

ザンビア共和国  
授業実践能力強化プロジェクト  
詳細計画策定調査  
**現地報告書**

2011年3月

独立行政法人国際協力機構

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ザンビア「校内研修を通じた教師の技能向上プロジェクト」(仮)  
詳細計画策定調査報告書  
(現地調査結果報告)

## 1. 要請の背景

ザンビア政府は、1996年に教育政策「Educating Our Future」を発表し、教育の地方分権化、アクセスの平準化、教育の質の向上に取り組んできた。なかでも、教師の職能開発に注力し、2000年から現職教員研修プログラム（School Program of In-Service for the Term：SPRINT）を実施している。これらの取り組みにより、初等教育純就学率が95%（2008年）となるなど教育の量的側面は飛躍的に改善された。しかしながら、教育の質的側面では教員採用・配置の不均衡や教材、教室数の不足などの問題を抱えており、修了率は7年生で69%、9年生で52.7%と依然として低い。生徒の学習達成度も低く、東部・南部アフリカ諸国を対象とした学力調査（小学校6年生の算数、読解力 2007年）では最下位グループである。

第6次国家開発計画（2011-2015）では、「持続可能な国家開発のための人的能力を強化するために質の高い教育訓練に対する公平なアクセスを拡大すること」を目標とし、中等教育及び高等教育へのアクセス拡大と同時にすべての段階の教育の質の向上に重点的に取り組むことをめざしている。教育の質の向上のための戦略の一つとして基礎教育及び中等教育の教員の継続的な職能開発（Continuing Professional Development：CPD）の促進を掲げている。

JICAは、教師教育のうち特にCPDの実施促進を目的として、ボランティア（理数科）派遣や、理数科教育強化のための教員協会（Strengthening of Mathematics, Science and Technology Education：SMASTE）に対する支援を実施してきた。さらに包括的な協力を行うため、2005年より2年間、中央州の8～12年生の理科教員を対象として「SMASTE 理科研究授業支援プロジェクト」（フェーズ1）を実施、2008年2月から3年間、中央州全教員、コッパーベルト州、北西部州の8～12年生の理科教員を対象として「SMASTE 授業研究支援プロジェクトフェーズ2」を実施した。これらの協力を通じて、既存の教員研修制度であるSPRINTの具体的な活動として授業研究の3州への導入及び普及モデルの構築、授業研究実施ガイドラインや教授技術スキルブックなどの開発、授業研究を主導できる人材の育成等の成果を上げた。ザンビア政府は、プロジェクトの実施と並行して授業研究を核とした校内研修（School-Based Continuing Professional Development：SBCPD）モデルを全国に普及するための実施戦略（マスタープラン）を自ら策定し、この実施に対する支援を日本政府に対し要請した。

## 2. 調査の目的・方針

本調査は、前述のザンビア政府からの要請を受け、具体的な協力内容についてザンビア政府と協議することを目的として派遣された。調査方針は以下のとおり。

- (1) フェーズ2終了時評価調査の結果も踏まえつつ、本事業の妥当性を確認する。

- (2) 事前に提出のあったプロジェクトデザイン案を基に、プロジェクトデザイン（PDM、実施体制、活動計画、双方の負担事項等）に関し、ザンビア側関係者と協議し、合意形成を図る。
- (3) プロジェクト開始までに行う作業及びそのスケジュールを確認する。
- (4) 日本側、ザンビア側双方で同意した事項を M/M として取りまとめ、署名交換をする。（プロジェクトドキュメント案も M/M に添付予定）
- (5) 事前評価表案の作成を行う。
- (6) マルチバイ連携、PRS 無償も含むプログラム案に関する協議を行う。（JICA 事務所、大使館。ザンビア側との協議は行わない）

### 3. 調査結果概要

調査団は、調査対処方針に沿ってザンビア側関係機関との協議、現場視察等を行い、プロジェクトの妥当性、計画内容、実施体制等を確認した。協議結果を M/M に取りまとめ、2011 年 3 月 15 日にザンビア教育省次官（教育サービス、カリキュラム担当）との間で署名交換を行った。調査結果概要は以下のとおり。

#### (1) 計画内容の確認

##### 1) 概要

- ① 案件名称：「校内研修を通じた教師の技能向上プロジェクト」（仮）  
 “Strengthening Teachers’ Performance and Skills through School-Based Continuing Professional Development (STEPS) Project”
- ② スーパーゴール：理数科教育の質の向上
- ③ 上位目標：生徒の学習過程（理数科）の改善
- ④ プロジェクト目標：校内研修を通じた教師の技能向上
- ⑤ 成果：1. 授業研究を通じた校内研修制度の強化  
 2. 校内研修実施のために必要な中核人材の育成  
 3. 校内研修実施のために必要な参考資料の開発

##### 2) 対象

- ① 対象地域：全 9 州（74 郡のうち選定された 54 郡）
- ② 対象学校：公立学校（Government Schools 及び Grant-aided Schools）
- ③ 対象学年・科目：1～7 年生理数科（中央州、コッパーベルト州、北西部州）  
 8～12 年生の理数科（全州）
- ④ 裨益者：基礎教育学校（1～7 年生）教員（中央州、コッパーベルト州、北西部州）  
 対象地域の理数科教員（8～12 年生）（全州）

### 3) 実施体制

#### ① 実施責任機関：教育省

プロジェクトディレクター：計画局長

プロジェクトマネージャー：教師教育局長及び全州教育事務所長

#### ② 実施体制：教育省の既存の仕組み（以下）を活用してプロジェクト活動を実施する。

中央（National Education Support Team）

州（Provincial Education Support Team）

郡（District Education Support Team）

上記に加え、校内研修に対する技術的支援を行うグループとして、教育省・各州から選抜された優れた行政官・視学官により構成される「中央技術チーム（National Core Technical Team）」を編成し、全州に対する技術支援を行う体制を整える。

### 4) 普及戦略

#### ① 導入：先行州の経験を最大限活用し短期間での普及

1. 9州を3州ごとのグループに分け、先行3州が他の新規2州に対するサポートを行う体制を整備。新規州に対する導入研修は、先行3州から選抜されたメンバーが担当。

2. 導入研修後約1年程度は、先行3州に加えて、中央技術チームが定期的に新規州を訪問し、実施状況のモニタリング及び技術支援を行う。

3. 先行3州の中核人材及び経験を有効活用することにより、短期間での普及展開を行う。

#### ② 実施：中央技術チームによる継続的な技術支援の提供

1. 各州での活動が軌道に乗った後は、中央技術チームにより各州での経験（Good Practices）の収集・分析を行い、その結果を全州にフィードバックすることにより、各地での校内研修の継続・質の向上を図っていく。この仕組みを永続的なものとしていくことにより、校内研修の持続発展を促進する。

### 5) 投入

#### ① ザンビア側

1. 人材（中央、州、郡教育支援チーム、教育大学教官、国立科学センタースタッフ、フェーズ1・2を通じて育成された中核人材）

2. 活動場所、資機材の提供（事務所、事務機器、車両及び燃料、校内研修用教材）

3. 活動費（ワークショップを含む校内研修実施に必要な経費、ザンビア側人員の出張旅費）

#### ② 日本側

1. 長期専門家3名、短期専門家（必要に応じ）、ローカルコンサルタント1名

2. 本邦研修、第三国研修、技術交換等

3. 資機材（研修用機材、車両等）

4. 在外事業強化費（研修用参考資料・スキルブック印刷、専門家活動に要する経費等）

6) プロジェクト期間 (予定)

2011年7月または8月～2015年12月

(2) プロジェクト妥当性の確認

本プロジェクトは以下の観点から、実施する妥当性は高いと判断される。

- 1) 政策との整合性：教育（特に理数科教育）の質の向上は、第6次国家開発計画や教育セクター開発計画等、ザンビア政府の上位計画の目標の一つとして掲げられており、なかでも教師の継続的な職能開発を通じた教育の質的側面の改善は優先度の高い戦略として位置づけられている。本プロジェクトは、校内研修システムへの授業研究の導入により教師の技能向上を図り、もって政策目標である生徒の学習達成度の向上に貢献するものである。
- 2) 既存制度との整合性：本プロジェクトは、ザンビアの学校に対し新しい活動を導入するものではなく、既存の校内研修及び教育行政によるそのモニタリングの仕組みを活用する。校内研修の仕組み（SPRINT）は2000年から導入されているが、校内研修で実施する具体的活動の内容が規定されていなかったため、その実施状況は学校によりばらつきがある。授業研究は、教師が日常実施する授業をテーマに教員同士の切磋琢磨を通じて改善をめざす活動であり、既存の校内研修を再活性化することが期待できる。
- 3) 日本の比較優位性：授業研究は日本の公立学校を中心に広く実施されている特徴的な活動であり、プロジェクトではこのような日本の教育界の経験を活用することが可能である。また、JICAはアフリカ13カ国で理数科教員研修分野のプロジェクトを実施するとともに、理数科教育振興をめざす国同士とのネットワークを有していることから、ザンビアを含む関係国間の相互訪問やワークショップなど、経験共有の機会を提供することができるという点で、日本が本分野での支援を行う意義がある。
- 4) 他ドナーとの連携：教師教育分野に対する支援はUSAID、VVOB（ベルギー）が実施しており、本プロジェクトとは相互補完的な関係で、校内研修の実施を通じた教師の指導力向上を支援している。USAIDは校長に対する研修を支援しているが、同研修に本プロジェクトが支援する校内研修の実施管理に関するモジュールを組み込むよう教育省が調整を行っている。VVOBは、本プロジェクトと同様の教材等を用いて、本プロジェクトでは対象外となっているコミュニティスクールにおける校内研修の普及、及び教育大学における校内研修実施の支援を行っている。

(3) 今後の予定

時期	項目	実施主体
2011年3月末まで	プロジェクトドキュメント最終版作成 (関連データ収集含む)	ザンビア側
2011年4～5月	事前評価結果の承認	JICA 本部
2011年5月中 (予定)	R/D 署名	ザンビア側、JICA ザンビア事務所
2011年6月	実施計画決裁	JICA 本部

2011年6～7月	専門家派遣準備	JICA 本部
2011年7～8月	プロジェクト開始	

#### 4. 団長所感

##### (1) オーナーシップと持続性

本調査を通して、本プロジェクトを核とした継続的な教師の職能形成システムを実現したい、というザンビア側の強い意志が確認できた。特に教員教育局長の教員教育に対する広くて深い視野や、州レベル教育行政官の本プロジェクトに対する強いコミットメントには感銘を受けた。

一方、同局関係者のオーナーシップの強さは、予算措置を含め教育政策全体の中で未だ教育省の総意となっていないような印象も受けた。今後プロジェクトは、投資に見合う確固としたアウトプット、アウトカムを出しつつ省内部での認知度を高め、省全体のオーナーシップを醸造していく努力をしていくことが肝要となってくるだろう。

##### (2) プロジェクト理念の共有の重要性

ザンビア側はこれまで「(本プロジェクトを通して)なぜ授業研究をするのか」「われわれの最終的な目標は何か」を何回も自問自答してきた。そして最終目標(スーパーゴール)を「数学理科教育の質向上」に置き、その評価指標を生徒の数学・理科の国家試験の結果とすることとした。この最終目標は、ザンビアで従来から設定され評価されてきた授業目標(通常は「生徒は～ができるようになる」)評価をもう一度授業研究の文脈の中で捉え直したものにほかならない。しかし、この「常に生徒の学びを通して授業改善を図る」という視点が最終目標として明文化されたことで、授業改善の方向性が確固たるものとなったのである。別の言葉で言えば、授業研究という授業改善戦略に明確なビジョンを持たせることに成功した、ともいえるであろう。

今後プロジェクト関係者で十分この理念を共有しながら活動実施を図っていくことが最終目標達成のうえで非常に重要となるだろう。

##### (3) 優秀な現場教師の経験を基盤とした戦略

本調査団が参観したコッパーベルト州11年生の化学の授業は、生徒の学びを大切にしながら非常に質の高いものであった。しかし、同じ授業を参観した同僚教師は、この授業の良さをあまり理解できなかったようである。また授業公開した教師も自分の授業のどこが良かったのか、あまり認識してはいなかったようである。

生徒の学力向上を最終目標とした場合、授業実施・観察の視点は自然と定まる。それは「生徒が学習していたのかどうか」という視点である。逆に言えば、いかに教員がグループ学習や教材という工夫した手立てをとったとしても、その手立てにより生徒の学習が促進されなければ評価されないことを意味する。このように授業観察の視点が明確であるために、授業計画・分析の視座がぶれにくくなる。

このコッパーベルト州の教師のような生徒の学びを大事にする教師の実践をプロジェク

トは評価し価値付けながら普及していきたい。そして今後「教師が何をしたか」から「教師が何をしたことによって生徒が学習できたか、またはできなかったのか」という授業分析の視点がザンビア人教師の間で日常的に語られるようになるよう、プロジェクト活動が実践されていくことが期待される。

#### (4) 日本側の技術支援レベル

以上のように本プロジェクトは、授業研究を通して生徒の学びを全国レベルで変えていこうという本質的かつチャレンジングなものである。ザンビア側の設定した最終目標に向かって、日本側は先方のオーナーシップを尊重しつつ、技術支援の質や内容を十分吟味し、最終目標を見据えたインプットを心がけることが肝要となる。ザンビア側の「日本は質の高い技術支援を提供する」という絶対的な信頼感・期待感を裏切らないよう、我々は常に質の高い技術支援を提供できるように心がけなければならない。

以上

別添資料1 調査団員名簿

別添資料2 調査日程（実績）

別添資料3 M/M（写）



## 別添資料 1 調査団員名簿

団長	西方 憲広	国際協力専門員（教育）
協力企画	菅原 美奈子	人間開発部基礎教育第二課 主任調査役
教育協力	山田 恭子	人間開発部基礎教育第二課 ジュニア専門員
現地コンサルタント	Edward Tindi	

別添資料2 調査日程（実績）

Date		Time	Mr. Nishikata	Ms. Yamada	Mr. Tindi
27, Feb	Sun		Haneda > Hong Kong > Johannesburg		
28, Feb	Mon	12:30 Any time from 15:00	Arrival at Lusaka Visit to JICA Zambia Office Courtesy call on the Director, ESS Meet TE Staff		
1, Mar	Tue	8:00-10:30 10:30-11:00  12:30-17:00 13:00-14:00 14:00-15:00 15:00-16:00	Trip from Lusaka to Kabwe Courtesy call on PEO, Central  Kabwe Trust Basic School: Lesson Study observation Demo Lesson (G5, Mathematics, Shopping by Mr. C. Musukuma) Post Demo Discussion Discussion with teachers and PEST/DEST members		
2, Mar	Wed	8:00-13:00 8:30-10:00 10:00-11:00 11:00-12:00 12:00-13:00  14:00-16:30 16:30-17:00	Kalonga High School: Lesson Study observation Demo Lesson(G11, Mathematics, Multiplication by a matrix to a matrix) Post Demo Discussion Focus Group Discussion with teachers Focus group discussion with PEST/DEST members  Trip from Kabwe to Ndola Courtesy call on PEO, Copperbelt		
3, Mar	Thu	8:00-13:00 8:30-10:00 10:00-11:00 11:00-12:00 12:00-13:00  14:00-18:00	Temweni High School: Lesson Study observation Demo Lesson(G11, Chemistry, Balancing of chemical equation) Post Demo Discussion Focus Group Discussion with teachers Focus group discussion with PEST/DEST members  Trip from Ndola to Solwezi		
4, Mar	Fri	8:00-8:30  8:45-13:00 9:00-10:30 11:00-12:00 12:00-13:00  14:00-15:00 15:00-18:00	Courtesy call on PEO, Northwestern  Kimiteto Basic School: Lesson Study Observation Demo Lesson(G9, Mathematics, ) Post Demo Discussion Focus Group Discussion with teachers  Discussion on project design with NIU and PEST/DEST members Trip from Solwezi to Kitwe		
5, Mar	Sat	Morning	Trip from Kitwe to Lusaka Departure of Ms. Sugawara		Trip from Kitwe to Kabwe
6, Mar	Sun	12:30 15:00	Report Writing  Arrival of Ms. Sugawara  Meeting with the mission members		
7, Mar	Mon	9:30 11:00 15:00-17:30 15:30-16:30	Courtesy call on the PEO, Lusaka Province Discussion with NIU Courtesy call on the director, ESS Interview to Acting Vice Principal, NISTCOL		
8, Mar	Tue	14:00-18:30	Discussion on the project design with NIU, selected members from Copperbelt and Northwestern provinces		

Date		Time	Mr. Nishikata	Ms. Yamada	Mr. Tindi
9, Mar	Wed	8:30 - 18:30	NEST Extra Ordinary Meeting discussion on the minutes and the project document		
10, Mar	Thu	8:30 - 13:00 14:00 - 18:00	NEST Extra Ordinary Meeting Discussion on the minutes and the project document		
11, Mar	Fri	9:00 11:00 14:30 - 17:00	Submission of the draft to the directors, ESS and Planning, and the PS Meeting with Embassy of Japan Correction of Minutes Discussion with directors, ESS and the chief, Planning and Information		
12, Mar	Sat		Correction of Minutes		
13, Mar	Sun		Completion of the final version of the Minutes		
14, Mar	Mon	(Morning) 8:30-11:00 8:40-10:00 10:00-11:00  12:00-14:30 12:10-13:30 13:30-14:30	Submission of the final version to the PS/JICA RR Palabana Basic School: Lesson Observation Lesson Observation, Upper Basic, Mathematics Interview to teachers  Mikango High School: Lesson Observation, Lusaka Province Lesson Observation, High School, Science Interview to teachers		
15, Mar	Tue	10:00  16:00 17:00	Signing of Minutes Preparing report Report to Embassy of Japan Report to JICA Zambia Office		
16, Mar	Wed		Departure of Zambia	work	
17, Mar	Thu		Arrival at Japan	work	

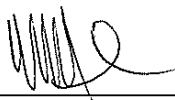
**MINUTES OF MEETING  
BETWEEN  
JAPAN INTERNATIONAL COOPERATION AGENCY  
AND  
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF  
THE REPUBLIC OF ZAMBIA  
ON  
JAPANESE TECHNICAL COOPERATION  
FOR  
STRENGTHENING TEACHERS' PERFORMANCE AND SKILLS  
THROUGH  
SCHOOL BASED CONTINUING PROFESSIONAL DEVELOPMENT PROJECT (STEPS)**

The Preparatory Survey Team (hereinafter referred to as “the Team”), organized by Japan International Cooperation Agency (hereinafter referred to as “JICA”) and headed by Mr. Norihiro Nishikata, visited the Republic of Zambia (hereinafter referred to as “Zambia”) from 28 February to 15 March 2011 in order to discuss the overall framework and implementation plan of the Strengthening Teachers’ Performance and Skills through School Based Continuing Professional Development (STEPS) Project (hereinafter referred to as “the Project”).

During its stay in Zambia, the Team exchanged views on the formulation of the Project with the Zambian authorities concerned (hereinafter referred to as “the Zambian side”) through a series of discussions.

As a result of the discussions, both the Zambian side and the Team drew up the Project plan in the document attached hereto.

Lusaka, 15 March 2011



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



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Norihiro Nishikata (Mr)  
Leader  
Preparatory Survey Team  
Japan International Cooperation Agency  
Japan

## ABBREVIATIONS

CE	College of Education
CPD	Continuing Professional Development
DEBS	District Education Board Secretary
DEST	District Education Support Team
DESO	District Education Standards Officer
DRC	District Resource Centre
DRCC	District Resource Centre Coordinator
EO	Education Officer
ESO	Education Standards Officer
ESS	(Directorate of) Education and Specialised Services
INSET	In-Service Training
JICA	Japan International Cooperation Agency
MOE	Ministry of Education
NEST	National Education Support Team
NIF	National Implementation Framework
NISTCOL	National In-Service Training College
PDM	Project Design Matrix
PEO	Provincial Education Officer
PESO	Provincial Education Standards Officer
PEST	Provincial Education Support Team
PRC	Provincial Resource Centre
PRCC	Provincial Resource Centre Coordinator
PO	Plan of Operation
SBCPD	School-Based Continuing Professional Development
SESO	Senior Education Standards Officer
SIC	School In-Service Coordinator
SMASTE	Strengthening of Mathematics, Science, and Technology Education
SNDP	Sixth National Development Plan
SPRINT	School Program of In-service for the Term
STEPS	Strengthening Teachers' Performance and Skills through School Based Continuing Professional Development
TE	Teacher Education
ZIC	Zone In-service Coordinator



The Government of Zambia attaches great importance to teacher education and the Ministry of Education (MOE) has established a system, which is called “School Program of In-service for the Term (SPRINT),” in order to regularize Continuing Professional Development (CPD) of teachers. JICA has supported the Ministry’s efforts in various ways, one of which is extending technical assistance through “SMASTE School-Based Continuing 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 program to all grades and subjects in Central province and added two provinces as target provinces, namely Copperbelt and Northwestern 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, the Government of Zambia requested the Government of Japan to provide technical assistance towards the expansion of the programme to remaining six provinces, namely Eastern, Luapula, Lusaka, Northern, Southern and Western.

On the basis of the official request from the Government of Zambia and the proposed Project Document, the Zambian side and the Japanese side have discussed the overall framework of the Project, including a narrative summary of the Project Design Matrix (PDM), Plan of Operation (PO), implementation framework, roles and duties of the implementation body, and cost-sharing plan among stakeholders. The discussions between two parties regarding the Project were held in Central, Copperbelt, Lusaka, and Northwestern provinces from 28 February to 15 March 2011. The participants of discussions are listed in ANNEX 1.

The major points of the Project design that have been discussed are summarized below.

### **1. Project Framework**

The section below summarizes the framework of the Project. The PDM in ANNEX 2 shows the log frame of the Project, and the PO in ANNEX 3 indicates the tentative schedule of implementation of each activity within the period of the Project.

#### **(1) Super Goal**

Quality of science and mathematics education is improved.

#### **(2) Overall Goal**

Students’ learning process in science and mathematics is improved.

#### **(3) Project Purpose**

Teaching skills are enhanced under School-based Continuing Professional Development (SBCPD).

#### (4) 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.

## 2. Strategy of SBCPD rolling-out and Activities

### (1) Induction Stage

#### 1) Initial activities

At the initial induction stage to six new provinces, a team composed of 15 selected facilitators from three mentor provinces, with technical support from the National Core Technical Team, will plan and conduct induction workshops at each province. The diagram in ANNEX 4 shows the flow of activities to be done at the initial induction stage.

As the participants of the induction workshop will be defined and selected by Provincial Education Support Teams (PEST), the number of attendance may differ from province to province. The category of resource persons who will be sensitized at this stage will include the following:

- 1) PEST members
- 2) District Education Support Team (DEST) members
- 3) Lecturers of Colleges of Education / Universities
- 4) 15 Facilitators who have been already identified

#### 2) Follow-up activities to initial induction

Following to the initial induction workshop, the National Core Technical Team will mentor six new provinces through monitoring the progress of activities in new provinces twice a year at the time when stakeholders or facilitators workshop will be taking place. The regular mentoring by a national team will continue for about one year from the first Stakeholders workshops 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. The diagram in ANNEX 5 shows the flow of activities to be done at this stage.

**The grouping of Provinces for mentoring**

<b>Mentor Provinces</b>	<b>New Provinces</b>
Central	Southern and Northern
Copperbelt	Eastern and Lusaka
Northwestern	Western and Luapula

## (2) Implementation Stage

At the implementation stage, the task of the National Core Technical Team will be to study the quality aspect of teaching and learning and to develop reference materials or monitoring instruments for Lesson Study together with identified skilled personnel from each province. They will also collect and document good practices of Lesson Study on the ground. The national team will give feedback about their work to all provinces through meetings or workshops at the national level and by disseminating what they produce. The diagram in ANNEX 6 shows a tentative image of the flow of activities to be done at this stage.

## 3. Target of the Project

### (1) Target area

The Project will cover all nine (9) provinces, and out of seventy-four (74) districts<sup>1</sup> in the country, a total of 54 districts were selected by PEST as target districts, where Lesson Study will be introduced. The table below shows the list of target districts.

**The 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, Nchelenje, Samfya
Lusaka	4	4	Lusaka, Kafue, Chongwe, Luangwa
Northwestern	8	8	Kabompo, Kasempa, Mwinilunga, Solwezi, Chavuma, Mufumbwe, Zambezi, Ikelenge
Northern	13	8	Kasama, Mungwi, Luwingu, Nakonde, Chinsali, Mpika, Mporokoso, Mafinga
Southern	11	5	Livingstone, Kalomo, Choma, Namwala, Itezhi-tezhi
Western	7	3	Mongu, Senanga, Kaoma
Total	74	54	

<sup>1</sup> Two districts, namely Ikelenge district in Northwestern province and Mafinga district in Northern province, have been established recently and will have administrative structure in due course.



**(2) Target group (beneficiaries)**

The target group of the Project includes the following:

- 1) Teachers who are teaching science and mathematics at Grade 8-12 of public (GRZ) and grant-aided schools in target districts
- 2) Grade 1-7 teachers of public (GRZ) and grant-aided schools in all districts in three provinces (Central, Copperbelt, and Northwestern)

**(3) Target schools, grades and subjects**

The target schools of the Project are public 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) Science and mathematics at Grade 8-12 in all provinces
- 2) Science and mathematics at Grade 1-7 in Central, Copperbelt, and Northwestern provinces

**4. Administration of the Project**

**(1) Responsible organization**

Ministry of Education

**(2) Project Director**

Director of Planning and Information, MOE

**(3) Project Manager(s)**

- a) National level  
Director of Education and Specialized Services, MOE
- b) Provincial level  
Provincial Education Officer

**(4) Project Coordinator(s)**

- a) National level  
Chief Education Officer, Teacher Education, the Directorate of Education and Specialized Services (ESS)
- b) Provincial level  
Provincial Education Standards Officer

**(5) Administration and Implementation of the project**

- a) National level

Principal Education Officer, Teacher Education (INSET), the Directorate of ESS

b) Provincial level

Education Officer, Teacher Education

**(6) Secretarial Work and Documentations**

National Junior Engineers, Technicians and Scientists (JETS) Secretariat to undertake the Secretarial work and documentations to do with the Project

**(7) Japanese Expert(s) and Local Advisor**

The Japanese expert(s) and local advisor will provide necessary technical advice to the Zambian counterparts, administrative personnel, and resource persons on any matters pertaining to the implementation of the Project.

**(8) Administrative Committee and Education Support Team(s)**

For the effective and successful implementation of technical cooperation for the Project, the National Education Support Team (NEST) Administrative Committee, NEST Coordinating Sub-Committee, PEST, and DEST will operate as coordination and implementation teams at each level. These teams are permanent bodies within the structure of MOE at national, provincial, and district level in order to support all aspects of education at each level. These existing teams will play a role of coordinating and implementing planned activities under the Project as part of their mandates. A part of the NEST Coordinating Sub-Committee forms the National Core Technical Team in order to specifically deal with technical aspect of the Project and mentor provincial teams. The diagram in ANNEX 7 shows the overall administrative structure of MOE and the Project. The function and the composition of each team are described in ANNEX 8, 9, 10, 11, and 12.

**(9) Facilitators**

Facilitators will be identified and appointed by PEST/DEST, whose terms of references are shown in ANNEX13. Facilitators are District Resource Centre Coordinators (DRCC), classroom teachers, lecturers and Zone In-service Coordinators (ZIC)/School In-service Coordinators (SIC), who have facilitation skills or have a potential to obtain the facilitation skills for lesson study activities at school or cluster level. Each facilitator is expected to assist SBCPD activities not only in his/her school but also in assigned schools. The expected number of facilitators to be appointed is 40 (30 in science and 10 in mathematics) per district.

## **5. Inputs from both sides**

### **(1) The Zambian side**

#### **1) Human resources**

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

#### **2) 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

#### **3) Finances**

- i Funds for implementation of the Lesson Study activities, including stakeholders and facilitators workshops, and necessary expenses for the activities of National Core Technical Team
- ii Allowances for travel of local staff for project activities

### **(2) JICA side**

#### **1) Human resources**

- i Three (3) Long-term experts
  - Chief advisor and the management of Lesson Study (Science)
  - Management of Lesson Study (Mathematics)
  - Project coordinator and monitoring
- ii Short-term experts when need arises in relation to the project activities.
- iii Local advisor

#### **2) Trainings**

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

#### **3) Materials and Equipment**

- 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

#### **4) Finances**

Local expenses and other necessary allowances for JICA experts

## 6. Cost-sharing plan among stakeholders

Both sides discussed the cost-sharing plan of local expenses among related organizations. The table below shows the outline of the cost-sharing plan among stakeholders. ANNEX14 shows the details of planned activities and its cost-sharing plan.

**Cost-sharing Plan of Local Expenses among Related Organizations**

Organization		Budget item that each party will bear
Zambia	MOE	<ul style="list-style-type: none"> <li>- Allowances for travel of local staff for project activities</li> <li>- Expenses for organizing national level meetings, workshops, and trainings</li> <li>- Expenses for activities of National Core Technical Team</li> </ul>
	Province	<ul style="list-style-type: none"> <li>- Funds for implementation of the Lesson Study activities, including Stakeholders and Facilitators Workshops</li> <li>- Necessary funds for inter-provincial activities</li> </ul>
	College/ Universities	- Funds for implementation of the Lesson Study activities, including Stakeholders and Facilitators Workshops
	District/ Basic School	- Funds for implementation of the Lesson Study activities, including Stakeholders and Facilitators Workshops
	Secondary/ High Schools	<ul style="list-style-type: none"> <li>- Funds for implementation of the Lesson Study activities at schools, travel expenses for teachers to attend Stakeholders and Facilitators Workshops</li> <li>- Transport/travel allowances for facilitators for monitoring</li> </ul>
Japan	JICA	Local expenses (printing reference materials, training venues, conducting survey [research assistant], etc.) and other necessary allowances for JICA experts' activities (field trips, overseas travels, etc.)

## 7. Title of the Project

Both sides agreed that the title of the Project should be “Strengthening Teachers’ Performance and Skills through School Based Continuing Professional Development (STEPS). “

The initial project proposal submitted by the Government of Zambia was entitled “Strengthening of Mathematics, Science and Technology Education (SMASTE) School-Based Continuing Professional Development (SBCPD) Project through Lesson Study – Phase III”. In the due course of project formulation, both parties agreed to change the title as mentioned above. The title of the Project will be finalized by signing of the Record of Discussions after authorization by the Ministry of Foreign Affairs in Japan and JICA.

## **8. Duration of the Project**

The duration of the Project is to be from the assignment of Japanese expert(s) to December 2015. The commencement of the Project is subject to the progress of the preparation by both parties.

## **9. Feasibility of the Project – the result of ex-ante evaluation**

### **(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 with the policy objectives of the Government of Zambia. One of the prioritized objectives of the Sixth National Development Plan and the National Implementation Framework III (2011-2015) 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 Education Policy document "Educating Our future (1996)."

#### ➤ **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 system of School Program of In-Service for the Term (SPRINT), 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 School-Based Continuing Professional Development Project Phase II (SMASTE 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 programs and regional conferences.

### **(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 towards 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 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 Teacher Group Meetings (TGM). However, the discussion in TGM 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 continuing professional development of teachers.

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

Since Lesson Study as one of the strategies of SBCPD are the continuous process of improving teaching skills, it is crucial for each school to internalize and regularise this program 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).

**(3) Efficiency**

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

➤ **Utilization of existing resources**

The inputs from 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 existing structure of the Ministry of Education, 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 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.

#### **(4) Impact**

##### **➤ Logical structure of the Project**

Since a 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 positive impact on student's learning process and learning achievement, it is necessary that students' learning environment and learning time be adequately secured. Furthermore, it is crucial that head teachers ensure students' learning.

##### **➤ An 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 could not fully exploit the benefit of Lesson Study and not produce the substantial impact on students' learning due to the limited knowledge on subject content. Although the Ministry of Education has made an enormous effort to upgrade these under-qualified teachers to the degree level, this may hinder to achieve overall goal if this issue continues.

#### **(5) Sustainability**

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

##### **➤ Policy**

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

##### **➤ Organizational Aspect**

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

##### **➤ Technical Aspect**

The National Core Technical Team, which is newly formulated recently, is an important body to accumulate and disseminate the technical knowhow 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 at the budgeting process at provincial and district levels in order to secure 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.

## 10. WAY FORWARD

### (1) Timeframe for preparation

The Zambian side and the Team discussed a timeframe toward the signing of the official agreement (i.e. the Record of Discussions), which shall lead to the commencement of the Project. The table below shows discussed and suggested schedule.

**Suggested Timeframe for Preparation**

<b>Date</b>	<b>Activities</b>	<b>Responsibility</b>
by the end of March, 2011	Finalizing the Project Document including all relevant information and data	Zambian side
April – May, 2011	Appraisal of the Project at JICA Headquarters.	JICA
May, 2011	Signing of the Record of Discussion and the complementary Minutes of Meetings [Final version of the Project Document will be attached to the Minutes of Meeting]	Zambian side and JICA
June, 2011	Approval of the implementation plan and the costing of the Project at JICA Headquarters	JICA
June, 2011	Recruitment process of JICA Experts	JICA
July or August, 2011	Commencement of the Project	Zambian side and JICA

*Note: The above schedule depends on the progress of the preparation of both parties.*

### (2) Important issues that need to be addressed by MOE headquarters

#### ➤ **Strengthening of the Implementation Structure**

In order to ensure the smooth and effective implementation of the Project, it is necessary for the Government of Zambia to fill the vacant position at National In-Service Unit, Teacher Education, MOE, before the commencement of the Project.

#### ➤ **Facilitating the prioritization of budget for Teacher Education at all levels**

It is necessary for MOE headquarters, provinces, and districts to share the common understanding on the budgeting rules and process, because officers at each level have a different



understanding on who decides the allocation of budget to each program at province or district level. MOE says that MOE has allocated the block of budget to Provincial Education Office and District Education Board Secretary's Office and they have a liberty to plan the allocation according to their priorities. However, provincial or district officers argue that planning or accounting officers tend to stick to the budget allocation prescribed by MOE headquarters. In order to prioritize and allocate sufficient budget to SBCPD, at first hand, it is necessary for MOE headquarters to issue a circular or guideline that clearly states the basic rule of budgeting, the ministry's priority, and the desired amount or ratio of budget allocation to Teacher Education. In addition, it is necessary to share the budget allocation plan of each province and review it periodically at NEST coordinating or Administrative committee in order to ensure that sufficient budget be allocated to Teacher Education, specifically SBCPD related activities.

➤ **Securing the budget for National Core Technical Team's activities**

Since the National Core Technical Team will become the important body to mentor provincial teams and contribute to the improvement of teaching skills, it is essential for MOE headquarters to finance their activities adequately, such as mentoring visits to new provinces, participating in national level meetings for developing reference materials and assessment tools.

## LIST OF ANNEXES

- ANNEX 1: Attendance List
- ANNEX 2: Project Design Matrix
- ANNEX 3: Plan of Operation
- ANNEX 4: Flow of Activities at Induction Stage (Initial activities)
- ANNEX 5: Flow of Activities at Induction Stage (Follow-up activities to initial induction)
- ANNEX 6: Flow of Activities at Implementation Stage
- ANNEX 7: Administrative Structure
- ANNEX 8: TOR and Composition of NEST Administrative Committee
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- ANNEX 10: TOR and Composition of National Technical Support Team
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- ANNEX 12: TOR and Composition of District Education Support Team
- ANNEX 13: TOR of Facilitators
- ANNEX 14: Cost-sharing Plan among Stakeholders

## **ANNEX 1: Attendance List**

### **THE ZAMBIAN SIDE**

#### **Ministry of Education (MOE)**

James S. Mulungushi (Dr.)	Permanent Secretary (Education Services, Standard and Curriculum)
Mrs. Ruth M. Mubanga	Director - ESS
Mr. Noel Mulopa	Principal Planning Officer, Directorate of Planning and Information
Mr. V. Sinda	Chief Education Standards Officer, Directorate of Standards and Curriculum
Mr. Bupe Musonda	Senior Planning Officer, Directorate of Planning and Information
Mrs. Esvah Chizambe	Principal Education Officer – In-service
Mr. G. B. Chola	Senior Education Officer – In-service High
Mrs. Mercy Mwiya	A/Senior Education Officer – In-service Basic
Mrs. Prisca C. Simukonda	A/ Principal Education Standards Officer – High Schools
Ms. E. Chisuta	Senior Human Resource Development Officer
Ms. Susan Mwanza	Senior Human Resource Development Officer
Mr. Samson Njapau	Senior Curriculum Specialist - Science

#### **Central Province**

Mr. Ngoma	PEO
Mr. M. Simatende	PESO
Mr. L. Moosho	SESO - Mathematics
Mrs. F. S. Mwandila	EO-TE
Mr. K.C. Lungwe	Principal - Nkrumah University College
Mr. Simpasa D,Chola	V/principal – Malcolm Moffat CE
Mr. R. Singoyi	Subject Coordinator Basic Kabwe PRC
Mr. Sande Mwape	ESO - Special Education
Ms. Christine Malonga	DRCC - Kabwe
Mrs. Rosemary N. Kayewa	ZIC – Mine Basic Zone
Mr. GoodfellowChikombola	Deputy Head-teacher – Kabwe Trust Basic School
Mr. Charles Musukwa	Teacher – Kabwe Trust Basic School
Mr. Forbes Judge	Teacher – Kabwe Trust Basic School
Mr. Felix Mulenga	Teacher – Kabwe Trust Basic School
Mrs. Mwila C. Imbwae	Science – Kabwe Trust Basic School

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Mrs. Mary M. Kamana	Teacher – Kabwe Trust Basic School
Mrs. Ivy K. Ndhlovu	Teacher – Kabwe Trust Basic
Mr. K. Kalonga	Head Teacher – Kalonga High School
Mr. Bwembya	Deputy Head Teacher - Kalonga High School
Mr. C. Nkwemu	Teacher – Kalonga High School
Mr. C. Mapeka	Teacher – Kalonga High School
Mr. A. Mbewe	Teacher – Kalonga High School
Mr. T. Malupande	Teacher – Kalonga High School
Mr. B. B. Ndiya	Teacher – Kalonga High School
Mr. H. Shikapwasha	Teacher – Kalonga High School
Mr. E. Banda	Teacher – Kalonga High School
Mr. L. P. Kaira	Teacher – Kalonga High School
Mrs. I. C. Mwewa	Teacher – Kalonga High School
Mrs. N. T. Hangoma	Teacher – Kalonga High School
Mrs. C. B. Mpokosa	Teacher – Kalonga High School
Mrs. M. H. Ngulube	Teacher – Kalonga High School
Mr. M. C. Chilobe	Teacher - Kalonga High School

Copperbelt Province

Mr. J.H. Siwingwa	PEO
Ms. E. Hamatumbika	PESO
Mr. J. Musonda	SESO - Mathematics
Mr. C.A. Chisanga	EO-TE
Mrs. Siwale	DESO - Ndola
Mrs. G. K.C. Chilekwa	Principal - Mufulira CE
Mr. M. Chisala	Vice Principal - Kitwe CE
Mr. Alex K. Tumeo	HOD – Copperbelt University College
Mrs. C.S. Kunda	Subject Coordinator Basic – Kitwe PRC
Mrs. E. Ngonga	Subject Coordinator High – Kitwe PRC
Ms. J. Mulambia	Subject Coordinator Basic – Ndola PRC
Mr. B.D. mulenga	Subject Coordinator High – Ndola PRC
Ms. A. Shakabozha	DRCC- Ndola
Ms. Hazel Mapanda	Head-teacher – Temweni High School
Mr. Raphael Kalela	Deputy Head-teacher - Temweni High School
Mr. Peter Lukhele	Science teacher – Temweni High School
Ms. Justina Ngwenya	Science teacher – Temweni High School
Ms. Caroline Jendeenda	Science teacher – Temweni High School

Mr. Thomas Malambo	Science teacher – Temweni High School
Ms. Mwauseya Tamishe	Science teacher – Temweni High School
Mr. Westerner Bwalya	Science teacher – Temweni High School
Mr. Mwila Katebe	Science teacher – Temweni High School
Mr. Kennedy Manda	Science teacher – Temweni High School
Mr. Owen Kibole	Science teacher – Temweni High School

Northwestern Province

Mrs. J.M. Malama	PEO
Mr. A. Lingambe	PESO
Mr. Mulenga S	SESO - Science
Mr. Andrew Mutobo	Principal – Solwezi CE
Mr. R. Kapyololo	EO-TE
Mrs. L.N. Lukama	Subject Coordinator High – Solwezi PRC
Mr. Monde C.W	DESO - Solwezi
Ms. Sikufele Kabila	ESO- General Inspection
Mrs. Malichi M. Kyembe	DRCC - Solwezi
Mr. S.M. Kashele	Head-teacher – Kimiteto Basic School
Mrs. Nkwashi J. Kapeshi	Deputy head-teacher – Kimiteto Basic School
Mr. Hendric Samu	Teacher/ZIC – Kimiteto Basic School
Mr. A. Lungu	Teacher – Kimiteto Basic School
Ms. Chewe Hilda	Teacher – Kimiteto Basic School
Mr. Fred Kapombe	Teacher – Kimiteto Basic School
Mr. Kaiza Kanyungulu	Teacher – Kimiteto Basic School

Eastern Province

Mr.S.T. Mwanza	PESO
Mrs. Venus C.N. Thole	EO-TE

Lusaka Province

Mrs. Alice M. Nzala	PEO
Ms. Chilufya Mumba	SESO - Science
Mr.N.H. Mwanapabu	PESO
Mrs. Pamela C. Banda	EO-TE
Mr. C. Maambo	A/ principal - NISTCOL
Mr. Hector Swazi	A/ vice principal – NISTCOL
Mr. Julian Mudolo	Head Teacher – Mikango High School

Mr. Nalaswa Ronald	Science Teacher – Mikango High School
Mr. Evans B. Mulenga	Head Teacher – Palabana Basic School
Ms. Hildah Z. Phiri Mulenga	Teacher – Palabana Basic School

Luapula Province

Mr. Ngosa Kotati	PESO
Mrs. A.K. Mtonga	EO-TE

Southern Province

Mrs. C.N. Sakala	PESO
Mr. M.K. Kabbudula	EO-TE

Northern Province

Mrs. C.M.M. Kaira	PESO
Mrs. Victoria K. Mbewe	EO-TE

Western Province

Mr. Patrick Kalukango	EO-TE
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**THE JAPANESE SIDE**

JICA Preparatory Survey Team

Mr. Norihiro Nishikata	Senior Advisor, JICA
Mr. Edward Tindi	Local Advisor to the Team
Ms. Minako Sugawara	Assistant Director, Basic Education Division II, Basic Education Group, Human Development Department, JICA
Ms. Kyoko Yamada	Associate Expert, Basic Education Division II, Basic Education Group, Human Development Department, JICA

JICA Zambia Office

Mr. Shiro Nabeya	Resident Representative
Mr. Yuichi Matsushita	Assistant Resident Representative
Dr. John Chileshe	Senior Education Consultant

Annex 2 : 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

Duration of the Project: \*\* 2011 - Dec. 2015  
 Version No.: PDM Ver.1  
 Date: 15th March 2011

Target Area: All nine (9) Provinces in Zambia (54 selected districts out of 74 districts)  
 Target Group: 1) Teachers who are teaching science and mathematics at Grade 8-12 in all provinces  
 2) Grade 1-7 teachers in three provinces (Central, Copperbelt, and Northwestern)

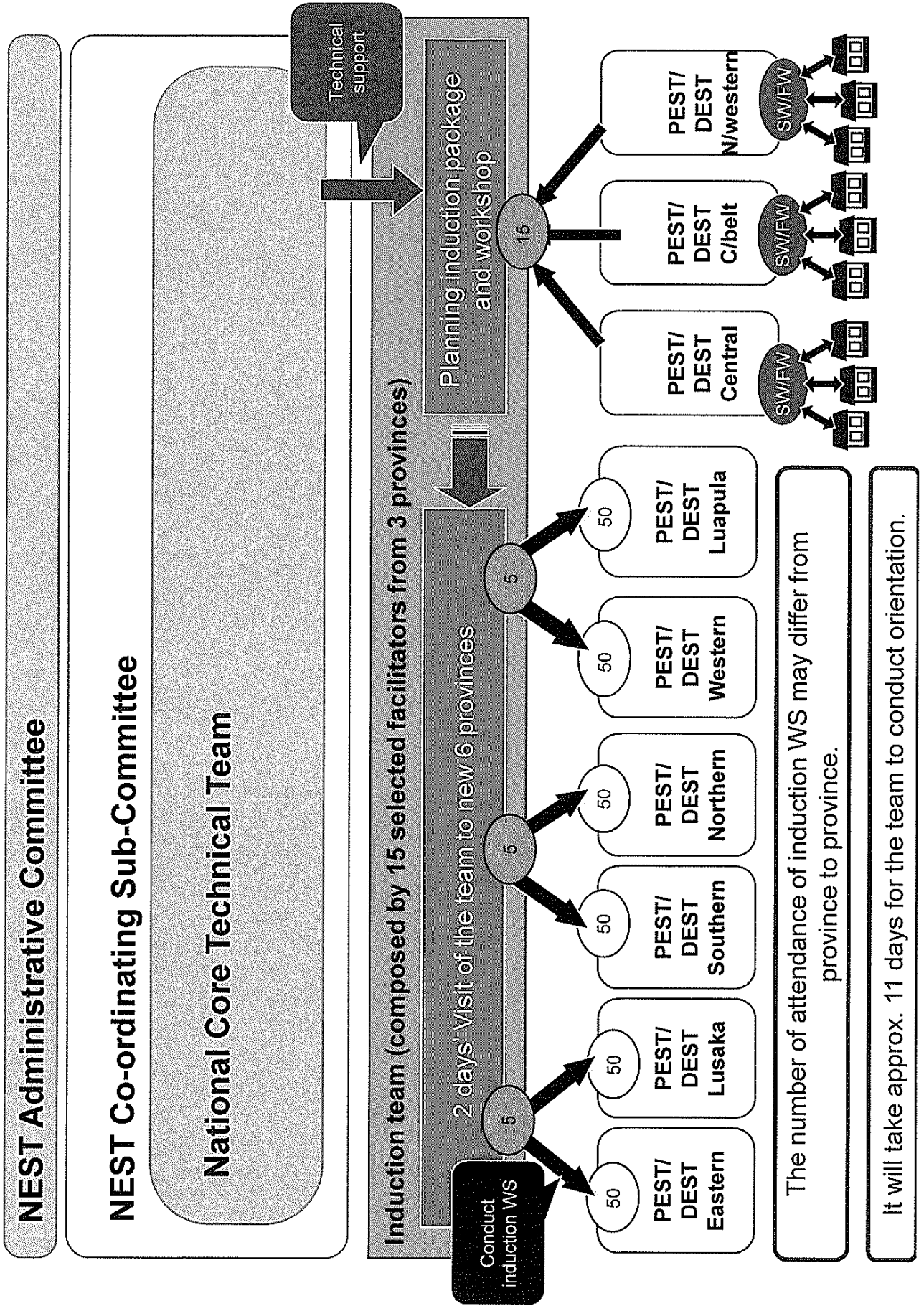
Supra Goal	Objectively verifiable indicators	Means of Verification	Important Assumptions
<p><b>Narrative Summary</b>                      Quality of science and mathematics education is improved.</p>	<p>i. Scores in national assessment (Grade 5 Numeracy, Grade 9 Science &amp; Mathematics)                      ii. Examination pass rate in Grade 9 and Grade 12                      iii. International Assessment (SACMEQ)</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><b>Overall Goal</b>                      Students' learning process in science and mathematics is improved.</p>	<p>i. Record of lesson observation (Science and Mathematics) (students' activities)                      ii. Students' perception toward their learning</p>	<p>Baseline and Endline Survey Report                      i. Results of lesson observations                      ii. Student's questionnaires</p>	<p>Learning environment is not adversely deteriorated.                      Learning time of students is secured.                      Head teachers ensure that students are learning.</p>
<p><b>Project Purpose</b>                      Teaching skills are enhanced under School-based Continuous Professional Development (SBCPD).</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 towards teaching</p>	<p>Baseline and Endline Survey Report                      i. Results of lesson observations                      ii. Self-evaluation of teachers                      iii. Evaluation by Students</p>	<p>Teachers continuously apply improved teaching skills to teaching.                      Trained teachers remain in school system.</p>
<p><b>Outputs</b>                      1. SB-CPD is strengthened through Lesson Study.</p>	<p>i. % of schools implementing Lesson Study (target figure: 70% in all target grades)                      ii. Quality of Lesson Study verified by prepared check list</p>	<p>i. Progress reports submitted by PEST                      ii. Baseline and Endline Survey Report</p>	<p>SB-CPD is continuously implemented.                      The motivation of teachers and all related stakeholders in participating SB-CPD is maintained.</p>
<p>2. Capacity of resource persons for implementing SB-CPD is enhanced.</p>	<p>i. Number of resource persons (stakeholders and facilitators) trained in lesson study (target figure: to be confirmed later)                      ii. Self-evaluation of resource persons on their performance                      iii. Evaluation toward resource persons by beneficiaries</p>	<p>i. Progress reports submitted by PEST (List of trained facilitators and stakeholders)                      ii. Self-evaluation of resource persons                      iii. Evaluation by beneficiaries</p>	<p>Head teachers support SB-CPD.                      Facilitators continue to offer technical support to lesson study not only in their own schools but also in assigned schools.</p>
<p>3. Reference materials for implementing SB-CPD are developed</p>	<p>i. Availability of developed reference materials in schools (Skills books, Journals, Guidelines, etc.)                      ii. User's (teachers') evaluation on the developed reference materials</p>	<p>i. Reference Materials                      ii. Result of users' evaluation</p>	
<p><b>Activities</b>  <b>Preparation and Orientation Stage</b>                      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 and train the task team of PEST in conducting Baseline Survey                      1-5 Train facilitators/DESTs in conducting Baseline survey                      1-6 Conduct Baseline survey                      1-7 Mentor six provinces by National Core Technical Team  <b>Implementation Stage</b>                      1-8 Planning Stakeholders workshop (once per term)                      1-9 Conduct Stakeholders workshop (once per term)                      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 the 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</p>	<p><b>Input from Zambian Government</b>                      • Human resource                      • NEST, PEST and National Core Technical Team, DEST members in all nine (9) provinces                      • College/University lecturers                      • In-NSC staff                      • Trained resource persons (facilitators and stakeholders) through SMASTE Phase I and II                      • Materials                      • Office and other buildings used for activities under the project                      • Office Equipment                      • Vehicles and fuel                      • Teaching/learning materials used for Lesson Study                      • Finance                      • Funds for implementation of the Lesson Study activities, including Stakeholders and Facilitators Workshops                      • Allowances for travel of local staff for project activities</p>	<p>• There is consistency of core officers.</p>	
<p>3-1 Revise the Teaching Skills book                      3-2 Revise the Management Skills book                      3-3 Produce the 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</p>	<p><b>Input from JICA</b>                      • Human resource                      • Three (3) Long term experts                      • Short term experts when need arise in relation to the project activities                      • Local Advisor                      • Training                      • Provide opportunities for overseas training and conferences for Zambian counterparts and core resource persons in relation to the project activities.                      • Materials                      • Office equipment (computer, printers, LCD projectors, video camera, 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</p>	<p><b>Prerequisites</b>                      • 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 SB-CPD activities.</p>	





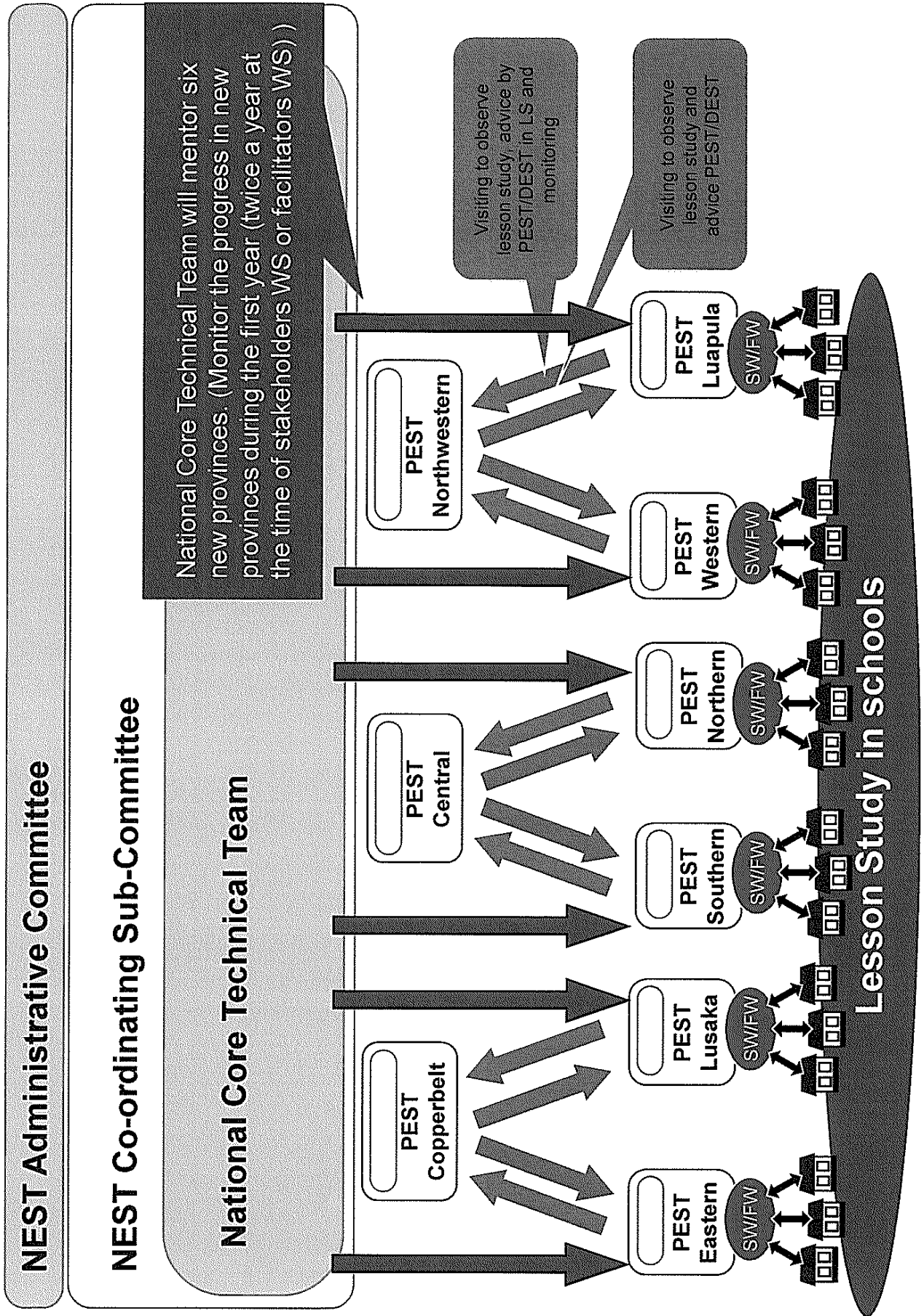


ANNEX 4: Flow of activities at induction stage (initial activities)

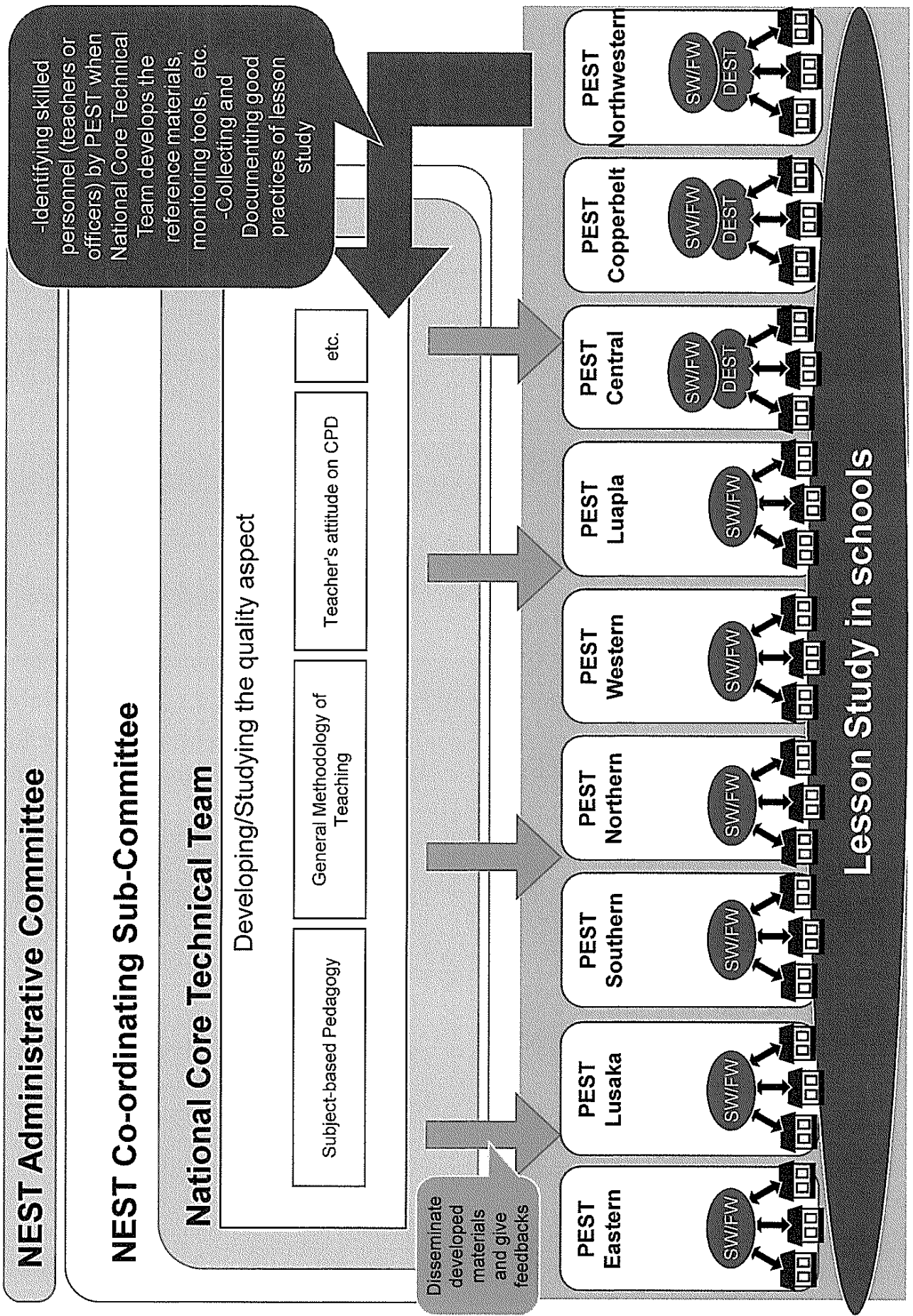


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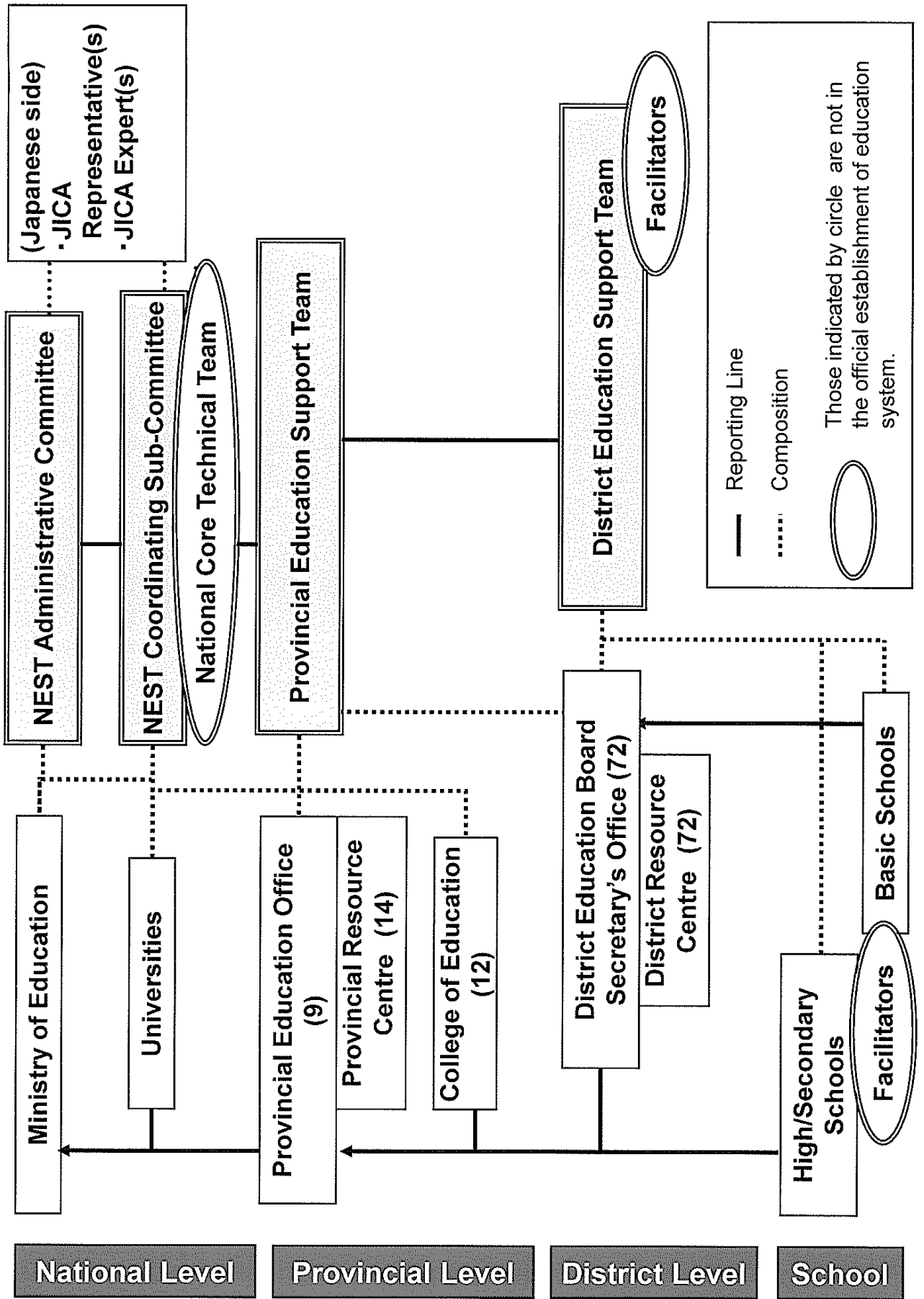
ANNEX 5: Flow of activities at induction stage (Follow-up activities to initial induction)



ANNEX 6: Flow of activities at implementation stage



# ANNEX 7: Administrative Structure



## **ANNEX 8: TOR and the Composition of NEST Administrative Committee**

### **Functions (TOR):**

1. To approve the Annual Work plan and Budget of the Project
2. To review the overall progress and annual expenditure of the Project
3. To review and exchange views on major issues related to the Project.

### **Chairperson:**

The Permanent Secretary (Education Services, Standards and Curriculum)

### **Members:**

#### Zambian Side

- Directors Planning and Information
- Director of Education and Specialised Service (ESS)
- Director of Standards and Curriculum
- Director of Distance Education
- Director of Human Resources and Administration
- All the Provincial Education Officers (9)
- Teacher Education members (5)
- Two representatives of Universities
- Principal of NISTCOL
- Union representatives (3)
- Representative(s) of Grant Aided Institutions

#### Japanese Side

- JICA Resident Representative
- JICA personnel including Experts (6)

### **Note:**

- 1) Officials of the Embassy of Japan may attend the NEST Administrative Committee meetings as observers.
- 2) Other persons who are invited by the Chairperson may attend the NEST Administrative Committee meetings.
- 3) NEST will be in charge of coordinating all existing projects/programme under the framework of SPRINT programme.

## **ANNEX 9: TOR and the Composition of NEST Co-ordinating Sub -Committee**

### **Functions (TOR):**

1. Undertake overall coordination and supervision of the programme following national policy of INSET and CPD
2. Plan, review and revise the master plan for School-Based CPD
3. Facilitate and support workshops under the programme held at provincial, district and zone level
4. Monitor activities under the programme in coordination with PESTs, and DESTs

### **Chairperson:**

Chief Education Officer, Teacher Education, Directorate of ESS

### **Members:**

#### Zambian Side

##### *Headquarters*

- Chief Curriculum Specialist, Curriculum Development Centre, Directorate of Standards and Curriculum
- Chief Education Standards Officer, Directorate of Standards and Curriculum
- 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
- The Chief Educational Officer - Planning
- The Chief Human Resource - Administration
- Colleges/Universities representatives (2)
- Head Advisory Unit for Colleges of Education (AUCE)
- Deputy JETS/SMASTE Secretary

##### *Provinces*

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

#### Japanese Side

- JICA (Long-term) Experts (3)
- JICA Personnel excluding experts (3)

## **ANNEX 10: TOR and the Composition of National Core Technical Team**

### **Functions (TOR):**

1. Identifying and Pooling human Resource and categorizing them in areas of specialization for the purpose of mentoring six provinces
2. Develop Curricula / content for Lesson Study
3. Develop training packages/manuals for Facilitators/ stakeholders
4. Review and develop relevant SBCPD materials / Lesson Study materials (Skills books, Guidelines, journals, etc.)
5. Review & Develop Monitoring instruments
6. Monitor SBCPD/ Lesson Study activities at all levels
7. Initiate research to assess impact & on other identified SBCPD/ Lesson Study issues
8. Initiate establishment of databases that will periodical be updated on SBCPD/ Lesson Study activities
9. Encourage establishment of Provincial Core Technical Teams that will feed into the National Core Technical Team and accountable to PEST

### **Chairperson:**

Principal Education Officer, Teacher Education (INSET), ESS

### **Members:**

Nyambe Dominic  
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 local advisor will provide technical advice to the team.



## **ANNEX 11: TOR and the Composition of Provincial Education Support Team**

### **Functions (TOR):**

1. Overall coordination of the programme
2. Planning of activities under the programme
3. Capturing budget and procurement of workshop materials
4. Issuing and filing official communication
5. Recording activities and producing minutes of meetings
6. Conducting baseline and other surveys on the programme
7. Encoding data on the implementation and surveys
8. Monitoring activities.

### **Chairperson:**

Provincial Education Officer

### **Members:**

#### Zambian Side

- Provincial Education Officer (PEO)
- Provincial Education Standards Officer (PESO)
- All Senior Education Standards Officers (SESOs)
- The Principals –Colleges of Education
- College CPD Coordinators – Colleges of Education
- Senior Planning Officer
- Education Officer, Teacher Education (EO-TED)
- Subject Coordinators for Basic & High Schools (PRCCs)
- Representative of DEBSs

## **ANNEX 12: TOR and the Composition of District Education Support Team**

### **Functions (TOR):**

1. Planning of activities under the programme
2. Capturing budget and procurement of workshop materials
3. Issuing and filing official communication
4. Recording activities and producing minutes of meetings
5. Conducting baseline and other surveys on the programme with support of PEST
6. Encoding data on the implementation and surveys with support of PEST
7. Monitoring activities

### **Chairperson:**

District Education Officer

### **Members:**

#### Zambian Side

- District Education Board Secretary (DEBS)
- District Education Standard Officer (DESO)
- All Education Standards Officers (ESOs)
- District Planning Officer
- District Resource Center Coordinator (DRCC)
- 1 Head Teacher from High School
- 1 Head Teacher from Basic School
- 2 Facilitators from High Schools
- 2 Facilitators from Basic Schools
- Zone In-Service Coordinator (ZIC)
- Representative(s) of Heads Associations

### **ANNEX 13: TOR of Facilitators**

1. Assisting/mentoring teachers in the planning of SBCPD activities in the schools assigned
2. Offering technical support to teacher group on lesson plans before lesson demonstration are conducted
3. Effectively participating in the lesson planning stage
4. Observing demonstration lessons
5. Facilitating discussions after lesson demonstrations
6. Offering pedagogical and content support to teachers
7. Preparing and submitting facilitation reports
8. Participating in stakeholder and facilitators workshops



**ANNEX 14: Cost-sharing plan among stakeholders**

**Induction Stage (Initial activities)**

<b>Activities</b>	<b>MOE</b>	<b>Colleges/ Universities</b>	<b>Province (mentors)</b>	<b>Province (new)</b>	<b>District (new)</b>
<b>Preparation of Induction WS</b>	Travel expenses for core team members to attend preparation				
<b>Induction WS at each province by core team (core team visit new provinces to conduct induction WS)</b>	1) Travel expenses for core team members 2) Printing WS materials	Expenses for organizing WS (venue, printing additional materials, refreshment, etc.)		Expenses for organizing WS (venue, printing additional materials, refreshment, etc.)	Travel expenses to attend WS
<b>Training for Facilitators</b>	Travel expenses for core team members	Travel expenses for selected facilitators		Travel expenses for selected facilitators	
<b>Orientation and Training in conducting baseline for PEST/DEST</b>	Travel expenses for core team members (trainers)			Expenses for organizing WS at provincial level	
<b>Conducting Baseline survey at each province</b>	Travel expenses for core team members to visit new provinces conducting baseline survey Compiling final report	Travel expenses to visit schools for lesson observations and interviews		Travel expenses to visit schools for lesson observations and interviews	Travel expenses to visit schools for lesson observations and interviews
<b>Mentoring new provinces</b>	Travel expenses for core team members				

**Induction Stage (Follow-up activities to initial induction)**

<b>Activities</b>	<b>MOE</b>	<b>Province (mentors)</b>	<b>Province (new)</b>	<b>District (new) /Basic Schools</b>	<b>Secondary/ High schools</b>
<b>Visit by new provinces to mentor province and by mentor province to new province to attend stakeholder WS</b>		Travel expenses for PEST members to visit a new province	1) Travel expenses for PEST members to visit a mentor province 2) Expenses for organizing WS at provincial level		
<b>Conducting Stakeholder WS at provincial level</b>	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
<b>Conducting Facilitator WS at provincial level</b>	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
<b>Conduct lesson study activities at schools</b>				1) Expenses for preparing teaching & learning materials 2) Printing Lesson observation sheets	1) Expenses for preparing teaching & learning materials 2) Printing Lesson observation sheets
<b>Monitoring schools</b>			Transport (or expenses) for monitoring (PEST)	Transport (or expenses) for monitoring (DEST)	Transport (or expenses) for monitoring (facilitators & ZIC)
<b>National level meetings (NEST)</b>	Expenses for organizing meeting		Travel expenses to attend meetings		

### Implementation Stage

Activities	MOE	Province	District/ Basic Schools	Secondary/ High 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 & learning materials 2) Printing Lesson observation sheets	1) Expenses for preparing teaching & 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 & ZIC)
National level activities (NEST)	Expenses for organizing activities	Travel expenses to participate national level activities and other related expenses		