

ANNEX 1 Project Design Matrix

Project Title: Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET Malawi Phase II
Executing Bodies: Ministry of Education, Science and Technology (MoEST) and Japan International Cooperation Agency (JICA)
Target Teachers: All mathematics and science teachers in public secondary schools (3,400 teachers) and headteachers in public secondary schools
Target Area: 6 Divisions
Duration: 4 years (2008 - 2012)

Version 1.0 (19th May, 2008)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>Super goal</p> <p>The abilities of secondary school students in mathematics and science are improved in Malawi.</p>	<p>National Examination pass rate both at JCE and MSCE levels</p>	<p>National Examination results</p>	<p>The minimum number of M/S lessons/ periods per week is maintained. The learning environment of students is maintained.</p>
<p>Overall goal</p> <p>The quality of teaching & learning of mathematics and science is improved in secondary schools in Malawi.</p>	<p>(a) Secondary maths/science lessons sampled nationally obtain mean of over 3.0 on the scale of 1 to 5 in the Teaching & Learning Quality Index administered by the EMAS of MoEST. (b) Secondary maths/science lessons sampled nationally obtain mean of over 2.5 on the scale of 0 to 4 in the ASEI/PDSI checklist administered by the project M&E team.</p>	<p>(a) EMAS M&E reports (b) Project M&E reports</p>	<p>The stability of the teaching force within schools is maintained.</p>
<p>Project Purpose</p> <p>Quality INSETs for secondary mathematics and science teachers at Divisional level are provided.</p>	<p><u>By the end of the project</u>, Divisional INSETs obtain mean of over 2.5 on the scale of 0 to 4 in the INSET Quality Index through Pre- and Post-INSET, Session and Overall INSET evaluation instruments administered by the Monitoring and Evaluation Team.</p>	<p>Project M&E reports</p>	<p>Stability of Divisional trainers within divisions is maintained.</p>

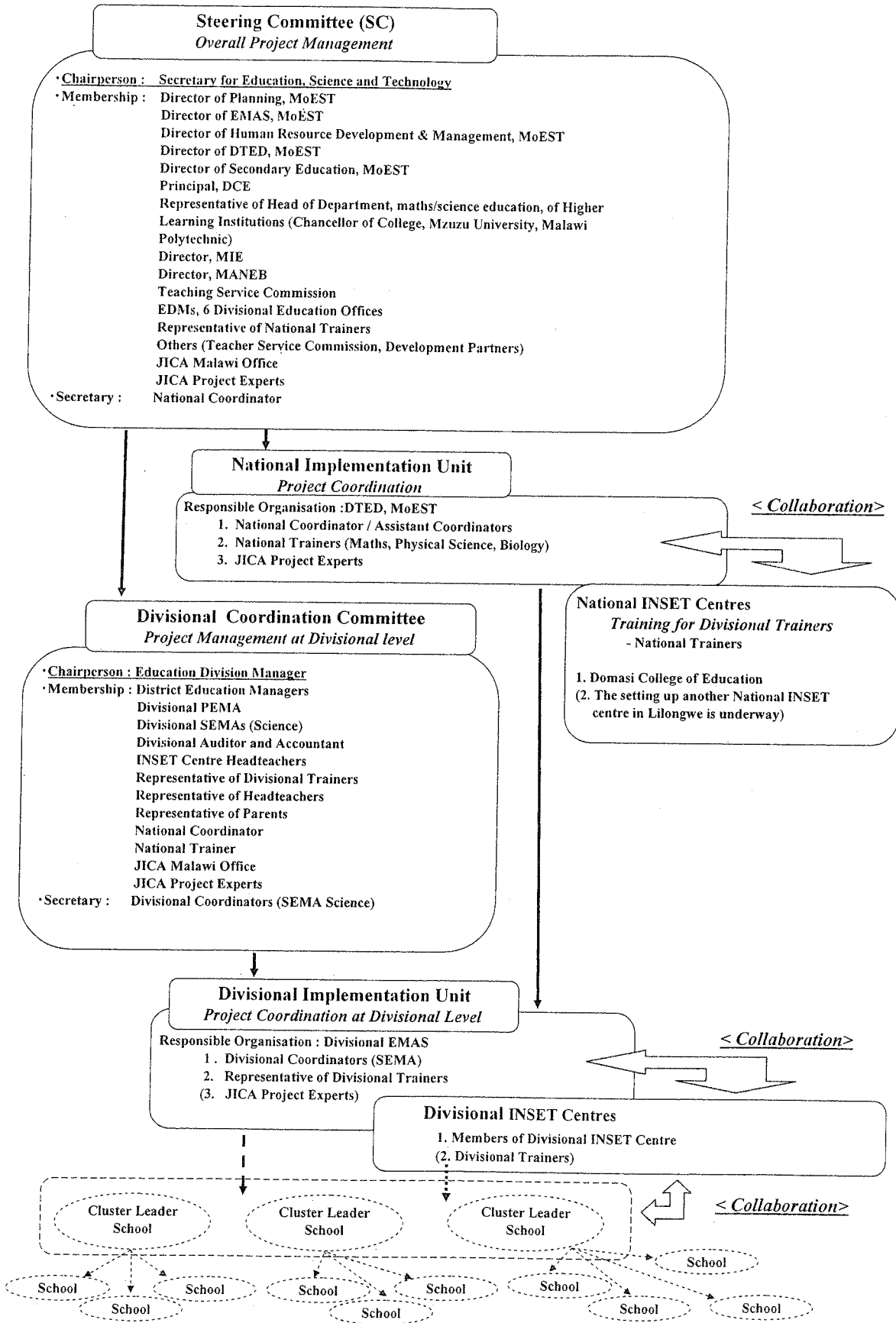
<u>Output(s):</u>		Project M&E reports	Stability of National trainers is maintained. Other educational activities will not interfere with the project activities. Stability and cooperation of leadership at all levels are maintained. INSET activities will be priority assignment for officers involved.
<p>1. Capacity of Divisional Trainers is strengthened.</p> <p>2. National INSET centre and divisional INSET centre as resource centre are strengthened.</p> <p>3. National & divisional INSETs and M&E are implemented.</p> <p>4. Sustainable INSET management system is strengthened at all levels.</p>	<p>By the end of the project,</p> <p>1(a) Over 240 divisional trainers undergo appropriate training.</p> <p>1(b) National and Divisional Trainers obtain mean of over 3 on the scale of 0 to 4 in the Trainer Capacity Index administered by the Monitoring and Evaluation Team.</p> <p>2(a) At least 1 national INSET centre and 19 divisional INSET centres are rehabilitated and equipped.</p> <p>2(b) Guideline to improve physical and material environment for INSET centres is developed.</p> <p>2(c) Physical and material environment for Divisional INSETs reach the level shown by INSET centre guideline.</p> <p>2(d) INSET material and equipment are fully utilized for activities of teacher professional development.</p> <p>3(a) Every year, one INSET is conducted at over 19 INSET centres in Malawi.</p> <p>3(b) National INSETs obtain mean of over 2.5 on the scale of 0 to 4 in the INSET Quality Index through Pre- and Post-INSET, Session and Overall INSET evaluation instruments administered by the Monitoring and Evaluation Team.</p> <p>3(c) Over 75% of all M/S teachers (2,500) in Public Secondary Schools attend Divisional INSETs.</p> <p>3(d) 9 INSET write-up per cycle (SEED 5: 4 subject & 1 general issue; and 4 for other divisions: 3 subject & 1 general issue) are developed.</p> <p>3(e) Divisional INSET M&E Reports are submitted for each INSET.</p> <p>4(a) Malawian's contribution to Divisional INSET Fund is increased.</p> <p>4(b) Over XXX headteachers and over XXX divisional and ministry officials participate training sessions for strengthening their administrative capacity.</p>	<p>Project M&E reports</p>	<p>Stability of National trainers is maintained.</p> <p>Other educational activities will not interfere with the project activities.</p> <p>Stability and cooperation of leadership at all levels are maintained. INSET activities will be priority assignment for officers involved.</p>

<p>Activities:</p> <p>1-1 Set TORs and recruitment criteria for National Trainers. 1-2 Recruit National Trainers. 1-3 Train National Trainers. 1-4 Sensitize M/S teachers for recruitment of Divisional Trainers 1-5 Set TORs and recruitment criteria for Divisional Trainers. 1-6 Recruit Divisional Trainers. 1-7 Train Divisional Trainers. 1-8 Conduct Trainers' meetings</p> <p>2-1 Set designation criteria for INSET centres 2-2 Designate and equip DCE and (to be decided) as National INSET Centres. 2-3 Designate schools as Divisional INSET centres. 2-4 Set minimum standards for INSET centres. 2-5 Conduct a survey on current physical and material environment at designated schools. 2-6 Carry out necessary maintenance and rehabilitation of the designated centres. 2-7 Equip INSET centres with T/L materials and facilities. 2-8 Set up guidelines for maintenance of equipment and facilities at INSET centres</p> <p>3-1 Conduct the baseline survey for M/S teachers. 3-2 Develop curriculums for INSETs. 3-3 Conduct National INSET. 3-4 Conduct monitoring and evaluation of National INSET. 3-5 Conduct Divisional INSET 3-6 Conduct monitoring and evaluation of Divisional INSET.</p> <p>4-1 Set TORs for different INSET committees. 4-2 Sensitize all stakeholders such as PTA, School Management Committee, and MoEST officials. 4-3 Establish INSET committees at different levels. 4-4 Establish Divisional INSET fund. 4-5 Strengthen leadership at all levels through trainings, workshops and study tours 4-6 Publicize INSET activities through newspapers, newsletters, radio and TV.</p>	<p>Inputs:</p> <p>1. <u>Malawian side:</u> (a) Office space and facilities necessary for the Project (b) Expenses for monitoring and evaluation. (c) Assignment of National Coordinator from DTED. (d) Assignment of full time National Trainers to the Project (e) Expenses necessary for the implementation of the Project (Running cost for INSETs)</p> <p>2. <u>Japanese side:</u> (a) Training of counterpart personnel in Japan, Kenya and other countries. (b) Provision of equipment, materials and maintenance of facilities(if necessary). (c) Dispatch of short / long term experts. (d) Expenses necessary for the implementation of the Project.</p>	
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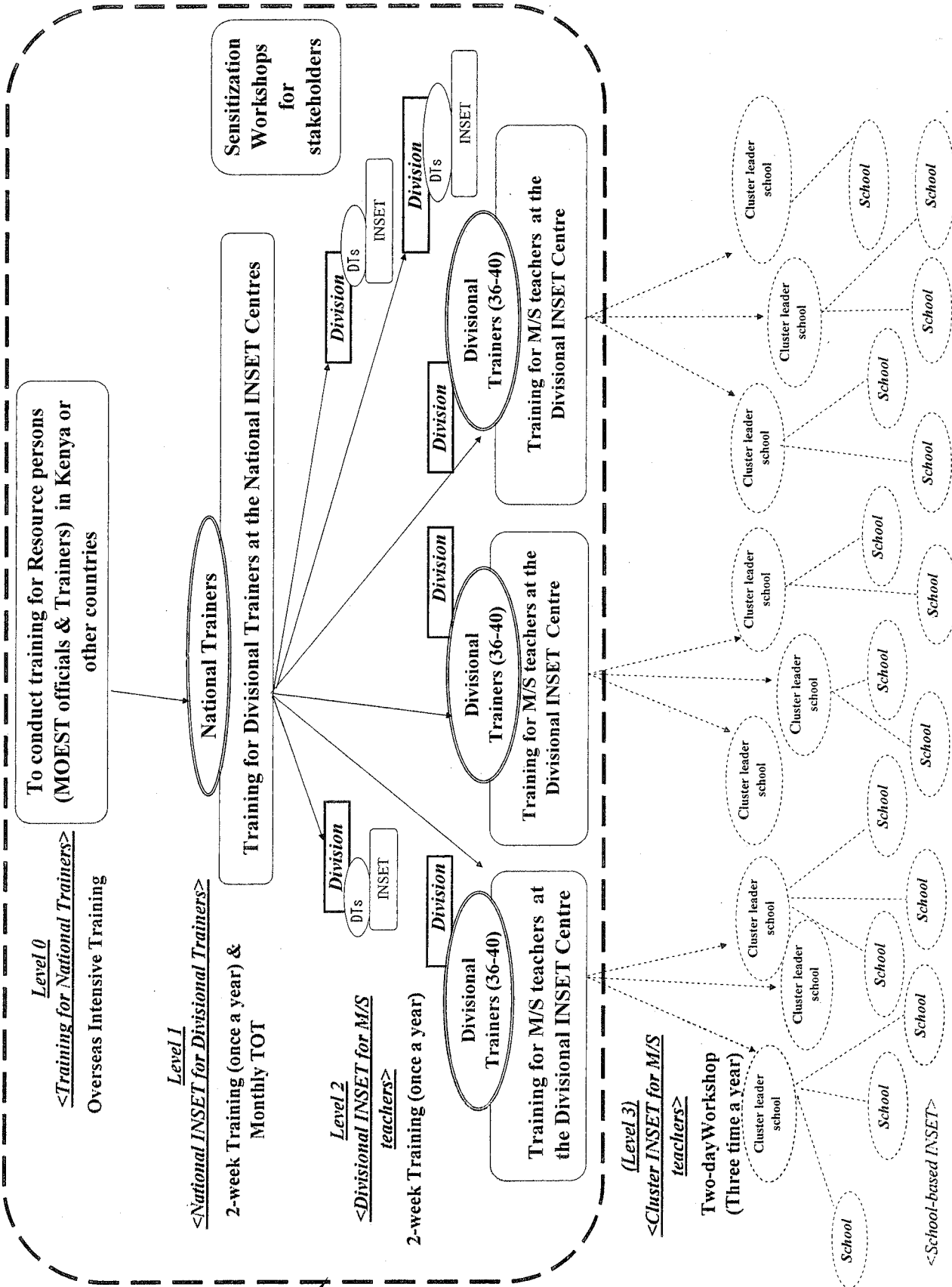
ANNEX 2 Plan of Operation (2608/09 - 2009/10)

[Activities]	2008						2009						2010												
	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
1-1 Set TORs and recruitment criteria for National Trainers.																									
1-2 Recruit National Trainers.																									
1-3 Train National Trainers.																									
1-4 Sensitize M/S teachers for recruitment of Divisional trainers																									
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1-6 Recruit Divisional Trainers.																									
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1-8 Conduct Trainers' meetings																									
2-1 Set designation criteria for INSET centres																									
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2-4 Designate schools as Divisional INSET centres.																									
2-5 Conduct a survey on current physical and material environment at designated schools.																									
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2-7 Equip INSET centres with T/L materials and facilities																									
2-8 Set up guidelines for maintenance of equipment and facilities at INSET centres																									
3-1 Conduct baseline survey for M/S teachers																									
3-2 Develop curriculum for INSETs																									
3-3 Conduct National INSET																									
3-4 Monitor and evaluate National INSET																									
3-5 Conduct Divisional INSET																									
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4-1 Set TORs for different INSET committees																									
4-2 Sensitize all stakeholders such as PTA, School Management Committee, and MoEST officials																									
4-3 Establish INSET committees at different levels																									
4-4 Establish Divisional INSET fund																									
4-5 Strengthen leadership at all levels through trainings, workshops, study tours																									
4-6 Publicize INSET activities through newspapers, newsletters, radio, TV																									

ANNEX 3 Organisational Chart



ANNEX 4 Training Structure



Area to be focused in project activities

ANNEX 5 Roles of Project Organizations

1. Steering Committee

The Steering Committee (SC), chaired by the Secretary for MoEST, shall take the highest authorities and responsibilities for the Project management and implementation.

The roles and functions of the Steering Committee (SC) shall be:

- (1) Approving the annual plan of operations of the project.
- (2) Reviewing the overall progress of the project.
- (3) Making policy decisions on major issues leading to INSET regularization and institutionalization.

Membership of the Committee shall include:

- Principal Secretary, MoEST (Chairperson)
- Director of Planning, MoEST
- Director of EMAS, MoEST
- Director of HRDM, MoEST
- Director of DTED, MoEST
- Director of Secondary Education, MoEST
- Principal, DCE
- Representatives of Head of Department, mathematics/science education, of higher learning institutions (Chancellor College, Mzuzu University, Malawi polytechnic)
- Director, MIE
- Director, MANEB
- Teaching Service Commission
- EDMs, 6 Divisional Education Boards
- Others (Development Partners)
- Representative of National Trainers
- JICA Malawi Office
- JICA Project Experts
- National Coordinator / Assistant Coordinator (Secretary)

2. National Implementation Unit

Department of Teacher Education and Development (DTED) under MoEST shall be responsible for coordination of the Project activities. As a National Implementation Unit, it shall carry out the following responsibilities:

- (1) Organizing and coordinating national INSET.
- (2) Developing curriculum for INSETs.
- (3) Organizing M&E activities.
- (4) Compiling project progress reports and presenting them to SC.
- (5) Issuing Certificates to participants.
- (6) Publicizing project activities.

Membership of the Unit shall include:

- National Coordinator / Assistant Coordinators
- National Trainers (Maths, Physical Science, Biology)
- JICA Project Experts

3. Divisional Coordination Committee (DCC)

The Divisional Coordination Committee (DCC), chaired by Education Division Manager, shall be responsible for the management and implementation of the project activities in the division.

The functions of the committee include:

- (1) Approve budget and programme for divisional INSETs.
- (2) Checking if the INSET centres are ready on time for INSETs.
- (3) Ensuring smooth implementation of INSETs.
- (4) Sensitizing parents, teachers and head teachers about SMASSE activities.
- (5) Responsible for disciplining participants as well as trainers during the INSET.
- (6) Monitoring and controlling the use of equipment at the INSET centres.
- (7) Approving division INSET reports.
- (8) Ensuring maintenance of equipment and facilities at the INSET centres.
- (9) (Monitoring INSET funds)

The membership of the Committee shall include:

- Education Division Manager (Chairperson)
- District Education Managers
- Divisional PEMA
- Divisional SEMA (Mathematics and Science)
- Divisional Auditor and Accountant

INSET Centre Headteachers
Representative of Divisional Trainers
Representative of Headteachers
Representative of Parents
National Coordinator
National Trainer
JICA Malawi Office
JICA Project Experts
Divisional Coordinator (SEMA) (Secretary)

4. Divisional Implementation Unit

Divisional EMAS will be in-charge of the coordination of project activities at divisional level. The SEMA (Mathematics and Science) shall be the Divisional Coordinator.

The functions of Divisional Implementation Unit include:

- (1) Modifying INSET programmes to suit divisional INSETs.
- (2) Preparing divisional INSET report.
- (3) Coordinating INSET and TOT activities at divisional level.
- (4) Collecting and consolidating budget estimates from divisional INSET centres.
- (5) Monitoring and evaluating classroom activities.
- (6) Organizing cluster activities in the divisions.

Membership of the Unit shall include:

Divisional Coordinator (SEMA)
Representative of Divisional Trainers
(JICA Project Experts)

5. National INSET Centres

National INSET Centres are venues where divisional trainers are to be trained. These centres are DCE and (to be decided) in Lilongwe

The roles of the national INSET Centres are as follows:

- (1) Hosting national INSETs (providing accommodation, teaching facilities, support staff).
- (2) Acting as a national resource centre.
- (3) Taking proper care of INSET equipment and facilities.

6. Divisional INSET Centres

The roles of the divisional INSET Centres are as follows:

- 1) Hosting divisional INSETs (providing accommodation, teaching facilities, support staff).
- 2) Acting as divisional resource centre.
- 3) Taking proper care of INSET equipment and facilities.

ANNEX 6 Terms of Reference of Coordinator, Trainers and Experts

1. National Coordinator/ Assistant National Coordinator

A National Coordinator and Assistant National Coordinator shall be appointed by the Secretary for MoEST to manage the National implementation Unit. They shall collaboratively develop the annual work plan.

The National Coordinator and the Assistant shall have the following roles and responsibilities:

- (1) Linking MoEST with DCE, JICA, Education Division Offices and any other relevant stakeholders.
- (2) Preparing, requisition, implementing and controlling the INSET unit budget.
- (3) Supporting and supervising activities at the National INSET Centres.
- (4) Compiling and presenting annual progress report of project activities to the Steering Committee (SC).
- (5) Conducting internal monitoring and evaluation of the National INSET.
- (6) Responsible for selecting and recruiting National Trainers.
- (7) Coordinating the formulation of INSET policies.
- (8) Implementing decisions made by the SC.
- (9) Supervising activities of National Trainers.

2. Divisional Coordinator

Divisional Coordinator will be in-charge of the coordination of project activities at divisional level. The SEMA (Mathematics and Science) from Divisional EMAS shall be the Divisional Coordinator.

Divisional Coordinator shall have the following roles and responsibilities:

- (1) Modifying INSET programmes to suit divisional INSETs.
- (2) Preparing divisional INSET report.
- (3) Coordinating INSET and TOT activities at divisional level.
- (4) Collecting and consolidating budget estimates from divisional INSET centres.
- (5) Monitoring and evaluating classroom activities.
- (6) Organizing cluster activities in the divisions.

3. National Trainers (NTs)

National Trainers are permanent staff at DTED (MoEST) who will be assigned to the Project. The NTs will implement training at National level.

The roles and responsibilities of the National trainers shall be:

- (1) Developing training manuals and materials for National and Divisional INSETs.
- (2) Producing training manuals and materials for National INSET.
- (3) Organizing and conducting training sessions, for Divisional Trainers, at the National level.
- (4) Developing the annual work plan collaboratively.
- (5) Developing monitoring and evaluation tools collaboratively.
- (6) Working in collaboration with Divisional implementation Unit in making the annual progress report of the project.
- (7) Supporting and supervising divisional trainers during trainings i.e. INSETs and monthly TOTs.
- (8) Coordinating and conducting classroom lesson observation (M&E).
- (9) Analyzing data and compiling reports for M&E exercise.
- (10) Conducting baseline survey to identify the needs of mathematics and science teachers in terms of lesson delivery.
- (11) Conduct research on maths and science.
- (12) Adhering strictly to work ethics as stipulated in the Project Document.

Criteria for Selecting National Trainers

- (1) Minimum qualification of a Bachelor's Degree in Education.
- (2) Must be a professional in mathematics and science education.
- (3) Must have minimum of 5 years of teaching experience.
- (4) Must show high level of dedication and commitment to duty.
- (5) Observable changes in attitude to the teaching and learning of mathematics and science.
- (6) Must be serving as a M/S teacher in MoEST.
- (7) Computer literacy will be an added advantage

4. Divisional Trainers (DTs)

The Divisional Trainers are core mathematics and science teachers from secondary schools.

The roles and responsibilities of the Divisional Trainers shall be:

- (1) Adapting the training manuals and materials developed by the National Trainers to the divisional INSETs.
- (2) Producing training manuals and materials for divisional INSETs.
- (3) Organizing and conducting the training sessions at the divisional INSET centre.
- (4) Organizing and conducting TOTs.
- (5) Monitoring and evaluating activities at divisional level.
- (6) Designing and improving curriculum for cluster-level INSET.
- (7) Developing, trying out and producing materials for cluster-level INSET.
- (8) Monitoring and evaluating the INSET activities at cluster level.
- (9) Writing articles and news features for the newsletters.
- (10) Conducting research and analyzing data.
- (11) Coordinating cluster INSET activities.
- (12) Adhering strictly to work ethics as stipulated in the project document.

Criteria for selecting Divisional Trainers:

- (1) Minimum qualification of Diploma in Education
- (2) Must have a minimum of 3 years of teaching experience
- (3) Must show high level of dedication and commitment to duty.
- (4) Observable changes in attitude to the teaching and learning of mathematics and science.
- (5) Must be serving as a M/S teacher in MoEST
- (6) Computer Literacy will be an added advantage.

5. JICA Project Experts

JICA Project Experts shall have the following roles and responsibilities:

One long term expert on;

[INSET planning & Administration / Coordination]

- (1) Advising on the planning, coordination, and implementation of the activities of the Project.
- (2) Liaising between Malawi and JICA sides to ensure the smooth implementation of the Project activities.
- (3) Managing JICA Project funds.

(4) In-charge of provision of equipment and materials from JICA.

One long term expert on;

[Mathematics and Science Education]

- (1) Advising on subject matters and methodology for INSETs.
- (2) Advising on the development of INSET curriculum.
- (3) Advising on M&E of INSET and its impact.

Short term experts, including SMASE-WECSA Experts, in areas such as INSET curriculum and M&E, will be dispatched according to necessities.

ANNEX 7 Budget estimate (2008/09 - 2011/12)

Estimate in MK

	2008/2009	2009/2010	2010/2011	-2011/2012	Total
MoEST	20,000,000	29,862,600	29,862,600	29,862,600	109,587,800
JICA	40,528,000	66,522,000	42,680,000	34,450,000	184,180,000
School/community	1,501,500	18,750,000	18,750,000	18,750,000	57,751,500
Total	62,029,500	115,134,600	91,292,600	83,062,600	351,519,300
MoEST	32.2%	25.9%	32.7%	36.0%	31.7%
JICA	65.3%	57.8%	46.8%	41.5%	52.8%
School/community	2.4%	16.3%	20.5%	22.6%	15.5%
Malawi side	34.7%	42.2%	53.2%	58.5%	47.2%
JICA side	65.3%	57.8%	46.8%	41.5%	52.8%

Estimate in US\$ (\$ 1= 150 MK)

	2008/2009	2009/2010	2010/2011	2011/2012	Total
MoEST	\$133,333	\$199,084	\$199,084	\$199,084	\$730,585
JICA	\$270,187	\$443,480	\$284,533	\$229,667	\$1,227,867
School/community	\$10,010	\$125,000	\$125,000	\$125,000	\$385,010
Total	\$413,530	\$767,564	\$608,617	\$553,751	\$2,343,462

ANNEX 7 (1) Budget Estimation [2008/09]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST (MK)	JICA (MK)	School/ Community (MK)
Management	Establishment of Secretariat	MoEST				2,302,600				
	Baseline Survey	MoEST				2,500,000				
	Divisional Trainer's Study tour for SEED INSET	MoEST				2,500,000				
	Training in Malaysia	JICA	25	350,000		8,750,000	35,876,600			
	Classroom M/E	JICA	4	5,000	30	600,000				
Secretariat (DTED)	Fuel	JICA		200,000	8	1,600,000				
	Sensitization activities	JICA				500,000				
	Procurement of Equipment	JICA				17,124,000				
	Meals, Transport & Night Allowance, etc	MoEST		100,000	10	600,000	600,000			
SEED TOT TOT(5divisions)	Meals, Transport & Night Allowance, etc	MoEST	5	100,000	6	3,000,000	3,000,000			
	Meals	MoEST	232	400	13	1,206,400				
	Service(Wage)	MoEST		120,000		120,000				
National INSETs for Divisional Trainers	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST		1,000,000		1,000,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000	4,415,400			
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000		20,000,000	40,528,000	1,501,500
	Refurbishment of Dormitory, Repair of Equipment	JICA				100,000				
	Procurement of Equipment	JICA				1,754,000	1,754,000			
	SEED Divisional INSETs for M/S Teachers	Meals	MoEST	385	400	13	2,002,000			
Service(Wage)		MoEST	3	120,000		360,000				
Allowance for Divisional Trainers		MoEST	40	700	13	364,000				
Session fee for Divisional Trainers		MoEST	40	700	10	280,000				
Transport for Divisional Trainers		MoEST	40	1,000		40,000				
Utilities (Water, Electricity, etc.)		MoEST	3	150,000		450,000				
Allowance for Participants		School	385	300	13	1,501,500				
Allowance for Participants		MoEST	385	200	13	1,001,000	16,383,500			
Transport for Participants		MoEST	385	1,000		385,000				
Teaching/learning materials For INSET Centres		JICA	3	200,000		600,000				
Divisional Education Offices & INSET Centres	Refurbishment of Dormitory, Repair of Equipment	JICA	3	200,000		600,000				
	Procurement of Equipment	JICA				8,800,000				
Total						62,029,500	62,029,500	32.2%	65.3%	2.4%

ANNEX 7(2) Budget Estimation [2009/10]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST (MK)	JICA (MK)	School/ Community (MK)
Management	Training in Kenya	JICA	80	180,000		14,400,000				
	Training in Malaysia	JICA	25	350,000		8,750,000				
	Classroom M/E	JICA	4	5,000	30	600,000	26,650,000			
	Fuel	JICA		200,000	12	2,400,000				
	Sensitization activities	JICA		500,000						
TOI	Meals, Transport & Night Allowance, etc	MoEST	6	100,000	6	3,600,000	3,600,000			
	Meals	MoEST	232	400	13	1,206,400				
National INSETs for Divisional Trainers	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				950,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000	4,365,400			
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000				
	Refurbishment of Dormitory & Repair of Equipment	JICA				100,000				
	Meals	MoEST	2,500	400	13	13,000,000		29,862,600	66,522,000	18,750,000
Divisional INSETs for M/S Teachers	Service(Wage)	MoEST	19	120,000		2,280,000				
	Allowance for Divisional Trainers	MoEST	232	700	13	2,111,200				
	Session fee for Divisional Trainers	MoEST	232	700	10	1,624,000				
	Transport for Divisional Trainers	MoEST	232	1,000		232,000				
	Utilities (Water, Electricity, Communication)	MoEST	19	150,000		2,850,000				
	Allowance for Participants	School/ community	2,500	500	13	16,250,000	48,447,200			
	Transport for Participants	School/ community	2,500	1,000		2,500,000				
	Teaching/learning materials For INSET Centres	JICA	19	200,000		3,800,000				
	Refurbishment of Dormitory, Repair of Equipment	JICA	19	200,000		3,800,000				
	Procurement of Equipment	JICA				32,072,000	32,072,000			
Divisional INSET Centre				Total	115,134,600	115,134,600	25.9%	57.8%	16.3%	

ANNEX 7 (3) Budget Estimation [2010/11]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST	JICA	School/ Community (MK)
Management	Training in Kenya	JICA	80	180,000		14,400,000				
	Training in Malaysia	JICA	25	350,000		8,750,000				
	Classroom M/E	JICA	4	5,000	30	600,000	26,650,000			
	Fuel	JICA		200,000	12	2,400,000				
	Sensitization activities	JICA				500,000				
TOT	Meals, Transport & Night Allowance, etc	MoEST	6	100,000	6	3,600,000	3,600,000			
National INSETs for Divisional Trainers	Meals	MoEST	232	400	13	1,206,400				
	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				950,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000	4,365,400			
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000				
	Refurbishment of Dormitory & Repair of Equipment	JICA				100,000		29,862,600	42,680,000	18,750,000
	Meals	MoEST	2,500	400	13	13,000,000				
Service(Wage)	MoEST	19	120,000		2,280,000					
Allowance for Divisional Trainers	MoEST	232	700	13	2,111,200					
Session fee for Divisional Trainers	MoEST	232	700	10	1,624,000					
Transport for Divisional Trainers	MoEST	232	1,000		232,000					
Utilities (Water, Electricity, Communication)	MoEST	19	150,000		2,850,000					
Divisional INSETs for M/S Teachers	Allowance for Participants	School/ community	2,500	500	13	16,250,000	56,677,200			
	Transport for Participants	School/ community	2,500	1,000		2,500,000				
	Teaching/learning materials For	JICA	19	200,000		3,800,000				
	Refurbishment of Dormitory, Repair of Equipment	JICA	19	200,000		3,800,000				
	Procurement of Equipment	JICA				8,230,000				
			Total			91,292,600	91,292,600	32.7%	46.8%	20.5%

ANNEX 7 (4) Budget Estimation [2011/12]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST	JICA	School/ Community (MK)
Management	Training in Kenya	JICA	80	180,000		14,400,000				
	Training in Malaysia	JICA	25	350,000		8,750,000				
	Classroom M/E	JICA	4	5,000	30	600,000	26,650,000			
	Fuel	JICA		200,000	12	2,400,000				
	Sensitization activities	JICA				500,000				
TOT	Meals, Transport & Night Allowance, etc	MoEST	6	100,000	6	3,600,000	3,600,000			
National INSETs for Divisional Trainers	Meals	MoEST	232	400	13	1,206,400				
	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				950,000				
	Utilities (Water, Electricity,etc.)	MoEST		150,000		150,000	4,365,400			
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000				
	Refurbishment of Dormitory & Repair of Equipment	JICA				100,000		29,862,600	34,450,000	18,750,000
Divisional INSETs for M/S Teachers	Meals	MoEST	2,500	400	13	13,000,000				
	Service(Wage)	MoEST	19	120,000		2,280,000				
	Allowance for Divisional Trainers	MoEST	232	700	13	2,111,200				
	Session fee for Divisional Trainers	MoEST	232	700	10	1,624,000				
	Transport for Divisional Trainers	MoEST	232	1,000		232,000				
	Utilities (Water, Electricity, Communication)	MoEST	19	150,000		2,850,000				
	Allowance for Participants	School/ community	2,500	500	13	16,250,000	48,447,200			
	Transport for Participants	School/ community	2,500	1,000		2,500,000				
	Teaching/learning materials For Refurbishment of Dormitory, Repair of Equipment	JICA	19	200,000		3,800,000				
		JICA	19	200,000		3,800,000				
	Total				83,062,600	83,062,600	36.0%	41.5%	22.6%	

ANNEX 8 List of Equipment

Estimate in MK

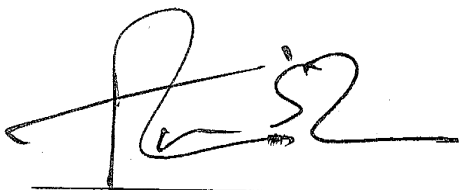
Place	JFY	Equipment	Unit Cost	Quantity	Sub-Total Cost	Total Cost
SMASSE Secretariat (DTED, MoEST)	2008	4X4 Vehicle(3.0Diesel Std 10str)	6,707,000	1	6,707,000	17,124,000
		4X4 Vehicle(2.5TD 16 Seater)	5,541,000	1	5,541,000	
		Photocopier	1,000,000	1	1,000,000	
		Laptop Computers	270,000	7	1,890,000	
		Desktop Computer	180,000	3	540,000	
		Laserjet Printer, Screen	200,000	3	600,000	
		LCD projector	250,000	1	250,000	
		UPS	10,000	3	30,000	
		AVS	15,000	3	45,000	
		Scanner	14,000	1	14,000	
		VCR	30,000	1	30,000	
		Flash Disk	40,000	7	280,000	
		External Floppy Disk Drive	8,000	4	32,000	
		MS-Office Professional	55,000	3	165,000	
National INSET Centre (DCE)	2008	Mattresses	6,000	250	1,500,000	1,754,000
		Mosquito Net	1,000	250	250,000	
		Cartain	100	40	4,000	
Divisional INSET Centres & Divisional Education Office	2008	Laptop Computers	270,000	5	1,350,000	8,800,000
		Desktop Computer	180,000	6	1,080,000	
		UPS	10,000	6	60,000	
		AVS	15,000	6	90,000	
		Laserjet Printer	160,000	11	1,760,000	
		Flash Disk	23,000	5	115,000	
		External Floppy Disk Drive	8,000	5	40,000	
		Digital Video Camera	140,000	5	700,000	
		Photocopiers	600,000	5	3,000,000	
		MS-Office Professional	55,000	11	605,000	
Divisional INSET Centres	2009	Laptop Computers	270,000	11	2,970,000	32,072,000
		Laserjet Printer	160,000	11	1,760,000	
		Flash Disk	23,000	11	253,000	
		External Floppy Disk Drive	8,000	11	88,000	
		Digital Video Camera	140,000	11	1,540,000	
		TV & VCR	130,000	16	2,080,000	
		Photocopiers	600,000	11	6,600,000	
		MS-Office Professional	55,000	11	605,000	
		Mattresses	6,000	2300	13,800,000	
		Mosquito Net	1,000	2300	2,300,000	
		Cartain	100	760	76,000	
Divisional INSET Centres	2010	LCD projector	250,000	16	4,000,000	8,230,000
		Mattresses	6,000	600	3,600,000	
		Mosquito Net	1,000	600	600,000	
		Cartain	100	300	30,000	
Total						67,980,000

**MINUTES OF MEETING BETWEEN
THE JAPANESE PREPARATORY STUDY TEAM AND
THE AUTHORITIES CONCERNED OF
THE GOVERNMENT OF THE REPUBLIC OF MALAWI ON
JAPANESE TECHNICAL COOPERATION FOR
STRENGTHENING OF MATHEMATICS AND SCIENCE
IN SECONDARY EDUCATION (SMASSE) INSET MALAWI PHASE II**

The Japanese Preparatory Study Team (hereinafter referred to as “Team”), organized by Japan International Cooperation Agency (hereinafter referred to as “JICA”) and headed by Mr. Shinichi Ishihara, visited the Republic of Malawi from 7th to 20th May 2008 in order to agree on the details of the Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET Malawi Phase II (hereinafter referred to as “the Project”).

During its stay in Malawi, the Team exchanged views through a series of discussions with the Ministry of Education, Science and Technology (hereinafter referred to as “Malawian side”) on the formulation of the Project. As a result of the discussions, both the Malawian side and the Team drew up the Project in the document attached hereto.

Lilongwe, 19th May, 2008



Mr. Anthony Livuza
Secretary for Education, Science and
Technology
Ministry of Education, Science and
Technology
Republic of Malawi



Mr. Shinichi Ishihara
Leader
Japanese Preparatory Study Team
Japan International Cooperation Agency
Japan

ATTACHED DOCUMENT

ATTENDANCE LIST

The meetings between the Malawian side and JICA side regarding the Project were held mainly in Lilongwe from 7th to 19th May, 2008. The participants are listed below.

Malawian Side

Ministry of Education, Science and Technology

Mr. Anthony Livuza	Secretary for Education, Science and Technology
Mr. A.F. Kamlongera	Director, Department of Planning
Ms. Matilda Kabuye	Director, EMAS
Mr. John Mswayo	Principal Education Method Advisor, EMAS
Ms. Regina Sambakunsi	Principal Education Method Advisor, EMAS
Ms. Dalless Mbewe	Acting Director, DTED
Mr. Alfred Kamoto	Training Manager of Secondary Section, DTED
Mr. Elvis Salagi	Logistics Manager for Teacher Education, DTED
Mr. Charles Gunsaru	Director, MIE
Mr. Jack Chalimba	Director(Examination), MANEB
Dr. Elias Chakwera	Principal, DCE
Mr. Arnold Mwanza	Deputy Principal, DCE
Dr. Mercy Kazima	Representing Principal, Chancellor College
Mr. Dudley Chiwala	Education Division Manager (CEED)
Mr. Harris Kachale	Education Division Manager (CWED)
Mr. Gossam Mafuta	Education Division Manager (SEED)
Sr. Eunice Dambo	Education Division Manager (SWED)
Ms. Hazel Manda	Education Division Manager (SHED)
Mr. P.C.B. Mkandawire	Representing Education Division Manager (NED)
Mr. Rosario Soko	Senior Education Method Advisor(NED)
Mr. Ernest Matengo	Senior Education Method Advisor(CWED)
Mr. Harold Chigalu	Senior Education Method Advisor(SEED)
Ms. Caroline Moto-Mwale	Senior Education Method Advisor(SWED)
Mr. Christopher Tsogolani	Senior Education Method Advisor(SHED)

SMASSE Secretariat

Mr. Mathias January	National Project Coordinator
Mr. Phaundi Shonga	National Project Administrator
Mr. George Vakusi	Subject administrator, Biology
Mr. Enock Chinomba	Subject administrator, Physical Science
Mr. Justus Nkhata	Subject administrator, Mathematics
Ms. Lisnet Mwadzaangati	Subject administrator, Home Economics

JICA Side

Preparatory Study Team

Mr. Shinichi Ishihara

Ms. Hazuki Uchiyama

Mr. Tatsuhiro Mitamura

JICA Malawi

Mr. Kyoji Mizutani

Mr. Hiroyuki Moronaga

Mr. Shingo Fujiwara

Mr. Hikaru Kusakabe

Director, Basic Education Division II, JICA

Expert, Science Education, SMASSE Project in Kenya

Senior Program Officer, Basic Education Division II, JICA

Resident Representative

Deputy Resident Representative

Assistant Resident Representative

Staff

ABBREVIATIONS

ASEI	Activity, Student, Experiment and Improvisation
CDSS	Community Day Secondary School
CEED	Central East Educational Division
CWED	Central West Educational Division
DCE	Domasi College of Education
DTED	Department of Teacher Education and Development
EMAS	Education Method Advisory Services
EMIS	Education Management Information System
INSET	In-Service Education and Training
HEC	Home Economics
JCE	Junior Certificate of Education
JICA	Japan International Cooperation Agency
M & E	Monitoring and Evaluation
MANEB	Malawi National Examinations Board
MIE	Malawi Institute of Education
MoEST	Ministry of Education, Science and Technology
MSCE	Malawi School Certificate of Education
NED	Northern Educational Division
ODA	Official Development Assistance
PDM	Project Design Matrix
PDSI	Plan, Do, See and Improve
PO	Plan of Operation
RD	Record of Discussions
SEED	South East Education Division
SHED	Southern Highland Educational Division
SMASSE	Strengthening of Mathematics and Science in Secondary Education
SMASE-WECSA	Strengthening of Mathematics and Science Education in Western, Eastern, Central and Southern Africa
SWED	Southern West Educational Division

I. Project Framework

On the basis of the proposal of the Project, the two parties have discussed and agreed on the Project framework, including Project Design Matrix, Plan of Operation, Training Structure, Project Organization, Budget Estimation, etc. The details of the agreed documents are attached in Annexes. The major points of the Project Framework that have been agreed upon are as follows:

1. Title of the Project

Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET Malawi Phase II

2. Objectives of the Project

1) Super Goal

The abilities of secondary school students in mathematics and science are improved in Malawi.

2) Overall Goal

The quality of teaching and learning of mathematics and science is improved in secondary schools in Malawi.

3) Project Purpose

Quality INSETs for secondary mathematics and science teachers at divisional level are provided.

4) Expected outcomes

- Capacity of Divisional Trainers is strengthened.
- National and Divisional INSET centres as resource centre are strengthened.
- National and Divisional INSETs and M&E are implemented.
- Sustainable INSET management system is strengthened at all levels.

3. Duration of the Project

The duration of the Project is to be four (4) years from August 2008 to August 2012, the commencement of the Project is subject to the progress of preparation by both parties.

4. Targets

- All six (6) divisions in Malawi will be covered.
- The Project will target three (3) core science subjects; Mathematics, Biology and Physical science. Home Economics will be covered additionally in all divisions, if enough funds are available.
- The Project will target all public secondary schools. The number of target schools is 773, according to the data provided by Education Division Offices.
- The expected nationwide number of participants at for Divisional INSET is approximately 2,500. This figure is estimated from the attendance rate of 75% for INSET. The total number of mathematics and science teachers is 3,400 teachers, which is reported by Education Division Offices.
- The students of secondary schools in Malawi, who are the indirect beneficiaries of INSETs, are 210,325, according to the EMIS statistics (2007).

5. INSET mechanism

1) Training venue

The National INSET will be held at Domasi College of Education (DCE) at first, while the setting up another National INSET centre in Lilongwe is underway.

The Divisional INSET will be held at Divisional INSET centres. Centres will be nominated by Division Offices and examined by National Implementation Unit. Divisional centres should be situated in an accessible location and should have necessary facilities such as laboratories and dormitories. Each centre will have 100-150 participants. The expected number of Divisional INSET centres is nineteen (19).

2) Period and duration of training

The duration of both National and Divisional INSET will be two (2) weeks. The National INSET will be held in January, which will be followed by the Divisional INSET in April.

3) National Trainer

Six (6) National Trainers, two (2) in each subject, will be recruited and assigned in DTED on full-time basis and the first three (3) National Trainers should be assigned by September 2008. Part-time National Trainers will be assigned from DCE personnel. They will be responsible for the administration and management of National INSET.

4) Divisional Trainer

Each Divisional INSET centre will have at least twelve (12) Divisional Trainers, four (4) per subject, and there will be approximately two hundreds forty (240) Divisional Trainers at all the INSET centres, who will be appointed from practicing teachers based on their teaching performance and professional attitude. Each division will be responsible for the recruitment for its Trainers.

5) INSET management

National INSET will be prepared, implemented and monitored by the National Implementation Unit led by the National Coordinator. The personnel from DTED should be assigned as a National Coordinator by August 2008.

Divisional INSET will be prepared and implemented by the Divisional Implementation Unit with technical support from National Trainers. Divisional Coordination Committee, chaired by the Education Division Manager, is responsible for the decision-making of the overall management of the Divisional INSET and Divisional INSET centres. The National Trainer is responsible for M&E of Divisional INSET and its impact.

6. Project Implementation Structure

The Project will be structured at the national and divisional level and will include all required decision-making institutions. For further details, see ANNEX 1 and 5.

7. Inputs of the Project

1) The Malawian side

- Responsible personnels (National coordinator and Divisional Coordinators)
- INSET Trainers (National Trainers and Divisional Trainers)
- INSET centres (National INSET centre and Divisional INSET centres)
- Project office, its repairing and maintenance
- Running costs for National and Divisional INSET

2) JICA

- Initial costs (equipping National and Divisional INSET centres)
- Refurbishment of INSET centres

- Training materials
- Experts (Japanese and SMASE-WECSA experts)
- Training in abroad

8. Budget

The Malawian side shall make the identified contributions over the period of four (4) years. Both sides have agreed on the cost sharing between the Malawian side and JICA as shown below (for the further detail of the costing, see ANNEX):

	4-year Total (MK)
Malawi	167,339,300
JICA	184,180,000
Total	351,519,300
Malawi %	47.6%
JICA %	52.4%

- The above budget shall be reviewed annually based on the annual workplan.

II. Way Forward

The Project shall start after the steps below are taken.

Date	Event	Remarks
June, 2008	Elaboration of the Project Document	
June – July, 2008	Internal Procedure of JICA	Internal procedure for the final approval by JICA Headquarter.
July, 2008	Signing of Record of Discussions (R/D)	R/D is the official document of the Project between JICA and the Malawian authorities.
August, 2008	Starting the Project	

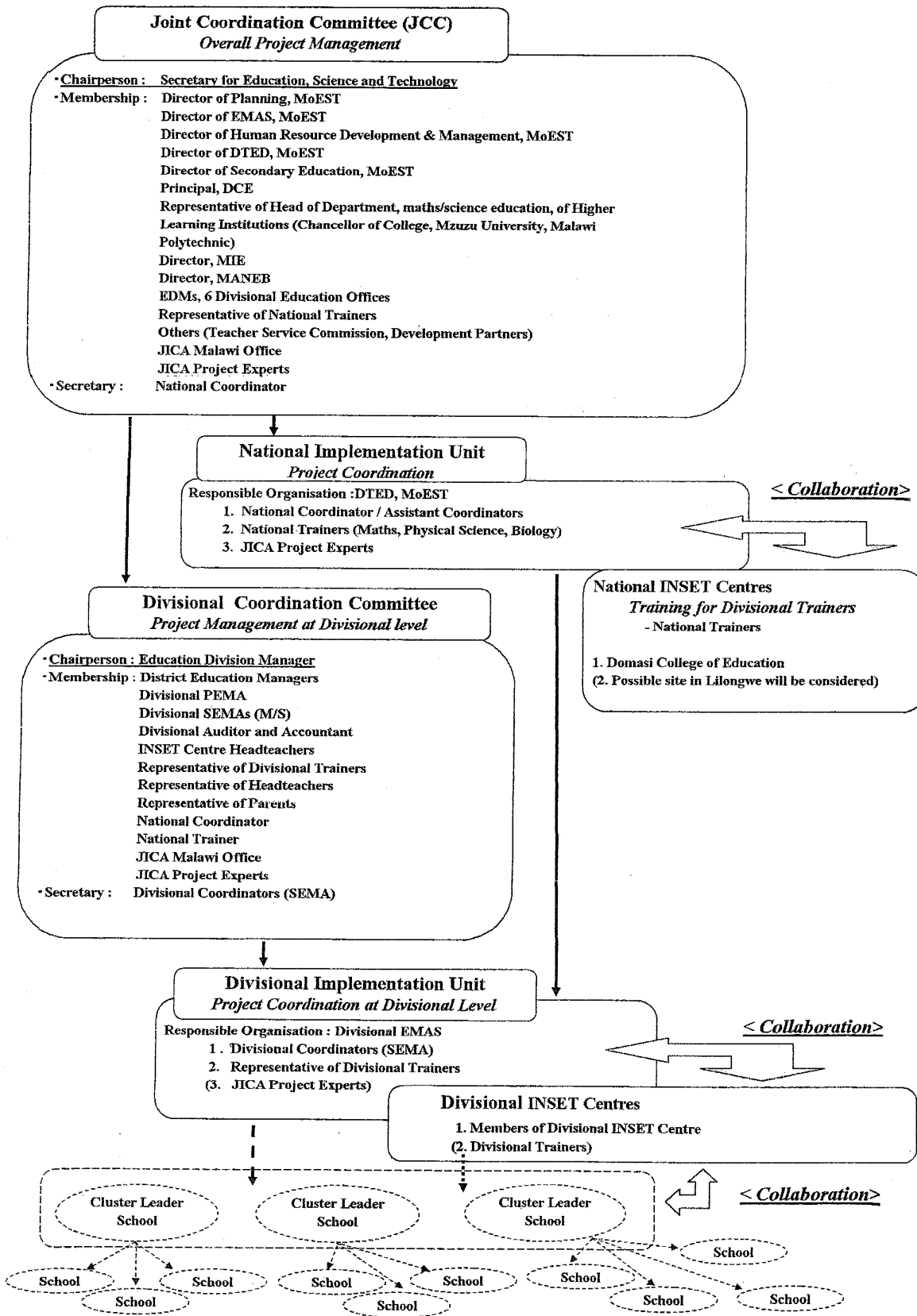
- The above schedule depends on the progress of the preparation of both sides.

ANNEX LIST

1. Organizational Chart
2. Training Structure
3. Project Design Matrix
4. Plan of Operation
5. Roles of Project Organizations
6. Terms of Reference of Coordinator, Trainers and Experts
7. Budget Estimate
8. List of Equipment



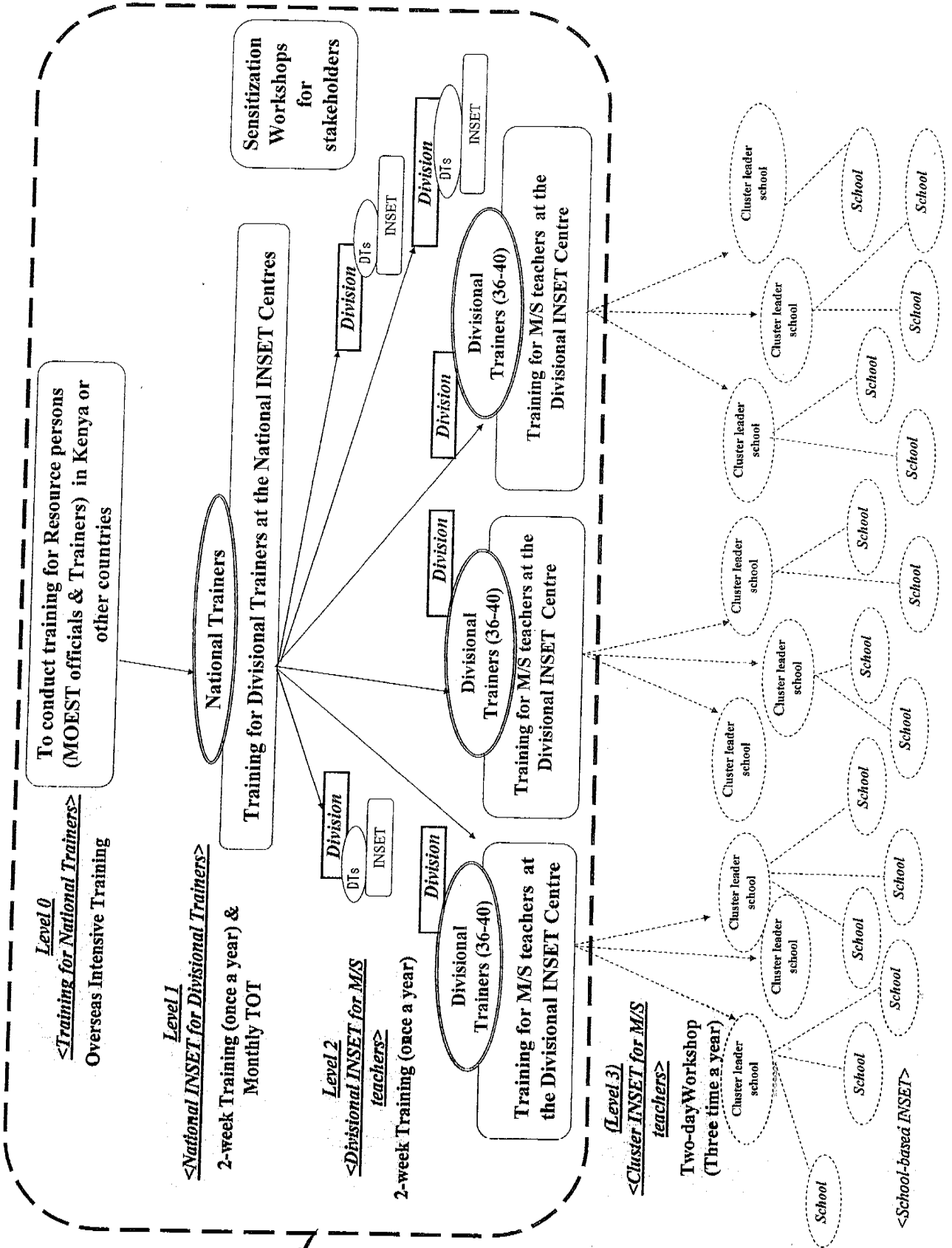
ANNEX 1 Organisational Chart



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ANNEX 2 Training Structure



Area to be focused in project activities

ANNEX 3 Project Design Matrix

Project Title: Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET Malawi Phase II
Executing Bodies: Ministry of Education, Science and Technology (MoEST) and Japan International Cooperation Agency (JICA)
Target Teachers: All mathematics and science teachers in public secondary schools (3,400 teachers) and headteachers in public secondary schools
Target Area: 6 Divisions
Duration: 4 years (2008 - 2012)

Version 1.0 (19th May, 2008)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Super goal The abilities of secondary school students in mathematics and science are improved in Malawi.	National Examination pass rate both at JCE and MSCE levels	National Examination results	The minimum number of M/S lessons/ periods per week is maintained. The learning environment of students is maintained.
Overall goal The quality of teaching & learning of mathematics and science is improved in secondary schools in Malawi.	(a) Secondary maths/science lessons sampled nationally obtain mean of over 3.0 on the scale of 1 to 5 in the Teaching & Learning Quality Index administered by the EMAS of MoEST. (b) Secondary maths/science lessons sampled nationally obtain mean of over 2.5 on the scale of 0 to 4 in the ASEI/PDSI checklist administered by the project M&E team.	(a) EMAS M&E reports (b) Project M&E reports	The stability of the teaching force within schools is maintained.
Project Purpose Quality INSETs for secondary mathematics and science teachers at Divisional level are provided.	By the end of the project, Divisional INSETs obtain mean of over 2.5 on the scale of 0 to 4 in the INSET Quality Index through Pre- and Post-INSET, Session and Overall INSET evaluation instruments administered by the Monitoring and Evaluation Team.	Project M&E reports	Stability of Divisional trainers within divisions is maintained. The cooperation between MoEST and JICA is maintained.

<p>Output(s):</p> <p>1. Capacity of Divisional Trainers is strengthened.</p> <p>2. National INSET centre and Divisional INSET centre as resource centre are strengthened.</p> <p>3. National & Divisional INSETs and M&E are implemented.</p> <p>4. Sustainable INSET management system is strengthened at all levels.</p>	<p><u>By the end of the project,</u></p> <p>1(a) Over 240 divisional trainers undergo appropriate training.</p> <p>1(b) National and Divisional Trainers obtain mean of over 3 on the scale of 0 to 4 in the Trainer Capacity Index administered by the Monitoring and Evaluation Team.</p> <p>2(a) At least 1 national INSET centre and 19 divisional INSET centres are rehabilitated and equipped.</p> <p>2(b) Guideline to improve physical and material environment for INSET centres is developed.</p> <p>2(c) Physical and material environment for Divisional INSETs reach the level shown by INSET centre guideline.</p> <p>2(d) INSET material and equipment are fully utilized for activities of teacher professional development.</p> <p>3(a) Every year, one INSET is conducted at over 19 INSET centres in Malawi.</p> <p>3(b) National INSETs obtain mean of over 2.5 on the scale of 0 to 4 in the INSET Quality Index through Pre- and Post-INSET, Session and Overall INSET evaluation instruments administered by the Monitoring and Evaluation Team.</p> <p>3(c) Over 75% of all M/S teachers in Public Secondary Schools attend Divisional INSETs.</p> <p>3(d) 9 INSET write-up per cycle (SEED 5: 4 subject & 1 general issue; and 4 for other divisions: 3 subject & 1 general issue) are developed.</p> <p>3(e) Divisional INSET M&E Reports are submitted for each INSET.</p> <p>4(a) Malawian's contribution to Divisional INSET Fund is increased.</p> <p>4(b) Over XXX headteachers and over XXX divisional and ministry officials participate training sessions for strengthening their administrative capacity.</p>	<p>Project M&E reports</p>	<p>Stability of National trainers is maintained.</p> <p>SMASE – WECSA will continue to support SMASSE INSET Malawi</p> <p>Funds from JICA are available timely.</p> <p>Other educational activities will not interfere with the project activities.</p> <p>Funds for National and Divisional INSETs are available timely.</p> <p>Stability and cooperation of leadership at all levels are maintained.</p> <p>INSET activities will be priority assignment for officers involved.</p>
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<p>Activities:</p> <p>1-1 Set TORs and recruitment criteria for National Trainers. 1-2 Recruit National Trainers. 1-3 Train National Trainers. 1-4 Sensitize M/S teachers for recruitment of Divisional Trainers. 1-5 Set TORs and recruitment criteria for Divisional Trainers. 1-6 Recruit Divisional Trainers. 1-7 Train Divisional Trainers. 1-8 Conduct Trainers' meetings.</p> <p>2-1 Set designation criteria for INSET centres. 2-2 Designate and equip DCE and (to be decided) as National INSET Centres. 2-3 Designate schools as Divisional INSET centres. 2-4 Set minimum standards for INSET centres. 2-5 Conduct a survey on current physical and material environment at designated schools. 2-6 Carry out necessary maintenance and rehabilitation of the designated centres. 2-7 Equip INSET centres with T/L materials and facilities. 2-8 Set up guidelines for maintenance of equipment and facilities at INSET centres.</p> <p>3-1 Conduct the baseline survey for M/S teachers. 3-2 Develop curriculums for INSETs. 3-3 Conduct National INSET. 3-4 Conduct monitoring and evaluation of National INSET. 3-5 Conduct Divisional INSET. 3-6 Conduct monitoring and evaluation of Divisional INSET.</p> <p>4-1 Set TORs for different INSET committees. 4-2 Sensitize all stakeholders such as PTA, School Management Committee, and MoEST officials. 4-3 Establish INSET committees at different levels. 4-4 Establish Divisional INSET fund. 4-5 Strengthen leadership at all levels through trainings, workshops and study tours. 4-6 Publicize INSET activities through newspapers, newsletters, radio and TV.</p>	<p>Inputs:</p> <p>1. <u>Malawian side:</u> (a) Office space and facilities necessary for the Project (b) Expenses for monitoring and evaluation (c) Assignment of National Coordinator from DTED (d) Assignment of full time National Trainers to the Project (e) Expenses necessary for the implementation of the Project (Running cost for INSETs)</p> <p>2. <u>Japanese side:</u> (a) Training of counterpart personnel in Japan, Kenya and other countries (b) Provision of equipment, materials and maintenance of facilities(if necessary) (c) Dispatch of short / long term experts (d) Expenses necessary for the implementation of the Project</p>	
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ANNEX 4 Plan of Operation (2008/09 - 2009/10)

[Activities]	2008						2009						2010													
	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	
1-1 Set TORs and recruitment criteria for National Trainers.																										
1-2 Recruit National Trainers.																										
1-3 Train National Trainers.																										
1-4 Sensitize M/S teachers for recruitment of Divisional trainers.																										
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2-8 Set up guidelines for maintenance of equipment and facilities at INSET centres.																										
3-1 Conduct baseline survey for M/S teachers.																										
3-2 Develop curriculum for INSETs.																										
3-3 Conduct National INSET.																										
3-4 Monitor and evaluate National INSET.																										
3-5 Conduct Divisional INSET.																										
3-6 Monitor and evaluate Divisional INSET.																										
4-1 Set TORs for different INSET committees.																										
4-2 Sensitize all stakeholders such as PTA, School Management Committee, and MoEST officials.																										
4-3 Establish INSET committees at different levels.																										
4-4 Establish Divisional INSET fund.																										
4-5 Strengthen leadership at all levels through trainings, workshops, study tours.																										
4-6 Publicize INSET activities through newspapers, newsletters, radio, TV.																										

Plan of Operation (2010/11 - 2011/12)

[Activities]	2010												2011												2012											
	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								
1-1 Set TORs and recruitment criteria for National Trainers.																																				
1-2 Recruit National Trainers.																																				
1-3 Train National Trainers.																																				
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4-6 Publicize INSET activities through newspapers, newsletters, radio, TV.																																				

ANNEX 5 Roles of Project Organizations

1. Joint Coordination Committee

The Joint Coordination Committee (JCC), chaired by the Secretary for MoEST, shall take the highest authorities and responsibilities for the Project management and implementation.

The roles and functions of the Joint Coordination Committee (JCC) shall be:

- (1) Approving the annual plan of operations of the project.
- (2) Reviewing the overall progress of the project.
- (3) Making policy decisions on major issues leading to INSET regularization and institutionalization.

Membership of the Committee shall include:

- Secretary for MoEST (Chairperson)
- Director of Planning, MoEST
- Director of EMAS, MoEST
- Director of HRDM, MoEST
- Director of DTED, MoEST
- Director of Secondary Education, MoEST
- Principal, DCE
- Representatives of Head of Department, maths/science education, of higher learning institutions (Chancellor College, Mzuzu University, Malawi polytechnic)
- Director, MIE
- Director, MANEB
- Teaching Service Commission
- EDMs, 6 Divisional Education Boards
- Others (Development Partners)
- Representative of National Trainers
- JICA Malawi Office
- JICA Project Experts
- National Coordinator / Assistant Coordinator (Secretary)

2. National Implementation Unit

Department of Teacher Education and Development (DTED) under MoEST shall be responsible for coordination of the Project activities. As a National Implementation Unit, it shall carry out the following responsibilities:

- (1) Organizing and coordinating national INSET.
- (2) Developing curriculum for INSETs.
- (3) Organizing M&E activities.
- (4) Compiling project progress reports and presenting them to JCC.
- (5) Issuing Certificates to participants.
- (6) Publicizing project activities.

Membership of the Unit shall include:

National Coordinator / Assistant Coordinators
National Trainers (Maths, Physical Science, Biology)
JICA Project Experts

3. Divisional Coordination Committee (DCC)

The Divisional Coordination Committee (DCC), chaired by Education Division Manager, shall be responsible for the management and implementation of the project activities in the division.

The functions of the committee include:

- (1) Approve budget and programme for divisional INSETs.
- (2) Checking if the INSET centres are ready on time for INSETs.
- (3) Ensuring smooth implementation of INSETs.
- (4) Sensitizing parents, teachers and head teachers about SMASSE activities.
- (5) Responsible for disciplining participants as well as trainers during the INSET.
- (6) Monitoring and controlling the use of equipment at the INSET centres.
- (7) Approving Division INSET reports.
- (8) Ensuring maintenance of equipment and facilities at the INSET centres.
- (9) (Monitoring INSET funds)

The membership of the Committee shall include:

Education Division Manager (Chairperson)
District Education Managers
Divisional PEMA
Divisional SEMA (M/S)

Divisional Auditor and Accountant
INSET Centre Headteachers
Representative of Divisional Trainers
Representative of Headteachers
Representative of Parents
National Coordinator
National Trainer
JICA Malawi Office
JICA Project Experts
Divisional Coordinator (SEMA) (Secretary)

4. Divisional Implementation Unit

Divisional EMAS will be in-charge of the coordination of project activities at divisional level. The SEMA (M/S) shall be the Divisional Coordinator.

The functions of Divisional Implementation Unit include:

- (1) Modifying INSET programmes to suit divisional INSETs.
- (2) Preparing divisional INSET report.
- (3) Coordinating INSET and TOT activities at divisional level.
- (4) Collecting and consolidating budget estimates from divisional INSET centres.
- (5) Monitoring and evaluating classroom activities.
- (6) Organizing cluster activities in the divisions.

Membership of the Unit shall include:

Divisional Coordinator (SEMA)
Representative of Divisional Trainers
(JICA Project Experts)

5. National INSET Centres

National INSET Centres are venues where divisional trainers are to be trained. These centres are DCE and (to be decided) in Lilongwe

The roles of the National INSET Centres are as follows:

- (1) Hosting National INSETs (providing accommodation, teaching facilities, support staff).
- (2) Acting as a national resource centre.
- (3) Taking proper care of INSET equipment and facilities.

6. Divisional INSET Centres

The roles of the Divisional INSET Centres are as follows:

- (1) Hosting Divisional INSETs (providing accommodation, teaching facilities, support staff).
- (2) Acting as divisional resource centre.
- (3) Taking proper care of INSET equipment and facilities.

ANNEX 6 Terms of Reference of Coordinator, Trainers and Experts

1. National Coordinator/ Assistant National Coordinator

A National Coordinator and Assistant National Coordinator shall be appointed by the Secretary for MoEST to manage the National implementation Unit. They shall collaboratively develop the annual work plan.

The National Coordinator and the Assistant shall have the following roles and responsibilities:

- (1) Linking MoEST with DCE, JICA, Education Division Offices and any other relevant stakeholders.
- (2) Preparing, requisition, implementing and controlling the INSET unit budget.
- (3) Supporting and supervising activities at the National INSET Centres.
- (4) Compiling and presenting annual progress report of project activities to the Joint Coordination Committee (JCC).
- (5) Conducting internal monitoring and evaluation of the National INSET.
- (6) Responsible for selecting and recruiting National Trainers.
- (7) Coordinating the formulation of INSET policies.
- (8) Implementing decisions made by the JCC.
- (9) Supervising activities of National Trainers.

2. Divisional Coordinator

Divisional Coordinator will be in-charge of the coordination of project activities at divisional level. The SEMA (M/S) from Divisional EMAS shall be the Divisional Coordinator.

Divisional Coordinator shall have the following roles and responsibilities:

- (1) Modifying INSET programmes to suit divisional INSETs.
- (2) Preparing divisional INSET report.
- (3) Coordinating INSET and TOT activities at divisional level.
- (4) Collecting and consolidating budget estimates from divisional INSET centres.
- (5) Monitoring and evaluating classroom activities.
- (6) Organizing cluster activities in the divisions.

3. National Trainers (NTs)

National Trainers are permanent staff at DTED (MoEST) who will be assigned to the Project. The NTs will implement training at National level.

The roles and responsibilities of the National trainers shall be:

- (1) Developing training manuals and materials for National and Divisional INSETs.
- (2) Producing training manuals and materials for National INSET.
- (3) Organizing and conducting training sessions, for Divisional Trainers, at the National level.
- (4) Developing the annual work plan collaboratively.
- (5) Developing monitoring and evaluation tools collaboratively.
- (6) Working in collaboration with Divisional implementation Unit in making the annual progress report of the project.
- (7) Supporting and supervising divisional trainers during trainings i.e. INSETs and monthly TOTs.
- (8) Coordinating and conducting classroom lesson observation (M&E).
- (9) Analyzing data and compiling reports for M&E exercise.
- (10) Conducting baseline survey to identify the needs of mathematics and science teachers in terms of lesson delivery.
- (11) Conduct research on maths and science.
- (12) Adhering strictly to work ethics as stipulated in the Project Document.

4. Divisional Trainers (DTs)

The Divisional Trainers are core mathematics and science teachers from secondary schools.

The roles and responsibilities of the Divisional Trainers shall be:

- (1) Adapting the training manuals and materials developed by the National Trainers to the divisional INSETs.
- (2) Producing training manuals and materials for divisional INSETs.
- (3) Organizing and conducting the training sessions at the divisional INSET centre.
- (4) Organizing and conducting TOTs.
- (5) Monitoring and evaluating activities at divisional level.
- (6) Designing and improving curriculum for cluster-level INSET.
- (7) Developing, trying out and producing materials for cluster-level INSET.
- (8) Monitoring and evaluating the INSET activities at cluster level.
- (9) Writing articles and news features for the newsletters.
- (10) Conducting research and analyzing data.
- (11) Coordinating cluster INSET activities.
- (12) Adhering strictly to work ethics as stipulated in the project document.



5. JICA Project Experts

JICA Project Experts shall have the following roles and responsibilities:

One long term expert on;

[INSET planning & Administration / Coordination]

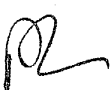
- (1) Advising on the planning, coordination, and implementation of the activities of the Project.
- (2) Liaising between Malawi and JICA sides to ensure the smooth implementation of the Project activities.
- (3) Managing JICA Project funds.
- (4) In-charge of provision of equipment and materials from JICA.

One long term expert on;

[Mathematics and Science Education]

- (1) Advising on subject matters and methodology for INSETs.
- (2) Advising on the development of INSET curriculum.
- (3) Advising on M&E of INSET and its impact.

Short term experts, including SMASE-WECSA Experts, in areas such as INSET curriculum and M&E, will be dispatched according to necessities.



ANNEX 7: Budget estimate (2008/09 - 2011/12)

Estimate in MK

	2008/2009	2009/2010	2010/2011	2011/2012	Total
MoEST	20,000,000	29,862,600	29,862,600	29,862,600	109,587,800
JICA	40,528,000	66,522,000	42,680,000	34,450,000	184,180,000
School/community	1,501,500	18,750,000	18,750,000	18,750,000	57,751,500
Total	62,029,500	115,134,600	91,292,600	83,062,600	351,519,300
MoEST	32.2%	25.9%	32.7%	36.0%	31.2%
JICA	65.3%	57.8%	46.8%	41.5%	52.4%
School/community	2.4%	16.3%	20.5%	22.6%	16.4%
Malawi side	34.7%	42.2%	53.2%	58.5%	47.6%
JICA side	65.3%	57.8%	46.8%	41.5%	52.4%

Estimate in US\$ (\$ 1 = 150 MK)

	2008/2009	2009/2010	2010/2011	2011/2012	Total
MoEST	\$133,333	\$199,084	\$199,084	\$199,084	\$730,585
JICA	\$270,187	\$443,480	\$284,533	\$229,667	\$1,227,867
School/community	\$10,010	\$125,000	\$125,000	\$125,000	\$385,010
Total	\$413,530	\$767,564	\$608,617	\$553,751	\$2,343,462

ANNEX 7 (1) Budget Estimate [2008/09]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST (MK)	JICA (MK)	School/ Community (MK)
Management	Establishment of Secretariat	MoEST				2,302,600				
	Baseline Survey	MoEST				2,500,000				
	Divisional Trainer's Study tour for SEED	MoEST				2,500,000				
	INSET									
	Training in Malaysia	JICA	25	350,000		8,750,000	35,876,600			
	Classroom M/E	JICA	4	5,000	30	600,000				
	Fuel	JICA		200,000	8	1,600,000				
Secretariat (DTED)	Sensitization activities	JICA				500,000				
	Procurement of Equipment	JICA				17,124,000				
SEED TOT TOT(5divisions)	Meals, Transport & Night Allowance, etc	MoEST		100,000	10	600,000	600,000			
	Meals, Transport & Night Allowance, etc	MoEST	5	100,000	6	3,000,000	3,000,000			
	Meals	MoEST	232	400	13	1,206,400				
	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				1,000,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000	4,415,400			
	Monitoring & Evaluation	MoEST				70,000				
National INSETs for Divisional Trainers	Teaching/learning materials For INSET Centres	JICA				100,000			40,528,000	1,501,500
	Refurbishment of Dormitory, Repair of Equipment	JICA				100,000				
National INSET Centre (DCE)	Procurement of Equipment	JICA				1,754,000	1,754,000			
	Meals	MoEST	385	400	13	2,002,000				
SEED Divisional INSETs for M/S Teachers	Service(Wage)	MoEST	3	120,000		360,000				
	Allowance for Divisional Trainers	MoEST	40	700	13	364,000				
	Session fee for Divisional Trainers	MoEST	40	700	10	280,000				
	Transport for Divisional Trainers	MoEST	40	1,000		40,000				
	Utilities (Water, Electricity, etc.)	MoEST	3	150,000		450,000				
	Allowance for Participants	School	385	300	13	1,501,500				
	Allowance for Participants	MoEST	385	200	13	1,001,000				
	Transport for Participants	MoEST	385	1,000		385,000	16,383,500			
	Teaching/learning materials For INSET Centres	JICA	3	200,000		600,000				
	Refurbishment of Dormitory, Repair of Equipment	JICA	3	200,000		600,000				
Divisional Education Offices & INSET Centres	Procurement of Equipment	JICA				8,800,000				
					Total	62,029,500	62,029,500	32.2%	65.3%	2.4%

ANNEX 7 (2) Budget Estimate [2009/10]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST (MK)	JICA (MK)	School/ Community (MK)
Management	Training in Kenya	JICA	80	180,000		14,400,000				
	Training in Malaysia	JICA	25	350,000		8,750,000				
	Classroom M/E	JICA	4	5,000	30	600,000	26,650,000			
	Fuel	JICA		200,000	12	2,400,000				
TOT	Sensitization activities	JICA				500,000				
	Meals, Transport & Night Allowance, etc	MoEST	6	100,000	6	3,600,000	3,600,000			
National INSETs for Divisional Trainers	Meals	MoEST	232	400	13	1,206,400				
	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				950,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000	4,365,400			
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000				
	Refurbishment of Dormitory & Repair of Equipment	JICA				100,000				
Divisional INSETs for M/S Teachers	Meals	MoEST	2,500	400	13	13,000,000		29,862,600	66,522,000	18,750,000
	Service(Wage)	MoEST	19	120,000		2,280,000				
	Allowance for Divisional Trainers	MoEST	232	700	13	2,111,200				
	Session fee for Divisional Trainers	MoEST	232	700	10	1,624,000				
	Transport for Divisional Trainers	MoEST	232	1,000		232,000				
	Utilities (Water, Electricity, Communication)	MoEST	19	150,000		2,850,000				
	Allowance for Participants	School/ community	2,500	500	13	16,250,000	48,447,200			
	Transport for Participants	School/ community	2,500	1,000		2,500,000				
	Teaching/learning materials For INSET Centres	JICA	19	200,000		3,800,000				
	Refurbishment of Dormitory, Repair of Equipment	JICA	19	200,000		3,800,000				
Divisional INSET Centre	Procurement of Equipment	JICA				32,072,000	32,072,000			
			Total			115,134,600	115,134,600	25.9%	57.8%	16.3%

ANNEX 7 (3) Budget Estimate [2010/11]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST	JICA	School/ Community (MK)
Management	Training in Kenya	JICA	80	180,000		14,400,000	26,650,000			
	Training in Malaysia	JICA	25	350,000		8,750,000				
	Classroom M/E	JICA	4	5,000	30	600,000				
	Fuel	JICA		200,000	12	2,400,000				
	Sensetization activities	JICA				500,000				
TOT	Meals, Transport & Night Allowance, etc	MoEST	6	100,000	6	3,600,000	3,600,000			
National INSETs for Divisional Trainers	Meals	MoEST	232	400	13	1,206,400	4,365,400			
	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				950,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000				
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000				
	Refurbishment of Dormitory & Repair of Equipment	JICA				100,000				
Divisional INSETs for M/S Teachers	Meals	MoEST	2,500	400	13	13,000,000	56,677,200			
	Service(Wage)	MoEST	19	120,000		2,280,000				
	Allowance for Divisional Trainers	MoEST	232	700	13	2,111,200				
	Session fee for Divisional Trainers	MoEST	232	700	10	1,624,000				
	Transport for Divisional Trainers	MoEST	232	1,000		232,000				
	Utilities (Water, Electricity, Communication)	MoEST	19	150,000		2,850,000				
	Allowance for Participants	School/ community	2,500	500	13	16,250,000				
	Transport for Participants	School/ community	2,500	1,000		2,500,000				
	Teaching/learning materials For	JICA	19	200,000		3,800,000				
	Refurbishment of Dormitory, Repair of Equipment	JICA	19	200,000		3,800,000				
Divisional INSET Centre	Procurement of Equipment	JICA				8,230,000	91,292,600	32.7%	46.8%	20.5%
					Total					

ANNEX 7 (4) Budget Estimate [2011/12]

Activities	Items	Responsible Organizations	Number of Participants	Unit Cost (MK)	Days/ Months	Breakdown (MK)	Annual Cost (MK)	MoEST	JICA	School/ Community (MK)
Management	Training in Kenya	JICA	80	180,000		14,400,000				
	Training in Malaysia	JICA	25	350,000		8,750,000				
	Classroom M/E	JICA	4	5,000	30	600,000	26,650,000			
	Fuel	JICA		200,000	12	2,400,000				
	Sensetization activities	JICA				500,000				
TOT	Meals, Transport & Night Allowance, etc	MoEST	6	100,000	6	3,600,000	3,600,000			
National INSETs for Divisional Trainers	Meals	MoEST	232	400	13	1,206,400				
	Service(Wage)	MoEST		120,000		120,000				
	Allowance for National Trainers	MoEST	10	700	13	91,000				
	Session fee for National Trainers	MoEST	10	700	10	70,000				
	Allowance	MoEST	232	500	13	1,508,000				
	Transport	MoEST				950,000				
	Utilities (Water, Electricity, etc.)	MoEST		150,000		150,000	4,365,400			
	Monitoring & Evaluation	MoEST				70,000				
	Teaching/learning materials For INSET Centres	JICA				100,000		29,862,600	34,450,000	18,750,000
	Refurbishment of Dormitory & Repair of Equipment	JICA				100,000				
	Meals			2,500	400	13	13,000,000			
	Service(Wage)	MoEST	19	120,000		2,280,000				
	Allowance for Divisional Trainers	MoEST	232	700	13	2,111,200				
Session fee for Divisional Trainers	MoEST	232	700	10	1,624,000					
Transport for Divisional Trainers	MoEST	232	1,000		232,000					
Utilities (Water, Electricity, Communication)	MoEST	19	150,000		2,850,000	48,447,200				
Allowance for Participants	School/ community	2,500	500	13	16,250,000					
Transport for Participants	School/ community	2,500	1,000		2,500,000					
Teaching/learning materials For Refurbishment of Dormitory, Repair of Equipment	JICA	19	200,000		3,800,000					
		JICA	19	200,000		3,800,000				
Total						83,062,600	83,062,600	36.0%	41.5%	22.6%

ANNEX 8 List of Equipment

						Estimate in MK	
Place	JFY	Equipment	Unit Cost	Quantity	Sub-Total Cost	Total Cost	
SMASSE Secretariat (DTED, MoEST)	2008	4X4 Vehicle(3.0Diesel Std 10str)	6,707,000	1	6,707,000	17,124,000	27,678,000
		4X4 Vehicle(2.5TD 16 Seater)	5,541,000	1	5,541,000		
		Photocopier	1,000,000	1	1,000,000		
		Laptop Computers	270,000	7	1,890,000		
		Desktop Computer	180,000	3	540,000		
		Laserjet Printer, Screen	200,000	3	600,000		
		LCD projector	250,000	1	250,000		
		UPS	10,000	3	30,000		
		AVS	15,000	3	45,000		
		Scanner	14,000	1	14,000		
		VCR	30,000	1	30,000		
		Flash Disk	40,000	7	280,000		
		External Floppy Disk Drive	8,000	4	32,000		
		MS-Office Professional	55,000	3	165,000		
National INSET Centre (DCE)	2008	Mattresses	6,000	250	1,500,000	1,754,000	
		Mosquito Net	1,000	250	250,000		
		Cartain	100	40	4,000		
Divisional INSET Centres & Divisional Education Office	2008	Laptop Computers	270,000	5	1,350,000	8,800,000	
		Desktop Computer	180,000	6	1,080,000		
		UPS	10,000	6	60,000		
		AVS	15,000	6	90,000		
		Laserjet Printer	160,000	11	1,760,000		
		Flash Disk	23,000	5	115,000		
		External Floppy Disk Drive	8,000	5	40,000		
		Digital Video Camera	140,000	5	700,000		
		Photocopiers	600,000	5	3,000,000		
		MS-Office Professional	55,000	11	605,000		
Divisional INSET Centres	2009	Laptop Computers	270,000	11	2,970,000	32,072,000	
		Laserjet Printer	160,000	11	1,760,000		
		Flash Disk	23,000	11	253,000		
		External Floppy Disk Drive	8,000	11	88,000		
		Digital Video Camera	140,000	11	1,540,000		
		TV & VCR	130,000	16	2,080,000		
		Photocopiers	600,000	11	6,600,000		
		MS-Office Professional	55,000	11	605,000		
		Mattresses	6,000	2300	13,800,000		
		Mosquito Net	1,000	2300	2,300,000		
		Cartain	100	760	76,000		
		Divisional INSET Centres	2010	LCD projector	250,000		
Mattresses	6,000			600	3,600,000		
Mosquito Net	1,000			600	600,000		
Cartain	100			300	30,000		
Total						67,980,000	