the stakeholders;
- Training of facilitators;
- Mentoring;
- Monitoring and Evaluation.

Part B: Consolidation and improvement of the quality of Lesson Study (Central, Copperbelt and North-western Provinces) with a focus on mathematics and science – all grades including CEs and Universities

Part C: NISTCOL and NSC as Capacity Building Institutions

- NISTCOL and TRCs as Centres of Specialisation for CPD and ICT in Education;
- NSC as Centre of Specialisation for materials/curriculum development and Appreciation – NSC to include publication of manuals, newsletters and journals in consultation with CDC (further consultations with CDC and NISTCOL)

4.6. Categorised Activities in Stage II and Stage III

The following activities are determined for the period 2009 to 2017 under the Master Plan.

For PART A: Introduction to 6 New Provinces

Activity	Supporting agency
Preparation for the induction of PEST.	IU and mentor provinces
Orientation of PEST, including three lecturers from each of the CEs	IU and mentor provinces
National team monitoring induction of pilot DESTs by PESTs	IU and mentor provinces
Orientation of lecturers from universities and CEs	PESTs and IU
Induction of head teachers, HODs, HOSs and ZICS	PESTs and DESTs
6 new provinces visit respective mentor provinces to get oriented in stakeholder	New provinces to bear the cost

workshop	
PESTs and DESTs in new provinces hold review meetings to assess implementation of Lesson Study	New provinces for participants
IU/mentor provinces monitor review meetings in the new provinces.	IU/ PESTs in mentor provinces
Induction of DESTs in the remaining districts of the new provinces	New provinces (MoE)
Preparations for facilitators training	IU/JICA, PESTs in the new and mentor provinces
Training of facilitators	Provinces/MoE and JICA
Training of the task team in baseline survey techniques	IU/JICA/mentor provinces
Implementation of Lesson Study activities in schools and zones	New provinces
Provincial stakeholders' workshops	New provinces and IU/JICA

For Part B: National Team to Improve Quality of Lesson Study

Activity	Supporting Agency
Preparations for 2 nd International Workshop	MoE/JICA
Conducting 2 nd International Workshop	IU/JICA
Preparations for national facilitators' Workshop	IU/JICA/National trainers (15)
National facilitators' workshop	MoE/JICA and JOCV

For Part C: Enhancement of NISTCOL and NSC

NISTCOL:

Activity	Supporting Agency
Consultancy on the new mandate and status	USAID (EQUIP 2)
Orientation of lecturers in Lesson Study	IU and PESTs in mentor provinces
Development of a strategic plan and submit to relevant authorities	NISTCOL
Enhancing the capacity of NISTCOL, e.g. lecturers, infrastructure, T/L materials and equipment	MoE, USAID (EQUIP 2)
Preparations for training of head teachers and deputy head teachers in management of Lesson Study	NISTCOL, IU
Capacity building of head teachers and deputy head teachers in management of CPD	NISTCOL, IU
Establish linkages with TRCs and strengthen linkages with other colleges and universities	IU, PESTs

NSC:

Activity	Supporting Agency
Development of strategic plan	NSC
Enhancing the capacity of NSC to produce teaching and learning materials in mathematics and science	MoE, other CPs
Orientation of NSC staff in Lesson Study	NSC , PESTs, IU

Among the activities listed above, some are expected to be undertaken by JICA as a technical cooperation project. The next section deals with the Project.

5. Design of the Project

The Project period is being viewed in the context of the Master Plan 2006 – 2023. The overall goal has been formulated in terms of what MoE intends to achieve during the Project Period 2011 – 2015. The project shall be called; "Strengthening Teachers' Performance and Skills through School Based Continuing Professional Development" (STEPS). This project, which is being implemented in collaboration with JICA, covers part of the master plan described in Section 4 above. The main thrust of the project will be to address issues of quality with particular emphasis on capacity development of teachers of science and mathematics in Basic and High schools. The project will also build capacity of resource persons such as facilitators, head teachers, teacher educators and other key MoE personnel. The components of the project described above are Annex 4 as Project Design Matrix (PDM) and Annex 5 as Plan of Operation (PO).

5.1. Target of the Project

5.1.1. Target Area

The Project will cover all nine (9) provinces. Among the seventy-four (74) districts in the country, each PEST selected some districts, bringing the total to 54 as target districts, where Lesson Study will be introduced at the initial stage of the Project. The table below shows the number of target districts. The list of target districts is shown in Annex 6.

Province	Target Districts	Total Districts
Central	6	6
Copperbelt	10	10
North-western	8	8
Eastern	5	8
Northern	8	13
Southern	5	11
Lusaka	4	4
Western	3	7
Luapula	5	7
Total	54	74

5.1.2. Target Group (Beneficiaries)

The target group of the Project includes the following:

- 1) Teachers teaching science and mathematics at Grade 8-12 in all provinces;
- 2) Grade 1-7 teachers in three provinces (Central, Copperbelt, and North-western)

The number of target teachers is shown in Annex 7.

5.1.3. Target Grades and Subjects

Japanese technical assistance extended through the Project focuses on the following grades and subjects, although all teachers are involved in SBCPD activities:

- 1) Science and mathematics at Grade 8 – 12 in all provinces;
- 2) Science and mathematics at Grade 1 – 7 in Central, Copperbelt, and North-western Provinces.

5.2. Super Goal

Quality of science and mathematics education is improved.

Objectively Verifiable Indicators

- i. Scores in national assessment (Grade 5 numeracy, Grade 9 science and mathematics);
- ii. Examination pass rate in Grade 9 and Grade 12;
- iii. International comparative study (SACMEQ).

The indicators are derived from NIF III. The indicators for the super goal will be set as the target figures of the same indicators that are set in NIF III. The indicators will be set in January 2012.

5.3. Overall Goal

Students' learning process in science and mathematics is improved.

In the context of the project this refers to lessons that promote and develop a variety of pupils' abilities by employing learner centred approaches, such as Problem Solving, Discovery, Experimental and such other approaches, which are characterised by:

- Constructing key questions that motivate and appropriately challenge learners to engage in critical thinking that promotes Higher Order Thinking Skills (HOTS);
- Taking into account the subject content, learners' prior knowledge, ability and curriculum requirement during planning and implementing of the lesson.

Objectively Verifiable Indicators

- i. Result of lesson observation (science and mathematics)(students' activities);
- ii. Students' perception towards their learning (science and mathematics) lessons

5.4. Project Purpose

Teaching skills are enhanced under SBCPD.

The project aims to improve teaching skills through Lesson Study activities at school. Enhancement of teaching skills means improving the skills and knowledge a teacher needs in order to effectively deliver quality lessons to the class. These include:

- Subject content knowledge;
- Planning skills (ability to prepare the termly scheme, weekly forecasts and lesson plans);
- Eclectic skills (ability to vary methods of teaching as the situation demands);
- Pedagogical skills (ability to take into account learner diversity, emotional, psychological and cognitive needs);
- Preparation skills (ability to prepare relevant and suitable teaching and learning materials, including improvisation).

Objectively Verifiable Indicators

- i. Result of lesson observation (science and mathematics) (demonstration of teaching skills);
- ii. Self-evaluation of teachers in teaching skills;
- iii. Students' evaluation of teaching.

5.5. Outputs

Output 1: SBCPD is strengthened through Lesson Study.

Objectively Verifiable Indicators

- i. Percentage of schools implementing Lesson Study (Target figure: 70% in all target

- grades);
- ii. Quality of Lesson Study verified through a prepared checklist.

Output 2: Capacity of resource persons for implementing SBCPD is enhanced.

On the basis of teachers taking full responsibility for their own learning and being key players in ensuring effective lesson delivery, the teachers and teacher educators who have been identified as facilitators will practice to improve on their facilitation skills such as:

- Lesson planning;
- Lesson observation;
- Group discussion;
- Curriculum analysis;
- Lesson and programme assessment and evaluation;
- Teacher change process.

Objectively Verifiable Indicators

- i. Number of resource persons (stakeholders and facilitators) trained in Lesson Study (target figure will be determined later);
- ii. Self-evaluation of resource persons on their performance;
- iii. Evaluation of resource persons by beneficiaries.

Output 3: Reference materials for implementing SBCPD are developed (reviewed/revised)

Objectively Verifiable Indicators

- i. Availability of developed reference materials in schools (Skills books, Journals, Guidelines, etc.);
- ii. Users' (Teachers') evaluation of the developed reference materials.

5.6. Activities

Output 1:

Preparation and Orientation Stage

- 1-1 Prepare orientation materials
- 1-2 Conduct orientation of PESTs and DESTs in Lesson Study
- 1-3 Identify facilitators
- 1-4 Orient the PEST task team in conducting baseline survey
- 1-5 Train facilitators/DESTs in conducting baseline survey
- 1-6 Conduct necessary surveys for project evaluation
- 1-7 National Core Technical Team mentor six provinces

Implementation Stage

- 1-8 Plan stakeholders' workshop
- 1-9 Conduct stakeholders' workshop
- 1-10 Implement Lesson Study in schools
- 1-11 Monitor implementation of Lesson Study

Output 2

- 2-1 Conduct workshops for resource persons
- 2-2 Conduct stakeholders' workshops
- 2-3 Provide technical support to Lesson Study activities at school level

- 2-4 Conduct International Technical Workshop
- 2-5 Conduct International Technical Exchange
- 2-6 Conduct local technical exchange visits between provinces

Output 3

- 3-1 Revise the Teaching Skills book
- 3-2 Revise the Management skills book
- 3-3 Produce Lesson Study journals
- 3-4 Print Teaching, Management skills books and journals
- 3-5 Distribute Teaching, management skills books and journals
- 3-6 Organise a contest on good practices of Lesson Study for schools
- 3-7 Document good practices in journals

5.7. Strategy of SBCPD Roll out and Activities

(1) Induction Stage (initial activities)

At the initial induction stage for the new participating six provinces, a team composed of 15 selected resource persons from three mentor provinces, with technical support from National Core Technical Team, will plan and conduct induction workshops in each province. The PO – Annex 5 – shows the activities to be implemented at the orientation stage and when these activities will be implemented.

As the participants of the induction will be defined and selected by the PEST, the number of participants may differ from province to province. The resource persons for the orientation of the new provinces will be composed of the following:

- 1) PEST members
- 2) DEST members
- 3) Facilitators
- 4) Lecturers of CEs / Universities

Flow of Activities at Induction Stage

Induction Team (composed of 15 selected resource persons from the 3 mentor provinces) assisted by the National Core Technical Team will undertake the following:

- 1. Plan the induction package and workshop;
- 2. Undertake a 2-day visit to the new province;
- 3. Conduct Induction Workshop for the PEST/DEST in the new province

The flow chart of the activities at this stage is shown in Annex 9.

(2) Induction Stage (follow-up activities to initial induction)

The National Core Technical Team will mentor six new provinces through monitoring the progress of activities in the new provinces twice a year at the time when stakeholders' or facilitators' workshops will be taking place. Regular mentoring by the national team will continue for around one year from the first PEST meeting in April 2012.

In addition, new provinces may visit three mentor provinces, and vice versa, in order to observe Lesson Study and seek advice from mentor PEST/DEST in conducting Lesson Study and monitoring. The table below shows the grouping of provinces for mentoring.

Mentor Provinces	New Provinces
Central	Southern and Northern
Copperbelt	Eastern and Lusaka
North-western	Western and Luapula

Below is the flow of activities to be undertaken at this stage.

Flow of Activities (follow-up activities to initial induction)

1. National Core Technical Team will mentor six new provinces

The National Core Technical Team will monitor the progress in the new provinces during the first year (twice a year at the time of stakeholders' workshops or facilitators' workshops).

2. PESTs of mentor provinces will also mentor the six new provinces

The PESTs of the mentor provinces will visit the new provinces to observe Lesson Study. Alternately, the PESTs / DESTs of the new provinces will also visit the mentor provinces to observe Lesson Study and seek advice in implementing and monitoring Lesson Study.

The flow chart of the activities at this stage is shown in Annex 10.

(3) Implementation Stage

At the implementation stage, the task of the National Core Technical Team will focus on studying the quality aspects of teaching and learning. The team will identify skilled personnel (teachers or officers) from the mentor provinces. The National Core Technical Team will also develop reference materials and monitoring instruments and disseminate the developed materials. In addition, the National Core Technical Team will collect and document good practices of Lesson Study and give feedback to all provinces.

Below is the flow of activities to be undertaken at this stage.

Flow of Activities (Implementation Stage)

National Core Technical Team will:

Develop /Study quality aspects such as:

- Subject teaching skills;
- General teaching skills;
- Teachers' attitudes to CPD.

PEST in collaboration with DEST will:

- Identify skilled personnel;
- Identify teachers/officers to develop the reference materials, monitoring tools, etc.;
- Collect good practices of Lesson Study.

The flow chart of the activities at this stage is shown in Annex 11.

5.8. Input

5.8.1. Input from Zambian Government

- Human resource
 - i. NEST, National Core Technical Team, PEST and DEST members in all the nine (9) provinces;
 - ii. College/University lecturers;
 - iii. NSC staff;
 - iv. Trained resource persons (facilitators and stakeholders) through SMASTE Phase I and II.

- Materials

- i. Offices and other buildings to be used for activities under the project;
- ii. Office Equipment;
- iii. Vehicles and fuel;
- iv. Teaching/learning materials to be used for Lesson Study.

- Finances

- i. Funds for implementation of Lesson Study activities, including stakeholders' and facilitators' workshops;
- ii. Allowances for travel of local staff for project activities.

5.8.2. Input from JICA

- Human resource

- i. Three (3) long term experts:
 - Chief Advisor / Management of Lesson Study, Science Education;
 - Management of Lesson Study, Mathematics Education;
 - Coordination and Monitoring of Lesson Study Activities.
- ii. Short term experts when need arises in relation to the project activities
- iii. Local technical advisor
 - Administration and Management of SBCPD

- Training

- i. Provide opportunities for overseas training and conferences for Zambian counterparts and core resource persons in relation to the project activities.

- Materials

- i. Office equipment (computers, printers, LCD projectors, video cameras) to be used for project activities;
- ii. Vehicles to be used for monitoring the project activities;
- iii. Teaching and learning materials for science and mathematics.

- Finance

- iv. Local expenses and other necessary allowances for JICA experts

5.9. Executing Bodies

- Ministry of Education – Government of the Republic of Zambia
- Japan International Cooperation Agency – Government of Japan

5.10. Duration

The duration of the Project will be from the date of first assignment of the JICA Expert to the end of 2015.

5.11. Administrative/Implementation Structure

5.11.1. National Education Support Team (NEST) - Administrative Committee

NEST Administrative Committee meetings will be held at least once a year and whenever it is deemed necessary. NEST Administrative Committee approves the annual work plan, reviews overall progress, conducts monitoring and evaluation of the project. The terms of reference and a list of proposed members of NEST Administrative Committees are shown in the Annex 12.

5.11.2. National Education Support Team (NEST) – Coordinating Sub-Committee

NEST Co-ordinating Sub-Committee is established in order to facilitate coordination of School Based CPD. NEST Co-ordinating Sub-Committee meetings will be held at least quarterly. The terms of reference and a list of proposed members of NEST Co-ordinating Sub-Committee are shown in the Annex 13.

5.11.3. National Core Technical Team

The National Core Technical Team will deal with the quality aspects of the implementation of the Project. The terms of reference and a list of proposed members of NEST Co-ordinating Sub-Committee are shown in the Annex 14.

5.11.4. Provincial Education Support Team (hereinafter referred to as “PEST”)

PESTs will be established in each province for provincial coordination of SBCPD. PEST will meet at least once a term. The terms of reference and a list of proposed members of PEST are shown in the Annex 15.

5.11.5. District Education Support Team (hereinafter referred to as “DEST”)

DESTs will be established in each district for coordination of SBCPD activities at the district level. DEST will meet at least once a term. The terms of reference and a list of proposed members of DEST are shown in the Annex 16.

5.11.6. Facilitators

Facilitators will be responsible for mentoring Lesson Study at cluster or school level. For the effective and successful implementation of SBCPD through Lesson Study, facilitators will be assigned whose functions are described in the Annex 17.

5.12. Cost-sharing Plan among Stakeholders

Both sides discussed the cost-sharing plan for local activities among stakeholders. Table 5.1 below shows the outline of the cost-sharing plan among stakeholders. Annex 18 shows the details of planned activities and its cost-sharing plan.

Table 5.1: Cost-sharing Plan of Local Expenses among Relevant Organisations

Organization		Budget item that each party will bear
Zambia	MoE	<ul style="list-style-type: none"> - Allowances for travel of local staff for project activities - Expenses for organizing national level meetings, workshops, and trainings - Expenses for activities of National Core Technical Team
	Province	<ul style="list-style-type: none"> - Funds for implementation of Lesson Study activities, including Stakeholders' and Facilitators' Workshops - Necessary funds for inter-provincial activities
	Colleges/	<ul style="list-style-type: none"> - Funds for implementation of Lesson Study activities, including

	Universities	Stakeholders' and Facilitators' Workshops
	District/ Basic School	- Funds for implementation of Lesson Study activities, including Stakeholders' and Facilitators' Workshops
	Secondary/ High Schools	- Funds for implementation of Lesson Study activities at schools, travel expenses for teachers to attend Stakeholders' and Facilitators' Workshops - Transport/travel allowances for facilitators for monitoring
Japan	JICA	Local expenses (printing reference materials, training venues, conducting surveys [research assistant], etc.) and other necessary allowances for JICA experts' activities (field trips, overseas travels, etc.)

6. Feasibility of the Project

In March 2011, an ex-ante evaluation of the Project was carried out. The results are presented below.

6.1. Relevance

It is considered that the relevance of the Project is very high based on the following factors:

➤ **Alignment with the education policy of the Government of Zambia**

This project is highly relevant to the policy objectives of GRZ. One of the prioritized objectives of the SNDP and the NIF III is to improve the quality of education at all levels, and more specifically, to improve students' learning achievement in science and mathematics. By enhancing teachers' teaching skills through SBCPD in all nine provinces with special emphasis on science and mathematics, the Project will contribute to the improvement of the quality of mathematics and science education at Basic and High School levels. This is well articulated in the education policy document *Educating our Future*.

➤ **Relevance of approach employed in the Project**

Since the Project introduces Lesson Study not as a new activity for schools but as one of the activities to be conducted within the existing SPRINT framework, this ensures the effective implementation of planned activities at schools.

Lesson Study is considered to be an effective approach to improve teachers' skills. The Joint Terminal Evaluation of the previous project, SMASTE CPD Project Phase II, found that the collaborative activities among teachers introduced through Lesson Study substantially contributed to the improvement of some aspects of teaching skills.

➤ **Comparative advantage of Japanese technical assistance**

Since Lesson Study is widely conducted among teachers in Japan, the Project can effectively utilize those resources and experiences. In addition, JICA has experience in supporting the improvement of teaching skills through in-service training in African countries. JICA also provides a forum that brings different countries together to share their experiences and knowledge through technical exchange programmes and regional conferences.

6.2. Effectiveness

The effectiveness of the Project design is expected to be high considering the following points:

➤ **Appropriateness of the Project Purpose**

The Project Purpose "Teaching skills are enhanced under School Based Continuing Professional Development" will be assessed through lesson observations, self-evaluation by teachers, and students' evaluation of the teaching. Since the improvement of skills in teaching could be demonstrated during lesson delivery, it is appropriate to measure the achievement of this project purpose by the set indicator (lesson observation). The Project can utilize the lesson observation tool that was developed during SMASTE Phase II, although it needs further modification and elaboration.

➤ **Effectiveness of SBCPD and Lesson Study to improve teaching skills**

In order to improve teaching skills and promote the professional development of teachers, it is necessary for them to practice lesson planning and demonstrations and reflect the result repeatedly. The SPRINT programme provides teachers with such an opportunity to discuss their challenges in teaching during TGMs. However, the discussion in the TGMs has not been necessarily focused on lesson planning and delivery, such as hands-on activities and so on. It is clear that the Lesson Study approach is an effective tool to provide teachers with an opportunity to refine their teaching skills through collaborative planning, demonstration

and reflective discussions. By introducing Lesson Study in all provinces, developing the capacity of resource persons and reference materials for Lesson Study, the Project will establish the critical foundation for CPD of teachers.

➤ **Important assumptions to achieve the Project Purpose**

Since Lesson Study, as one of the strategies of SBCPD, is the continuous process of improving teaching skills, it is crucial for each school to internalize and regularise this programme effectively with strong support from school administrators, maintained motivation of teachers and all related stakeholders, and adequate technical support from facilitators. These assumptions will influence the degree of achievement of the Project Purpose (enhancing teaching skills under SBCPD).

6.3. Efficiency

The efficiency of the Project design is high in terms of the following aspects:

➤ **Utilization of existing resources**

The inputs from the Zambian and Japanese sides are sufficient to conduct all planned activities. Particularly, the design of the Project is efficient in terms of utilizing local resource persons, who have been capacity built through SMASTE Phase I and Phase II, in introducing Lesson Study to new provinces. By utilizing local resources and the existing structures of MoE, the Project will cover all provinces at minimum cost.

➤ **Important assumption to achieve outputs**

The important assumption that needs to be fulfilled in order to achieve outputs is the consistency of trained resource persons. From the experiences of Phase I and Phase II, it was established that the majority of resource persons who were capacity built through the Project activities have remained in the same positions or relevant positions within the Education Sector. It is necessary to monitor whether the trained or capacity built resource persons are fully utilized and continue to contribute to the implementation of the Project.

6.4. Impact

➤ **Logical structure of the Project**

Since the teacher is one of the key factors to influence students' learning achievement, it is expected that the enhancement of teaching skills will have a positive impact on students' learning achievement. However, in order to have a positive impact on students' learning process and learning achievement, it is necessary that students' learning environment and learning time are adequately secured. Furthermore, it is crucial that head teachers ensure students' learning.

➤ **Anticipated hindrance to achieve overall goal and super goal**

Since a significant number of teachers who are currently teaching science and mathematics at high schools are under-qualified (qualified only to teach at Grade 8 and 9), it might be possible that these teachers would not fully exploit the benefit of Lesson Study and not produce the substantial impact on students' learning due to their limited knowledge of subject content. Although MoE has made an enormous effort to upgrade these under-qualified teachers to the degree level, this may hinder the achievement of the overall goal if this constraint continues.

6.5. Sustainability

The sustainability of the Project is expected to be high considering the following aspects:

➤ **Policy**

It is expected that the policy of prioritizing SBCPD will continue even after the completion of the Project, since MoE recognizes the importance and effectiveness of SBCPD.

➤ **Organizational Aspects**

Since the Project utilizes the existing framework and administrative structures of MoE, it is expected that related activities will be continued as regular activities of the responsible organizations (MoE, Province, District, Schools) even after the completion of the Project.

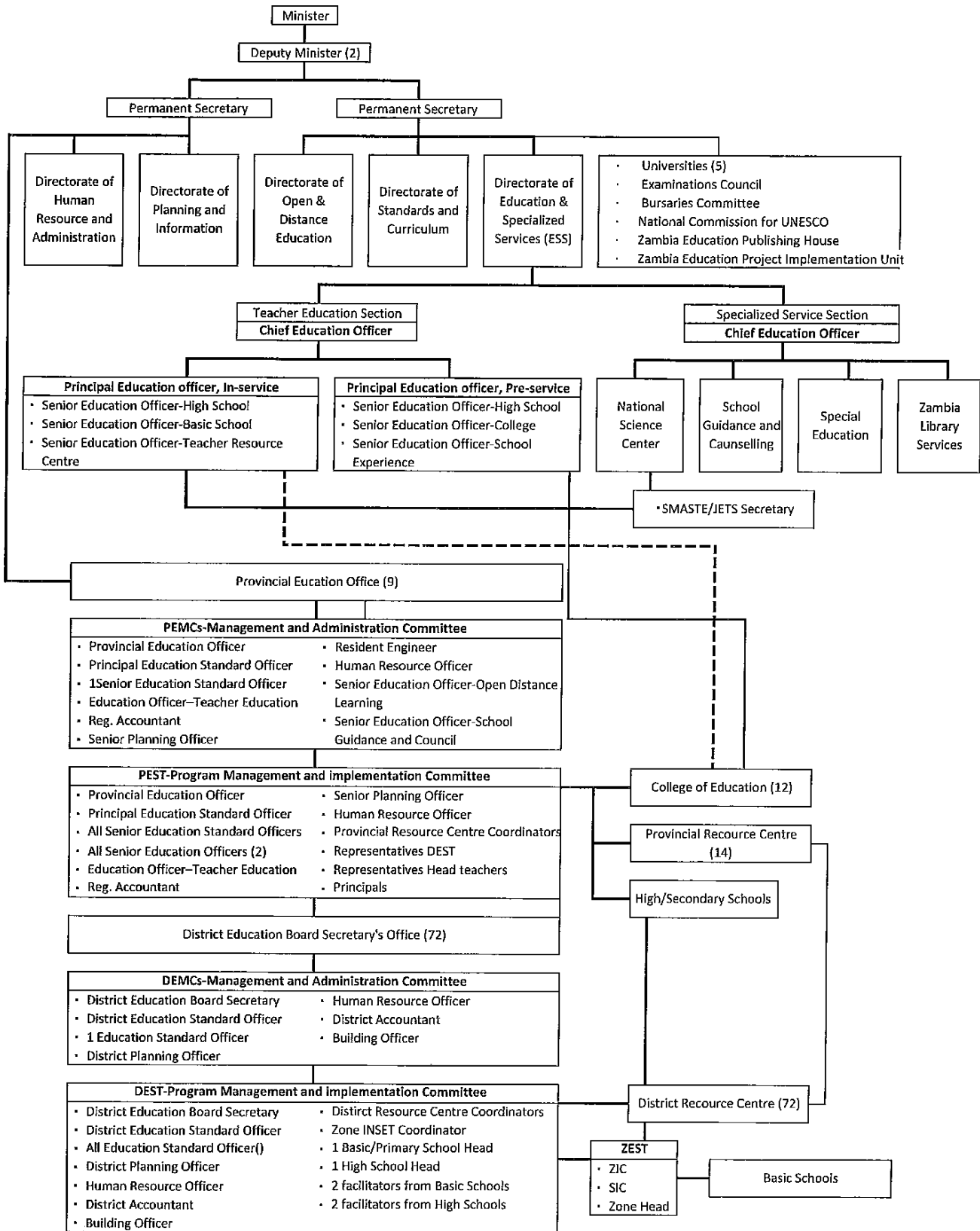
➤ **Technical Aspects**

The National Core Technical Team, which has recently been formed, is an important body to accumulate and disseminate the technical know how of improving Lesson Study and lessons. In order for this body to continuously function, it is necessary for MoE and provinces to financially and administratively support the members of this team to fulfil their mandates. However, it is necessary to prioritize SBCPD activities in the budgeting process at provincial and district levels in order to secure the necessary budget regularly. In this sense, it is crucial that PEST and DEST members, particularly PEO, PESO, DEBS and DESO, recognize the importance and significance of SBCPD.

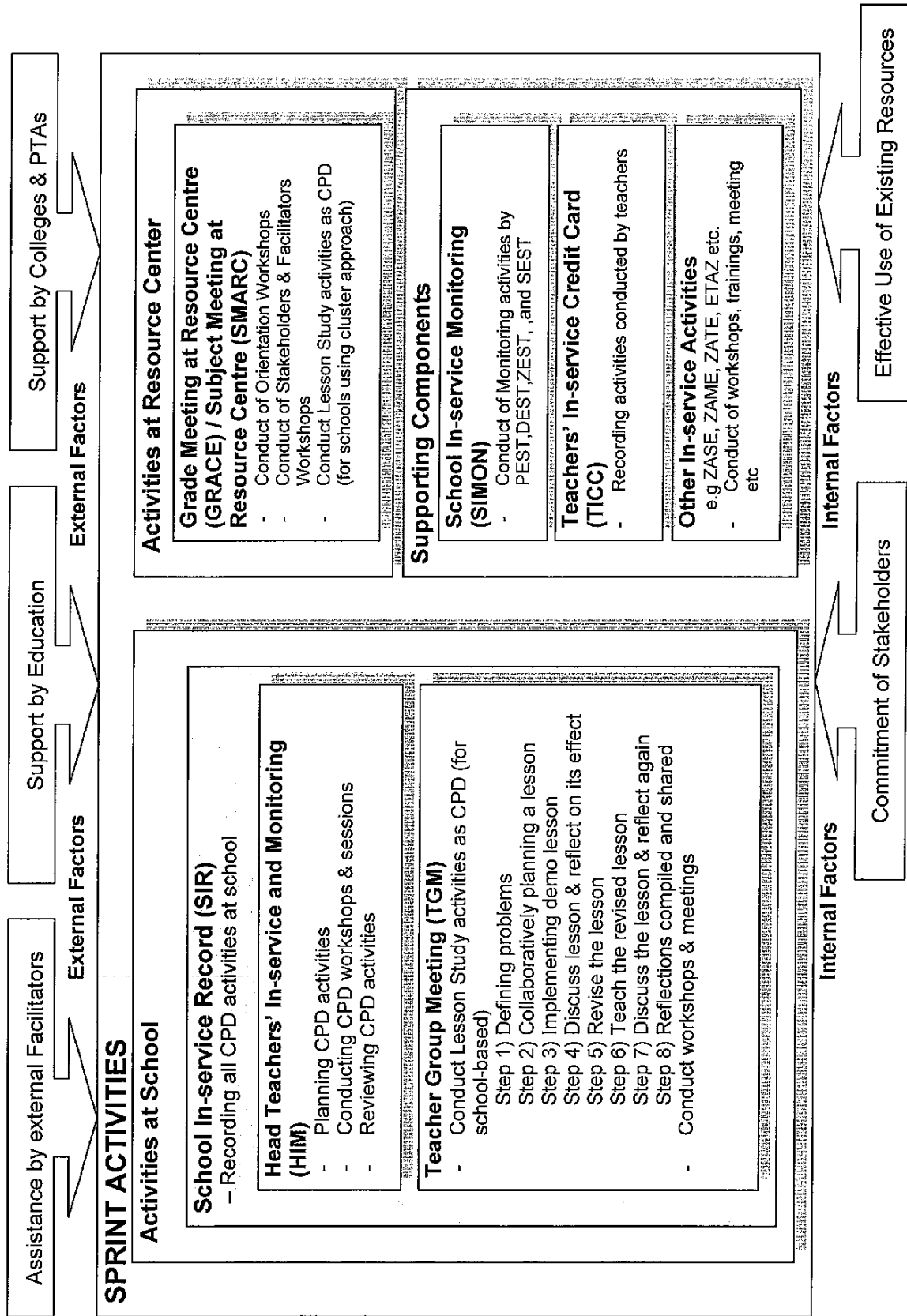
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ANNEX1: Ministry of Education
Organizational Structure
Teacher Education



Annex 2
Framework of Lesson Study through SBCPD



Annex 3: Major Cooperating Partners with a Presence in the Education Sector, 2010¹

Cooperating Partner	Signed MoU	Funding Modality	Activities
1. African Development Bank	✓	Currently none	Currently none
2. Denmark	✓	Pool; designated	Support to the <i>NIF</i>
3. European Commission	✓	General Budget Support through MoFNP; designated	Support to the <i>NIF</i>
4. International Labour Organisation ²	x	Project	Support to anti-child labour interventions in the Education Sector
5. Ireland	✓	Pool; designated; project	Support to the <i>NIF</i> ; support to teacher education
6. Japan	✓	Project	Support to the <i>NIF</i> ; support to strengthening of science and mathematics education
7. Netherlands	✓	Pool; designated; project	Support to the <i>NIF</i> ; support to gender; support to university education
8. Norway	✓	General Budget Support through MoFNP; designated; project	Support to the <i>NIF</i> ; support to community schools
9. Save the Children, Norway	x	Project	Support to community schools
10. SNV (Netherlands Development Organisation)	x	Project	Provision of advisory capacity development to tertiary education
11. United Kingdom (DfID)	✓	General Budget Support through MoFNP	Support to the <i>NIF</i>
12. United Nations System (UNICEF, WFP)	✓	Designated; project	Support to the <i>NIF</i> ; provision of teaching/learning materials; support to community schools; support to human resource development; support to the School Health and Nutrition programme
13. United States (USAID)	✓	Pool; designated; project	Support to the <i>NIF</i> ; support to anti-HIV and AIDS interventions; support to the School

¹ The MoU indicated in the matrix refers to the second MoU that was signed in 2008 between MoE and the CPs in the Education Sector.

² UNICEF is the Education Sector signatory representative of the United Nations agencies.

Cooperating Partner	Signed MoU	Funding Modality	Activities
			Health and Nutrition programme; support to IRI; provision of advisory capacity development to MoE
14. VVOB (Flemish Office for International Cooperation and Technical Assistance)	x	Project	Support to teacher education; support to ICT; support to distance education; support to community schools
15. World Bank/FTI	✓	Pool; project	Support to the <i>NIF</i> ; provision of advisory capacity development to MoE

Super Goal	Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Quality of science and mathematics education is improved.		<ul style="list-style-type: none"> i. Scores in national assessment (Grade 8 Numeracy, Grade 9 Science & Mathematics) ii. Examination pass rate in Grade 9 and Grade 12 iii. International comparative study (SACMEQ) 	<ul style="list-style-type: none"> i. National Assessment Survey Report published by Ministry of Education ii. Examination Results published by Zambia's Examination Council iii. SACMEQ result (if available) 	<ul style="list-style-type: none"> i. Learning environment is not adversely deteriorated. ii. Learning time of students is secured. iii. Head teachers ensure that students are learning.
Students' learning process in science and mathematics is improved.		<ul style="list-style-type: none"> i. Result of lesson observation (Science and Mathematics) (students' activities) ii. Students' perception towards their learning 	<ul style="list-style-type: none"> i. Baseline and Endline Survey Report ii. Results of lesson observations iii. Student's questionnaires 	<ul style="list-style-type: none"> i. Teachers continuously apply improved teaching skills to teaching. ii. Trained teachers remain in school system.
Teaching skills are enhanced under School-based Continuing Professional Development (SBCPD).		<ul style="list-style-type: none"> i. Result of lesson observation (Science and Mathematics) (demonstration of teaching skills) ii. Self-evaluation of teachers in teaching skills iii. Students' evaluation of teaching 	<ul style="list-style-type: none"> i. Baseline and Endline Survey Report ii. Results of lesson observations iii. Self-evaluation of teachers iv. Evaluation by Students 	
SBCPD is strengthened through Lesson Study.		<ul style="list-style-type: none"> i. % of schools implementing Lesson Study (target figure: 70% in all target grades) ii. Quality of Lesson Study verified through a prepared check list 	<ul style="list-style-type: none"> i. Progress reports submitted by PEST ii. Baseline and Endline Survey Report 	<ul style="list-style-type: none"> i. SBCPD is continuously implemented. ii. The motivation of teachers and all related stakeholders in participating SBCPD is maintained. iii. Head teachers support SBCPD. iv. Facilitators continue to offer technical support to lesson study not only in their own schools but also in assigned schools.
Capacity of resource persons for implementing SBOPD is enhanced.		<ul style="list-style-type: none"> i. Number of resource persons (stakeholders and facilitators) trained in lesson study (target figure will be determined later) ii. Self-evaluation of resource persons on their performance iii. Evaluation of resource persons by beneficiaries 	<ul style="list-style-type: none"> i. Progress reports submitted by PEST (List of trained facilitators and stakeholders) ii. Self-evaluation of resource persons iii. Evaluation by beneficiaries 	
Reference materials for implementing SBOPD are developed.		<ul style="list-style-type: none"> i. Availability of developed reference materials in schools (Skills books, Journals, Guidelines, etc.) ii. Users' (teachers) evaluation on the developed reference materials 	<ul style="list-style-type: none"> i. Reference Materials ii. Result of users' evaluation 	
Preparation and Orientation Stage		<ul style="list-style-type: none"> i. Human resource ii. NEST, National Core Technical Team, PEST and DEST members in all nine (9) provinces iii. College/University lecturers iv. NSC staff v. Trained resource persons (facilitators and stakeholders) through SMASTE Phase I and II vi. Materials vii. Offices and other buildings used for activities under the project viii. Office Equipment ix. Vehicles and fuel x. Teaching/learning materials used for Lesson Study xi. Finances xii. Allowances for travel of local staff for project activities 		<ul style="list-style-type: none"> - There is consistency of core officers.
1-1 Prepare materials for induction WS				
1-2 Conduct induction WS for PESTs and DESTs on Lesson Study				
1-3 Identify facilitators				
1-4 Orient the PEST task team in conducting Baseline Survey				
1-5 Train Facilitators/DESTs in conducting Baseline Survey				
1-6 Conduct necessary surveys for project evaluation				
1-7 Mentor six provinces by National Core Technical Team				
1-8 Plan Stakeholders workshop				
1-9 Conduct Stakeholders workshop				
1-10 Implement Lesson Study in schools				
1-11 Monitor implementation of Lesson Study				
2-1 Conduct Facilitators WS				
2-2 Conduct Stakeholders WS				
2-3 Provide technical support to Lesson Study activities at school level				
2-4 Conduct International Technical Workshop				
2-5 Conduct International Technical Exchange				
2-6 Conduct local technical exchange visits between provinces				
3-1 Revise the Teaching Skills book				
3-2 Revise the Management skills book				
3-3 Produce of Lesson Study journals				
3-4 Print Teaching, management skills books and journals				
3-5 Distribute Teaching, management skills books and journals				
3-6 Organise a contest on good practices of Lesson Study for schools				
3-7 Document all good practices in journals				
Input from JICA				
Human resource				
Three (3) long term experts				
Chief advisor / Management of Lesson Study, Science Education				
Management of Lesson Study, Mathematics Education				
Coordination and Monitoring of Lesson Study Activities				
Short term experts when need arises in relation to the project activities.				
Local technical advisor				
Administration and Management of SBOPD				
Training				
Materials				
Office equipment (computers, printers, LCD projectors, video cameras, etc.) used for project activities				
Vehicles used for monitoring the project activities				
Reference materials for teaching and learning science and mathematics				
Finance				
Local expenses and other necessary allowances for JICA experts				
Input from Zambian Government				
Human resource				
NEST, National Core Technical Team, PEST and DEST members in all nine (9) provinces				
College/University lecturers				
NSC staff				
Trained resource persons (facilitators and stakeholders) through SMASTE Phase I and II				
Materials				
Offices and other buildings used for activities under the project				
Office Equipment				
Vehicles and fuel				
Teaching/learning materials used for Lesson Study				
Finances				
Allowances for travel of local staff for project activities				
Output from JICA				
Human resource				
Three (3) long term experts				
Chief advisor / Management of Lesson Study, Science Education				
Management of Lesson Study, Mathematics Education				
Coordination and Monitoring of Lesson Study Activities				
Short term experts when need arises in relation to the project activities.				
Local technical advisor				
Administration and Management of SBOPD				
Training				
Materials				
Office equipment (computers, printers, LCD projectors, video cameras, etc.) used for project activities				
Vehicles used for monitoring the project activities				
Reference materials for teaching and learning science and mathematics				
Finance				
Local expenses and other necessary allowances for JICA experts				
Preparations				
Zambian Government policy for strengthening and implementing CPD activities of teachers does not change adversely.				
There will be political will				
Budget allocation at national, provincial and district levels is adequate and timely for SBOPD activities.				

Annex 5: Plan of Operation

Year	2014												2015												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Period of Project Report	Baseline and Endline Survey																								
	Mission																								
Major Implementations	1. Long term report: Child Assessment/Management of Lesson Study, Science Education																								
	2. Long term report: Implementation of Lesson Study, Science Education																								
	3. Long term report: Implementation and Monitoring of Lesson Study Activities																								
	4. Local report: SBCEP Implementation/ Lesson Study Management																								
	5. Short term report: Lesson Evaluation (Science/Math)																								
Training in Outside of Country																									
OUTPUT 1	1-1	Prepare materials for induction workshop																							
	1-2	Conduct induction WS for PESTs and DESTs on Lesson Study																							
	1-3	Identify facilitators																							
	1-4	Orient the PEST task team in conducting Baseline Survey																							
	1-5	Train facilitators/DESTs in conducting Baseline survey																							
	1-6	Conduct necessary surveys for project evaluation																							
	1-7	Mentor six provinces by National Core Technical Team																							
	1-8	Plan stakeholders' workshop																							
	1-9	Conduct stakeholders' workshop																							
	1-10	Implement Lesson Study in schools																							
	1-11	Monitor implementation of Lesson Study																							
	2-1	Conduct workshops for resource persons																							
	2-2	Conduct Stakeholders' workshops																							
	2-3	Provide technical support to Lesson Study activities at school level																							
	2-4	Conduct International Technical Workshop																							
	2-5	Conduct International Technical Exchange																							
	2-6	Conduct local technical exchange visits between provinces																							
	3-1	Revise the Teaching Skills book																							
	3-2	Revise the Management skills book																							
	3-3	Produce Lesson Study journals																							
	3-4	Print teaching, management skills books and journals																							
	3-5	Distribute Teaching, management skills books and journals																							
	3-6	Organize a contest on good practices of Lesson Study for schools																							
	3-7	Document all good practices in journals																							
OUTPUT 2		2. Capacity of resource persons for implementing SBCEP is enhanced.																							
OUTPUT 3		3. Reference materials for teachers and managers (Skills books, journals, Guidelines) are developed																							

Annex 6: List of Target Districts

Province	Total Districts	Target Districts	Name of the Target Districts
Central	6	6	Kabwe, Chibombo, Kapiri-Mposhi, Serenje, Mkushi, Mumbwa
Copperbelt	10	10	Chililabombwe, Chingola, Kalulushi, Kitwe, Luanshya, Mufulira, Ndola, Lufwanyama, Masaiti, Mpongwe
Eastern	8	5	Chipata, Chadiza, Petauke, Lundazi, Chama
Luapula	7	5	Mansa, Mwense, Kawambwa, Nchelenge, Samfya
Lusaka	4	4	Lusaka, Kafue, Chongwe, Luangwa
North-western	8	8	Kabompo, Kasempa, Mwinilunga, Solwezi, Chavuma, Mufumbwe, Zambezi, Ikelenge
Northern	13	8	Kasama, Mungwi, Luwingu, Nakonde, Chinsali, Mpika, Isoka, Mporokoso
Southern	11	5	Livingstone, Kalomo, Choma, Namwala, Itezhi-tezhi
Western	7	3	Mongu, Senanga, Kaoma
Total	74	54	

Annex 7: Number of Target Teachers (Beneficiaries) by Province

Province	Basic Schools			Secondary Schools			Target Teachers		
	G1-7	S & M	Total	G1-7	S & M	Total	G1-7	S & M	Total
Central	3,855	1,468	5,323	139	596	735	3,994	2,064	6,058
Copperbelt	5,357	2,235	7,592	253	1,450	1,703	5,610	3,685	9,295
Eastern	0	855	855	0	291	291	0	1,146	1,146
Luapula	0	647	647	0	134	134	0	781	781
Lusaka	0	1,585	1,585	0	476	476	0	2,061	2,061
North-western	2,899	990	3,889	75	340	415	2,974	1,330	4,304
Northern	0	997	997	0	330	330	0	1,327	1,327
Southern	0	1,215	1,215	0	608	608	0	1,823	1,823
Western	0	762	762	0	171	171	0	933	933
National Total	22,865			4,863			12,578	15,150	27,728

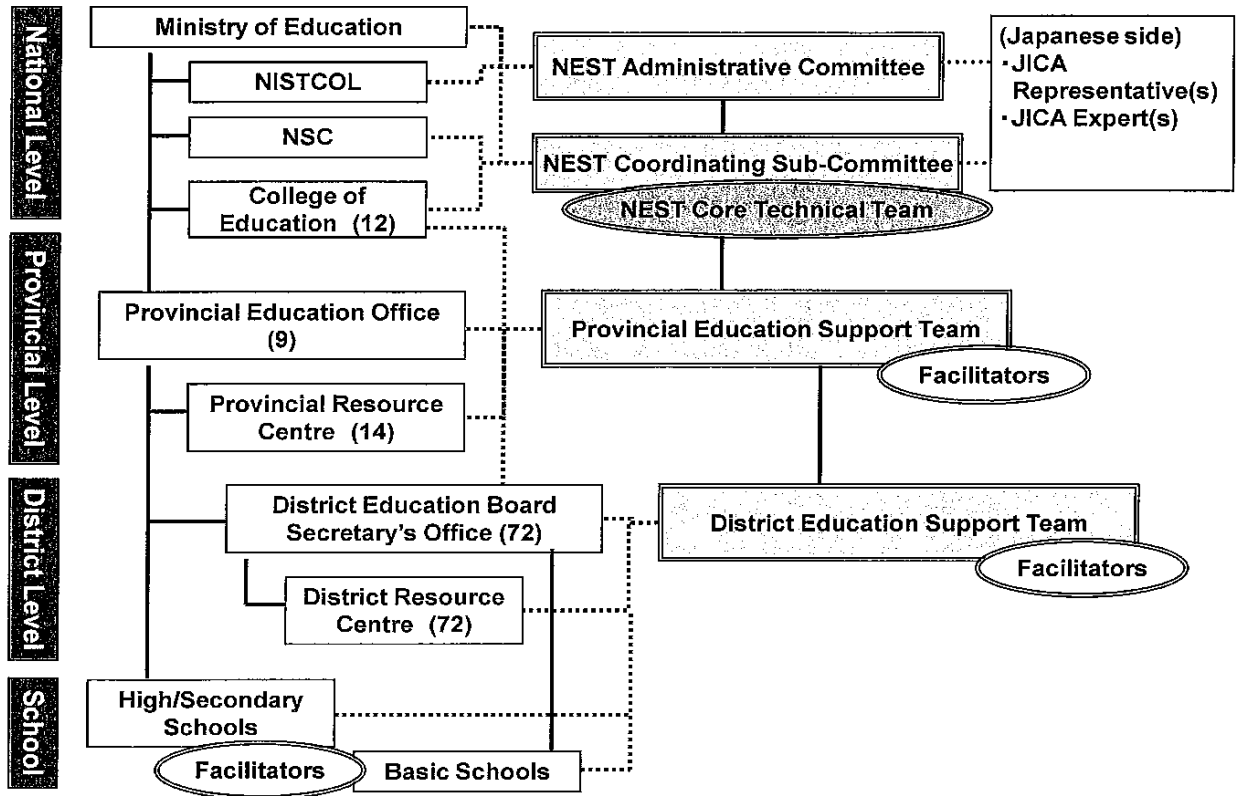
Source: ED*Assist Zambia 2009, Version 1.0.0 – Preliminary Data for Planning – July 6, 2009, MoE

* Total numbers of teachers in GRZ and Grant Aided schools from Grade 1 to Grade 12 is 59,914.

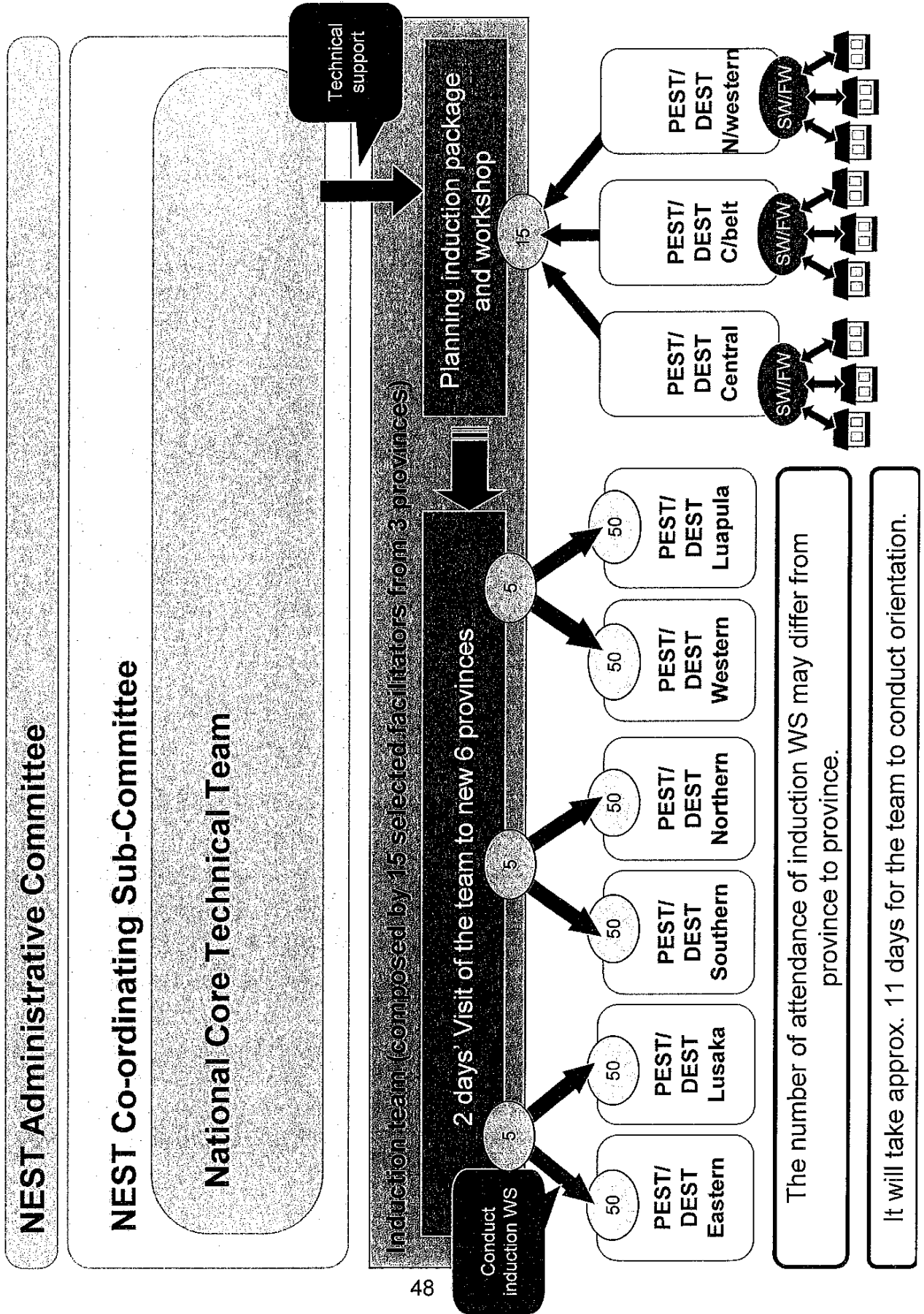
Categorisation of the schools

Category	Grades offered by schools
Basic School	Grade 1-4 (Lower Basic) Grade 1-7 (Middle Basic) Grade 1-9 (Upper Basic)
Secondary School	Grade 1-12 (Mixed) Grade 8-12 (Full) Grade 10-12 (High)

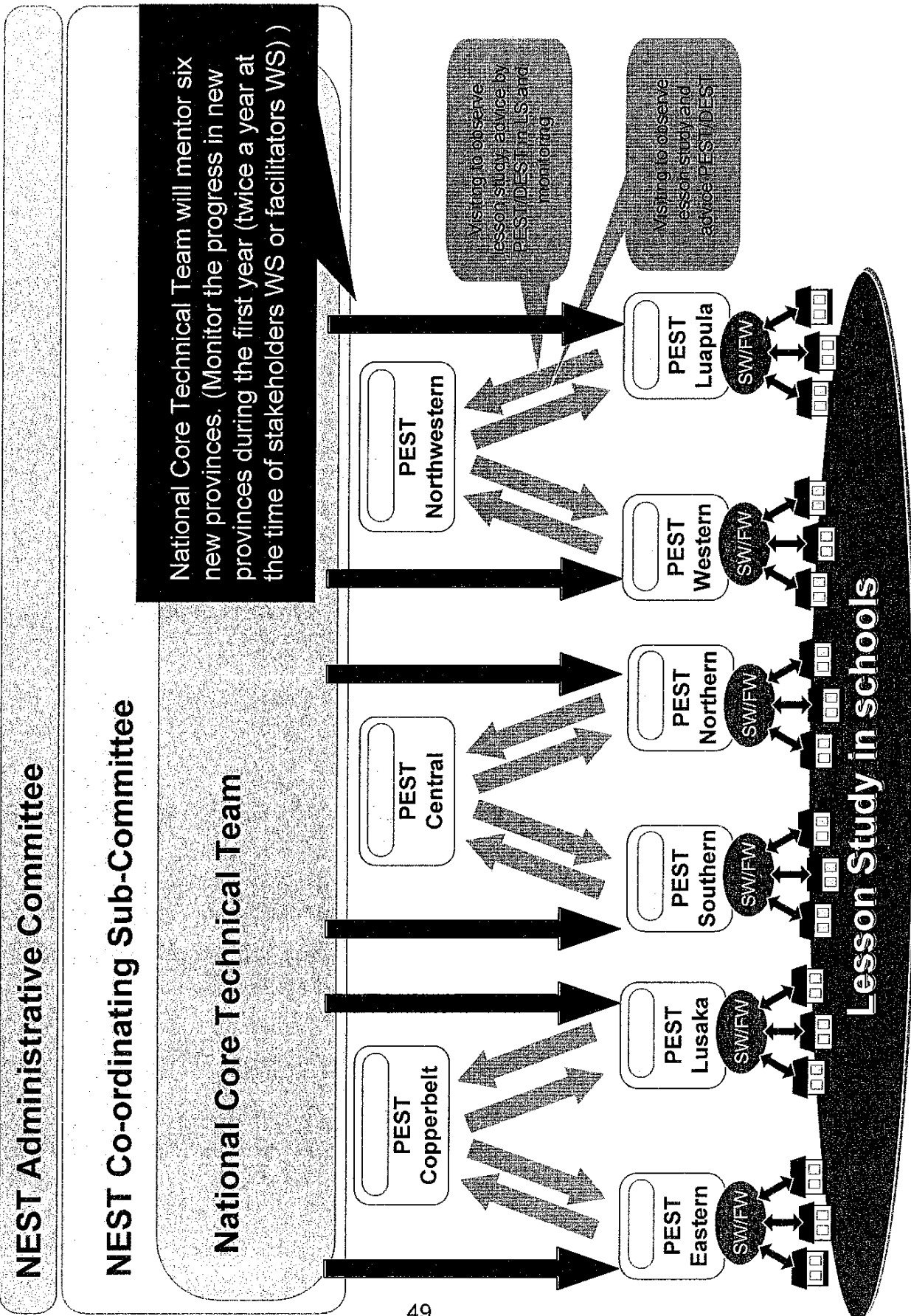
Annex 8: Administrative Structure



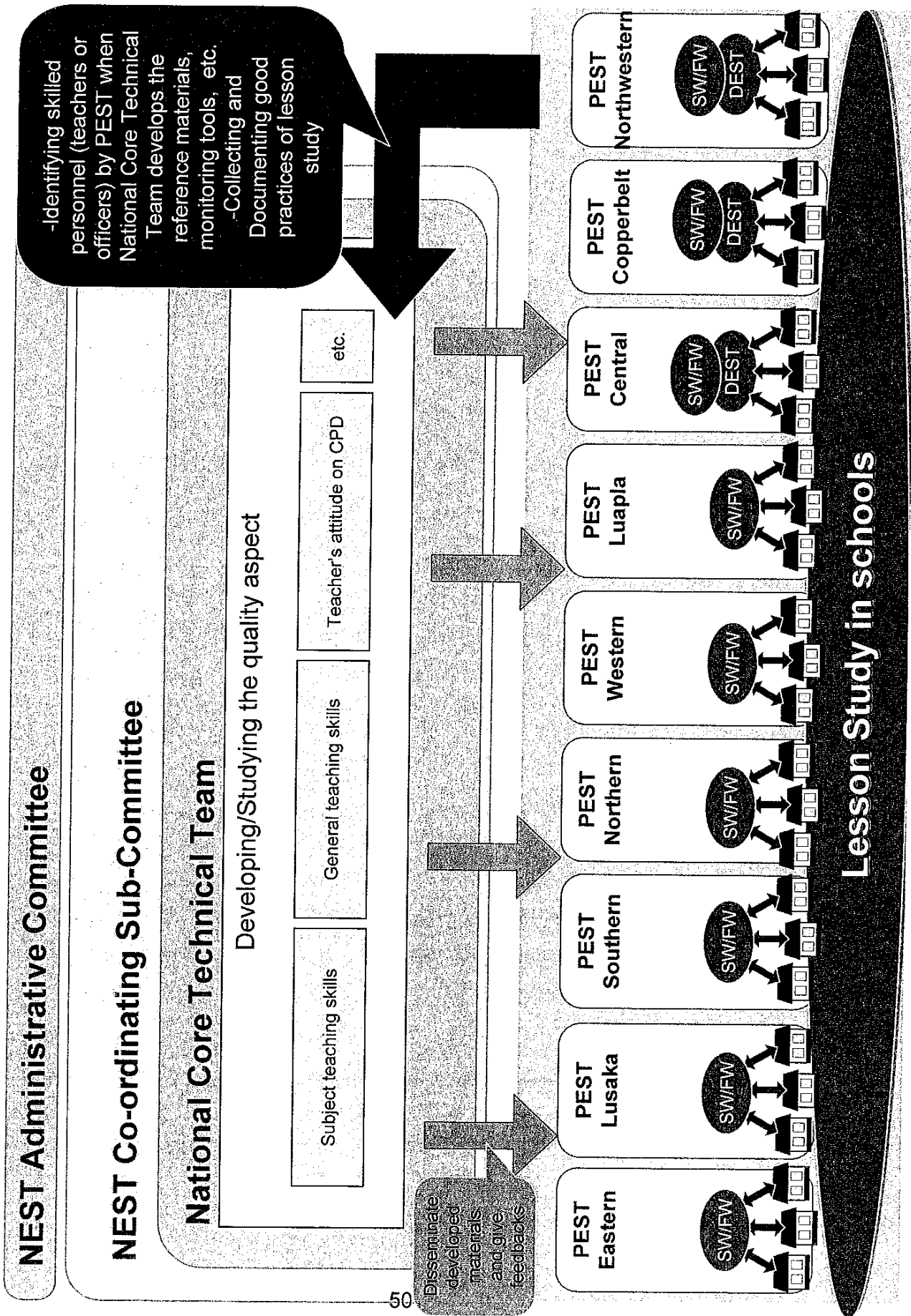
Annex 9: Flow of activities at induction stage (initial activities)



Annex 10: Flow of activities at induction stage (Follow-up activities to initial induction)



Annex 11: Flow of activities at implementation stage



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Annex 12: ToR and Composition of National Education Support Team (NEST) Administrative Committee

The NEST Administrative Committee shall meet at least once a year.

1. Functions

- a) To approve the Annual Work plan and Budget of the Project
- b) To review the overall progress and annual expenditure of the Project
- c) To review and exchange views on major issues related to the Project

2. Chairperson: Permanent Secretary, Education Services, Standards and Curriculum

3. Membership

Zambian Side

- Director of Planning and Information
- Director of Education and Specialized Services
- Director of Standards and Curriculum
- Director of Human Resources and Administration
- All Provincial Education Officers
- Chief Education Officer, Teacher Education
- Two representatives of Universities
- Teachers' Union representatives
- Representative(s) of Grant Aided Institutions

Japanese Side

- JICA Resident Representative
- JICA Assistant Resident Representative
- JICA Local Consultant for Education Sector
- JICA Long-term Experts
- JICA Local Technical Advisor for the Project

Secretariat: In-service Unit

Note:

- 1) NEST is an existing structure in MoE at national level that is composed of the representatives of directorates. NEST will be in charge of coordinating all existing projects / programme under the SPRINT framework – CPD Programme.
- 2) Officials of the Embassy of Japan may attend the NEST Administrative Committee meetings as observers.
- 3) Other persons who are invited by the Chairperson may attend the NEST Administrative Committee meetings.

Annex 13: ToR and Composition of National Education Support Team (NEST) Coordinating Sub-Committee

The NEST Coordinating Sub-Committee shall meet at least quarterly.

1. Functions

- a) To undertake overall coordination and supervision of the programme following the national policy of In-service Training and CPD
- b) To plan, review and revise the master plan for School Based CPD
- c) To facilitate and support workshops under the programme held at provincial, district and zonal level
- d) To monitor activities under the programme in coordination with PESTs and DESTs

2. Chairperson: Chief Education Officer, Teacher Education, Directorate of ESS

3. Membership

Zambian Side

Headquarters

- Chief Curriculum Specialist, Curriculum Development Centre, Directorate of Standards and Curriculum
- Chief Education Standards Officer, Directorate of Standards and Curriculum
- Chief Planning Officer, Directorate of Planning and Information
- Chief Human Resource Development Officer, Directorate of HRA
- Principal Education Officer, INSET, Directorate of ESS
- Principal Education Officer, PRESET, Directorate of ESS
- Principal Education Officer, National Science Centre
- Senior Education Officer, Basic Schools, Directorate of ESS
- Senior Education Officer, High Schools, Directorate of ESS
- Senior Education Officer, Resource Centres
- Colleges/Universities representatives (2)
- Head, Advisory Unit for Colleges of Education, UNZA
- Deputy JETS/STEPS Secretary

Provinces

- Principal Education Standards Officer
- Senior Education Standards Officer, Natural Science/Mathematics
- Education Officer, Teacher Education

Japanese Side

- JICA personnel including Long-term Experts

Note: PEST and DEST are existing structures in MoE at provincial and district level that are composed of the representatives of officers at Provincial and District level. The terms of reference for PEST and DEST are stated in the Annexes VI-4 and VI-5.

Annex 14: ToR and Composition of National Core Technical Team

The National Core Technical Team will deal with the quality aspects of the implementation of the Project, whose terms of reference are as follows:

1. Functions

- a) To identify and pool human resource and categorize them in areas of specialization for the purpose of mentoring six provinces
- b) To develop curricula/ content for Lesson Study
- c) To develop training packages/manuals for facilitators/institutions
- d) To review and develop relevant SBCPD materials / Lesson Study materials (skills books, guidelines, journals, etc)
- e) To review and develop monitoring instruments
- f) To monitor SBCPD / Lesson Study activities at all levels
- g) To initiate research to assess impact and other identified SBCPD / Lesson Study issues
- h) To initiate establishment of databases that will be periodically updated on SBCPD / Lesson Study activities
- i) To encourage establishment of Provincial Core Technical Teams that will feed into the National Core Technical Team and be accountable to PEST

2. Chairperson: Principal Education Officer, Teacher Education – In-service, ESS

3. Membership

- Dominic Nyambe
- Samson Njapau
- Allan Lingambe
- Charles A. Chisanga
- Lisulo Moosho
- Viston Machiko
- Grace Chilekwa
- Catherine S. Kunda
- Roger Kapyololo
- Hector Swazi

Note: JICA Expert(s) and JICA Local Technical Advisor will provide technical advice to the team

Annex 15: ToR and Composition of Provincial Education Support Team

The Provincial Education Support Team shall meet at least once a term.

1. Functions

- a) Overall coordination of the programme
- b) Planning of activities under the programme
- c) Preparing budget and undertaking procurement of workshop materials
- d) Issuing and filing official communication
- e) Recording activities and producing minutes of meetings
- f) Conducting baseline and other surveys on the programme
- g) Encoding data on the implementation and surveys
- h) Monitoring activities

2. Chairperson: Provincial Education Officer

3. Membership

- Provincial Education Standards Officers
- All Senior Education Standards Officers
- The Principals – Colleges of Education
- Senior Planning Officers
- Education Officer, Teacher Education
- Subject Coordinators for Basic and High Schools
- Representative of District Education Board Secretaries

Annex 16: ToR and Composition of District Education Support Team (DEST)

The District Education Support Team shall meet at least once a term.

1. Functions

- a) Planning of activities under the programme
- b) Preparing budget and undertaking procurement of workshop materials
- c) Issuing and filing official communication
- d) Recording activities and producing minutes of meetings
- e) Conducting baseline and other surveys on the programme
- f) Encoding data on the implementation and surveys
- g) Monitoring activities

2. Chairperson: District Education Board Secretary

3. Membership

- District Education Standards Officers
- All Education Standards Officers
- District Planning Officers
- District Resource Centre Coordinator
- 1 Head Teacher from High Schools
- 1 Head Teacher from Basic Schools
- 2 Facilitators from High Schools
- 2 Facilitators from Basic Schools
- Zone In-service Coordinator(s)
- Representative(s) of Heads' Association(s)

Annex 17: ToR of the Facilitators

Facilitators are District Resource Centre Coordinators (DRCCs), classroom teachers, lecturers and Zone In-service Coordinators (ZICs)/School In-service Coordinators (SICs), who have facilitation skills or have potential to obtain facilitation skills for Lesson Study activities at school or cluster level. The expected number of facilitators to be appointed is 40 (30 in science and 10 in mathematics) per district.

1. Functions

- a) Assigning/mentoring teachers in the planning of SBSPD activities in the schools assigned
- b) Offering technical support to teacher groups on lesson plans before lesson demonstrations are conducted
- c) Effectively participating in the lesson planning stage
- d) Observing demonstration lessons
- e) Facilitating discussions after lesson demonstrations
- f) Offering pedagogical and content support to teachers
- g) Preparing and submitting facilitation reports
- h) Participating in stakeholders' and facilitators' workshops

Annex 18: Planned Activities and the Cost-sharing Plan - Cost-sharing of Local Expenses among Stakeholders (Details – orientation stage)

Activities	MoE	Province (mentors)	Province (new)	District (new)
Preparation of Induction WS	Travel expenses for core team members to attend preparation			
Invitation of new PEST members to mentor province to attend stakeholder WS		Expenses for organizing WS at provincial level	Travel expenses for PEST members to visit mentor province	
Induction WS at each province (core team visits new provinces to conduct induction WS)	1) Travel expenses for core team members 2) Printing WS materials		Expenses for organizing WS (venue, printing materials, refreshment, etc.)	Travel expenses to attend WS
Training for Facilitators	Travel expenses for core team members (trainers)		Travel expenses for selected facilitators	
Conducting baseline survey at each province	Compiling final report	Travel expenses for core team members to visit new provinces conducting baseline survey	Travel expenses to visit schools for lesson observations and interviews	

Cost-sharing of Local Expenses among Stakeholders (Details – Implementation stage – New Provinces)

Activities	MoE	Province (mentors)	Province (new)	District (new)	Schools
Conducting Stakeholder WS at provincial level	Travel expenses for core team members to attend WS		Expenses for organizing WS (venue, printing materials, refreshment, etc.)	Travel expenses to attend WS	Travel expenses to attend WS
Conducting Facilitator WS at provincial level	Travel expenses for core team members to attend WS		Expenses for organizing WS (venue, printing materials, refreshment, etc.)	Travel expenses to attend WS	Travel expenses to attend WS
Conduct Lesson Study activities at schools					1) Expenses for preparing teaching and learning materials 2) Printing lesson observation sheets
Monitoring schools			Transport (or expenses) for monitoring (PEST)	Transport (or expenses) for monitoring (DEST)	Transport (or expenses) for monitoring (facilitators and ZICs)
National level meetings (NEST)	Expenses for organizing meeting		Travel expenses to attend meetings		

Cost-sharing of Local Expenses among Stakeholders (Details – Implementation stage – Mentor Provinces)

Activities	MoE	Province	District	Schools
Conducting Stakeholder WS at District level		Travel expenses for PEST members to attend WS at district level	Expenses for organizing WS (venue, printing materials, refreshment, etc.)	Travel expenses to attend WS
Conducting Facilitator WS at District level		Travel expenses for PEST members to attend WS at district level	Expenses for organizing WS (venue, printing materials, refreshment, etc.)	Travel expenses to attend WS (facilitators)
Conduct Lesson Study activities at schools				1) Expenses for preparing teaching and learning materials 2) Printing lesson observation sheets
Monitoring schools	Transport (or expenses) for monitoring (NEST)	Transport (or expenses) for monitoring (PEST)	Transport (or expenses) for monitoring (DEST)	Transport (or expenses) for monitoring (facilitators and ZICs)
National level meetings (NEST)	Expenses for organizing meeting	Travel expenses to attend meetings		