No.

Oromia Education Bureau (OEB)
Oromia Region State
The Federal Democratic
Republic of Ethiopia

OEB/JICA SMAPP PROJECT

THE PROJECT ON INCREASING ACCESS TO QUALITY BASIC EDUCATION THROUGH DEVELOPING SCHOOL MAPPING AND STRENGTHENING MICRO-PLANNING IN OROMIA REGION, ETHIOPIA

FINAL REPORT

MAIN REPORT

AUGUST 2007

JAPAN INTERNATIONAL COOPERATION AGENCY

KRI INTERNATIONAL CORP

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JR
07-30

OEB/JICA SMAPP PROJECT

THE PROJECT ON INCREASING ACCESS TO QUALITY BASIC EDUCATION THROUGH DEVELOPING SCHOOL MAPPING AND STRENGTHENING MICRO-PLANNING IN OROMIA REGION (SMAPP)

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Currency Equivalents
USD 1= Birr 8.911 = JPY = 123
as of July 2007

PREFACE

In response to a request from the Government of the Federal Democratic Republic of Ethiopia, the Government of Japan decided to conduct the Project on Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-Planning in Oromia Region (SMAPP)" and entrusted it to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team headed by Mr. Masanobu Ninomiya of the KRI International Corp., to Ethiopia between April 2005 and September 2007.

The team held discussions with the officials concerned of the Government of the Federal Democratic Republic of Ethiopia, the Oromia National Regional State, stakeholders at the zone, woreda levels and implemented the project activities in the target areas. Upon returning to Japan, the team conducted further analyses and prepared this final report.

I hope this report will contribute towards the promotion of the quality primary education in Ethiopia and towards the enhancement of friendly relations between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of the Federal Democratic Republic of Ethiopia for their close cooperation extended to the project.

August 2007

Yoshihisa Ueda,

Vice-President

Japan International Cooperation Agency

Mr. Yoshihisa Ueda,

Vice-President

Japan International Cooperation Agency

Dear Mr. Ueda

Letter of Transmittal

We are pleased to submit to you the Final Report on "The Project on Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-planning in Oromia Region (SMAPP)". Under the contract with you esteemed organization, the subject study was carried out for the 30-month period from April 2005 to September 2007.

The study team 1) provided technical support to enhance Education Management Information System (EMIS), thereby preparing and distributing school record formats to all the primary schools in the Region; 2) developed the OEdMap that is the school mapping database with Geographic Information System (GIS) and utilized it for planning and monitoring; 3) provided training in micro-planning, thereby formulating Woreda Primary Education Development Plan for all the 117 pilot woredas (districts), in order to build capacity of education officers at the region, zone and woreda levels in areas of data management, planning and marketing through strengthening the decentralization policy of the Government of the Federal Democratic Republic of Ethiopia.

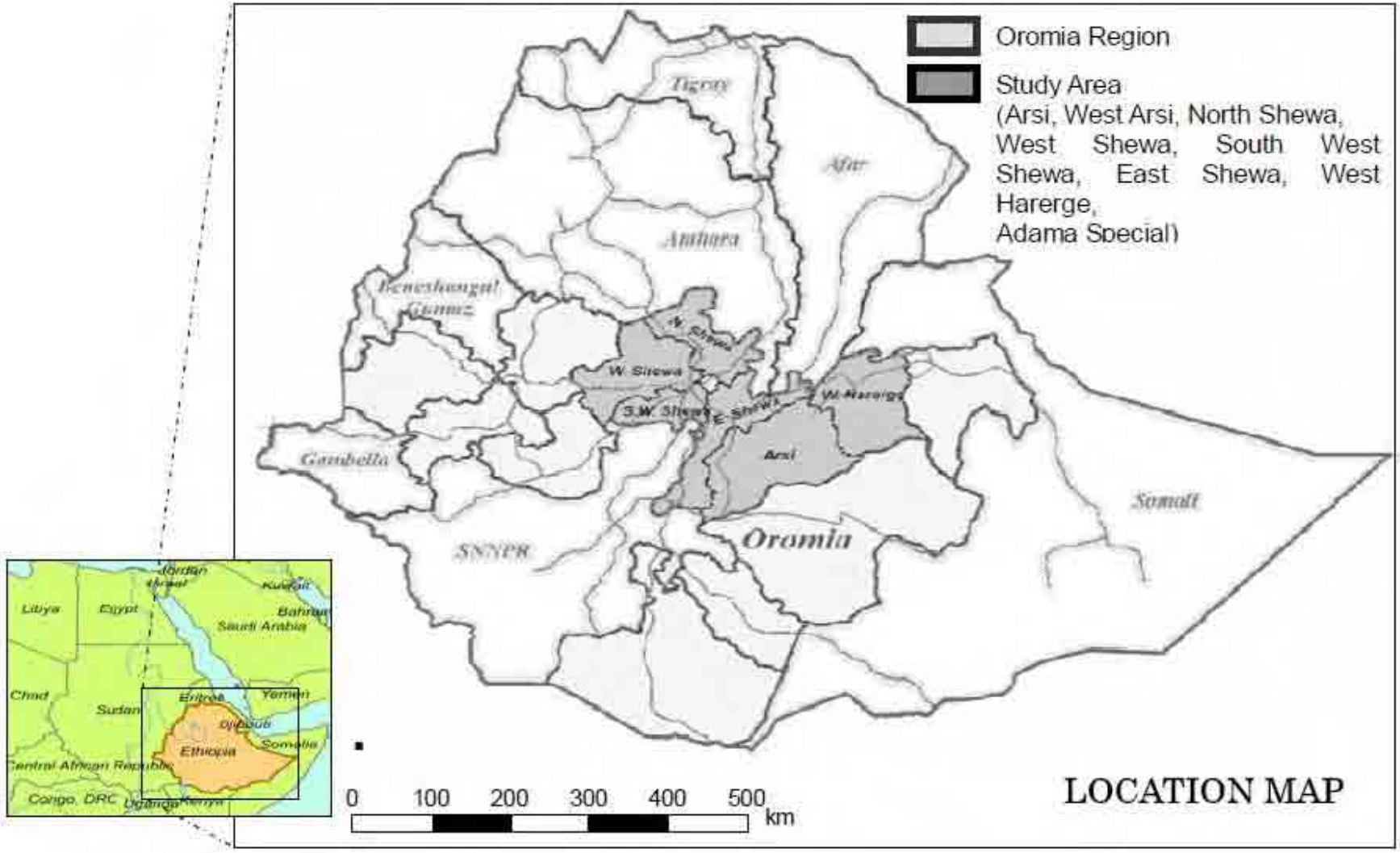
We wish to take this opportunity to allow us to express our sincere gratitude towards the generosity of JICA, Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Tokyo Institute of Technology, Kyoto University, Urayasu City and Matsue City. We also wish to express our deepest gratitude towards the Oromia Education Bureau, zone and woreda education offices, Oromia Bureau of Finance and Economic Development, Ministry of Education, Ministry of Finance and Economic Development as well as community leaders and school directors and teachers of the Federal Democratic Republic of Ethiopia for the courtesies and cooperation extended to the team during the course of the project.

Very truly yours,

Masanobu Ninomiya

SMAPP Team Leader

August 2007


Oromia Region
Study Area
(Arsi, West Arsi, North Shewa, West Shewa, South West Shewa, East Shewa, West Harerge, Adama Special)
Tigray
Afar
Amhara
Beneshangul Gumuz
W. Shewa
E. Shewa
W. Harerge
Arsi
Gambella
SNNPR
Oromia
Somali
Libya
Egypt
Jordan
Israel
Kuwait
Bahrain
Saudi Arabia
Chad
Sudan
Eritrea
Yemen
Djibouti
Somalia
Ethiopia
Central African Republic
Congo, DRC
Uganda
Kenya
0 100 200 300 400 500
km
LOCATION MAP

1. PROJECT MANAGEMENT

Steering committee

Taskforce meeting

OEB workshop(Midterm evaluation)

Focus group interview(Terminal evaluation)

2. EMIS ENHANCEMENT

Attendance sheet used in the primary school

Records of student attendance displayed at WEO

School records developed by the SMAPP Project

Sample survey for school records

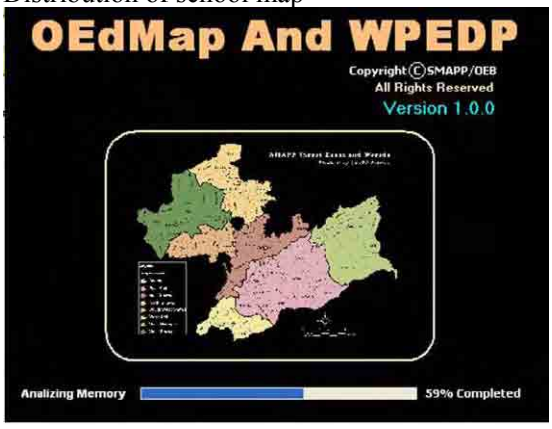
3. DEVELOPMENT OF OEDMAP

GIS Training for OEB

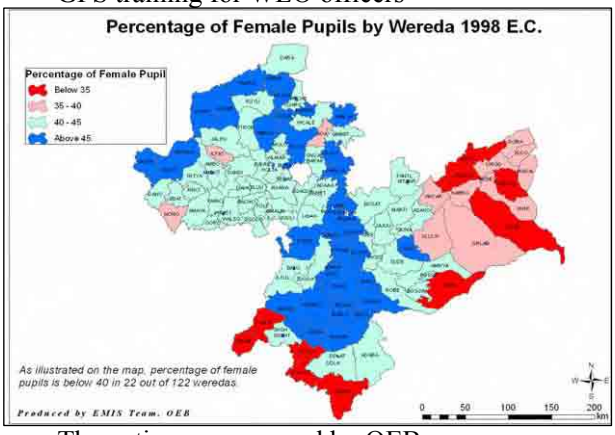
School location survey

Distribution of school map

GPS training for WEO officers



OEdMap and WPEDP viewer



Thematic map prepared by OEB

4. DEVELOPMENT OF WPEDP

Presentation by OEB Staff

Group work by Woreda Planning Team

Projection of educational indicators

Group work facilitated by ZEO officers

Discussion on a school map

WPEDP approved by Woreda Cabinet

5. TRAINING IN OTHER COUNTRIES

~ in Malawi~

Discussion for educational development

Site visit to primary school

Site inspection of income generation activity

Observation on EMIS data input

~ in Japan~

Observations of multi-grade class (Matsue)

Visit to science education institute (Kyoto)

View exchange for development of Ethiopia (Kyoto)

Knowledge exchange on education administration with Shimane Prefectural Education Board (Matsue)

6. MARKETING FAIR

Concept sharing on marketing Fair

Marketing card

Opinion exchange among officers and donors

Presentation to development partners

THE PROJECT FOR INCREASING ACCESS TO QUALITY BASIC EDUCATION THROUGH DEVELOPING SCHOOL MAPPING AND STRENGTHENING MICRO-PLANNING IN OROMIA
- SMAPP PROJECT -

EXECUTIVE SUMMARY

1. Objectives and Operation Structure of SMAPP Project

The government of Ethiopia (GoE) adopted a new Education and Training Policy (ETP) in 1994 proclaiming a new education system with a focus on the increase in access to educational opportunities with enhanced equity, quality and relevance. The ETP provided a basis for formulating the multi-year Education Sector Development Programme (ESDP) with a long-term goal of achieving universal primary education (UPE) by the year 2015. The OEB recognized, in its Education Sector Development Strategic Plan (ESDSP), the urgent needs on enhancement of Education Management Information System (EMIS) and sector development planning capacity at the regional and woreda (district) levels. This enhancement was believed to accelerate the process of increasing access to primary education in the Oromia Region with promoting the decentralization policy. Under such a circumstance, the OEB made an official request to the Government of Japan for technical assistance. A series of official deliberations resulted in a form of bilateral agreement of the Scope of Work on 17 December 2004 to implement "The Project on Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-Planning (hereinafter, refer to as the SMAPP Project)."

The main purpose of the SMAPP Project was:

To develop the capacity of woreda education officers in the areas of data management and planning in the seven pilot zones in Oromia Region with enhanced technical support of the OEB.

To accomplish the project purpose and overall goals, the SMAPP Project were to:

(1) Provide an overview of the educational development status in Oromia Region;
(2) Strengthen the EMIS;
(3) Develop the school mapping database using theGiographic Information System (GIS), the OEdMap (Oromia Education Map) database, for better planning of education development;
(4) Formulate the Woreda Primary Education Development Plans (WPEDPs); and,
(5) Improve the institutional capacity and human resources of Woreda Education Offices (WEOs), Zone Education Offices (ZEOs), and the OEB through knowledge and skill transfer.

The decision-making body of the SMAPP Project was a Steering Committee chaired by the OEB. The Committee consisted of respective representatives from the Ministry of Finance and Economic Development (MoFED), Ministry of Education (MoE), Oromia Bureau of Finance and Economic Development (BoFED), JICA Ethiopia Office, ManaBU Project, and Embassy of Japan. Under the Steering Committee, the Project Management Unit and two Task Forces were formed within the OEB to manage the SMAPP Project.

2. Policies related to Basic Education

The ETP was prepared in 1994 as the backbone of educational development in Ethiopia. The ETP document identified relevance, quality, accessibility and equity of education as the major issues facing the country's education system. In order to achieve the strategic goals set in the ETP, the Ministry of Education (MOE) developed Education Sector Development Program (ESDP) in collaboration with the regions, donors, and other key stakeholders. ESDP I started in the Ethiopian fiscal year[1] of 1997/98 and ended in 2001/02. ESDP II was developed as a three-year project from 2003/04 to 2005/06 to synchronize the ESDP implementation period and the national development plan implementation period. Implementation of ESDP III was started in 2005/06 and will end in 2009/10. The main objectives for primary education for the coming five years are to;

(1) raise enrolment;
(2) improve equity and quality;
(3) reduce dropout and repetition rates; and
(4) bring down student-teacher and student-section ratios to the standards set.

The overall federal EDSP policy framework was translated into the respective regional policy frameworks. As a result, the Oromia Region issued Oromia ESDP III.

3. Overview on Primary Education Profile in Oromia Region

Formal primary education is provided from Grade 1 to 8 and divided into two cycles. The first cycle covers Grades 1 to 4 for children aged 7 to 10. The second cycle covers Grades 5 to 8 for children aged 11 to 14. As of October 1997 E.C. (2004/05), there were 6,463 formal primary schools in the entire Oromia Region. In the SMAPP pilot zones, there were 2,701 formal primary schools.

The apparent intake rate (AIR) of Grade 1 for formal primary schools in the Oromia Region was 168.4% in 1997 E.C. (2004/05), while the net intake rate (NIR) was 49.8%. The gross enrolment rate (GER) in the Oromia Region in 1997 E.C. (2004/05) was 85.4% and the net enrolment rate (NER) was 73.8%. Considering that the GER in the region in 1995 E.C. (2002/03) was 66.7%, the increase in the GER was substantial. Despite the improvement in the AIR and GER, however, the NIR and the NER need to be further improved.

The student to teacher ratio in the Oromia Region was 78 /1 in 1997 E.C. (2004/05), while the student to section ratio was 74/1. The OEB tried to improve the classroom environment to decrease the student to section ratio to 60/1 and to stop the double- and triple-shift classes in 1998 E.C. (2005/06) through increasing classrooms with the low cost construction scheme being implemented all over the region.

When looking at the AIR, NIR, GER and NER data by gender, the figures for females were still much lower than the ones for males. The region GER for males was 97.9% in 1997 E.C. (2004/05), while the one for female was 72.6%. The gender gap was 25.3%.

The OEB provides training for primary school teachers. In 1997 E.C. (2004/05) academic year, the OEB used the Metu teacher training institute to train 550 first cycle primary school teachers in a regular day-time programme and more than 1,000

[1] The fiscal year of the GoE starts on July 1. The figure without the acronym of 'E.C.', meaning Ethiopian Calendar, shall be read as Gregorian (western) calendar in this report. In other words the figure of the year with 'E.C.' connotes the Ethiopian fiscal year.

teachers in its evening programme. The region used five teacher training colleges to train second cycle primary school teachers. However, there were still shortages of qualified teachers; particularly for the second cycle primary and secondary schools. To decrease the repetition and dropout rates, it is critical to improve this situation.

One of the key policies of the OEB was to increase access to primary education as fast as possible to reach the goal of UPE. This required a rapid construction of both formal schools and the Alternative Basic Education Centres (ABECs) in the Oromia Region. Both standard and low cost classrooms for the formal schools were funded by the government with some community contribution, while community classrooms for formal schools and classrooms for the ABECs were always constructed with community contribution. Selection of standard or low-cost classrooms for formal schools was decided based on the expected amount of the community contribution.

4. Decentralization of Primary Education

The GoE has embarked on the decentralization of governance to bring it closer to the community level as one of its key strategies in order to achieve its goal of social, economic and political development. Decentralization of governance in education is also a key strategy in achieving the goals of UPE. Due to decentralization, the regions also have further decentralized roles and responsibilities to the woredas for the management and administration of primary and lower secondary education..

The implementation of the decentralization policy has raised many challenges to the governance of the education system. The continuing regional inequalities has posed many questions as to the role and efficacy of the federal, regional, zone, and woreda education offices within the decentralized system to promote equity and balanced growth of the education system. The ESDP Annual Review Meetings (ESDP ARMs) have repeatedly pointed out the lack of sufficient organizational capacity as the key bottleneck to provide the necessary managerial and logistical supports for the implementation of the ESDP and the UPE.

5. EMIS Enhancement

The initial objectives of the EMIS enhancement under the SMAPP Project were to;

(1) improve data accuracy of the EMIS
(2) improve timeliness of the Annual Education Census (AEC) data collection and analysis
(3) validate and prepare for immediate use of the database for the OEdMap and micro-planning
(4) recommend further activities for enhancement of EMIS

To attain the objectives, the main four activities were carried out;

(1) training workshop in data collection and management;
(2) strengthening school records
(3) coordination with the OEdMap and database preparation for micro-panning projections; and
(4) comparative study between UIS-EMIS and the previous EMIS and impact assessment of UIS-EMIS on AEC,
(5) physical improvement in computer facilities

The objective of the 1st workshops was to develop the necessary conditions to enhance the EMIS at the OEB. The main outputs from participatory output-oriented training were: 1) clarification of definitions of key terminologies; 2) EMIS and the

responsibilities; 3) strengthening of school records; and 4) preparation of AEC implementation timetable.

The absence of standardized forms for school records was pointed out as one of the critical issues which caused poor data management at the school level. To assist proper management of the school information, the OEB produced and delivered new school record forms with the financial and technical assistance of the SMAPP Project. 79,000 copies of the class registry and 8,000 copies of four sets of other school record forms were printed and distributed to all zones in the Oromia Region for the use of all first cycle (Grade 1-4) primary schools. A monitoring survey of school records was conducted by the SMAPP Project Team in collaboration with the OEB in February 2007. All the sample-surveyed schools received school records through Woreda Education Office and used them.

In a process to link the OEdMap with the UNESCO Institute of Statistics (UIS)-EMIS, the SMAPP Project Team found technical difficulties in the querying or reporting system using the UIS-EMIS. The SMAPP Project Team exchanged views with a UIS consultant to find any possibility for further improvement of the UIS software and to develop more appropriate linkage between the OEdMap and the UIS-EMIS. Taking such a step, the 1998 E.C. (2005/06) EMIS data was eventually linked with the OEdMap.

The introduction of the UIS-EMIS brought about both positive and negative impacts on the EMIS and AEC system in the Oromia Region. The impacts were identified by the EMIS Task Force and the SMAPP Project Team in March 2007 as follows:1) user friendly front-end system and manuals developed; 2) minimization of work volume in AEC. 3) confusion in filling up of new questionnaire; 4) change of schedule of AEC; 5) handling of the previous school ID.

Based on the assessment, the SMAPP Project Team provided the EMIS Team with the computer peripherals for the sake of sustainable operation of the OEdMap linked with the UIS-EMIS.

6. Development of School Mapping (OEdMap)

The SMAPP Project developed a school mapping database with Geographic Information System (GIS), which was named “OEdMap”, and the objectives of its development were as follows:

(1) At the regional level (including the zone level), to

1) provide school location maps and thematic maps containing socio-economic and educational information in order to formulate education development strategy;
2) monitor and evaluate the micro-planning activities by WEO;
3) formulate objectives and strategies for goal-oriented education development and resource allocation plans at the zone and region levels; and
4) mobilize techniques on utilization of GIS in education planning

(2) At the Woreda level, to

1) understand the current education development status of the woreda within the regional sector development framework; and
2) formulate the WPEDP through micro-planning using maps, including GIS generated maps as tools provided from the OEB.

The EMIS/School Mapping Task Force was formulated by the OEB. They were responsible for preparing a framework, designing the database, inputting the data, maintaining the facilities, conducting training workshops, and setting up the system effectively and efficiently.

Development of the OEdMap consisted of the following activities; 1) development of sample school mapping as preparatory work for GIS designing; 2) designing OEdMap database; 3) base map preparation; 4) processing the topographic map; 5), processing administrative boundaries; 6) school location survey; 7) selection of the EMIS data, 8) verification of the OEdMap data; 9) preparation of maps and tables for the micro-planning workshops; 10) demonstration of thematic maps; and 11) adjustment of the OEdMap for the UIS-EMIS.

The SMAPP Project Team and OEB agreed to prepare three types of maps and one matrix for each woreda for micro-planning exercises; namely, i) a school coverage map (A4 size), ii) a school information map (A4 size), and iii) a school map (A0 size), and a school information matrix as a summary table of the AEC 1998E.C. (2005/06). Those maps and matrices were distributed to all the woredas. Sample maps and the matrix are included in Appendix-3 of this Report.

Thematic maps for education indicators were prepared and presented as another output from the OEdMap. These maps visualized the development level of each woreda with respect to access, quality, equity and efficiency in primary education. These maps were helpful for analysis, planning and decision making and for resource allocation at the region level.

Capacity development in the OEB in the operation and management of the OEdMap was one of the key components and objectives of the SMAPP Project. Main activities of capacity building consisted of 1) framework formulation of capacity development programme; 2) development of the OEdMap manuals; and, 3) training in OEdMap operation and maintenance.

A series of training courses designed especially for OEdMap development, operations, and management were provided for the six members of the EMIS/School Mapping Task Force. The training include:

(1) GPS utilization training to acquire basic concepts of GPS, GPS surveys, and the formulation of a school location database
(2) Introductory GIS training to provide basic knowledge and skills on GIS and ArcGIS 9.0 software and to produce a sample woreda school map as an output of the training
(3) Intermediate training in GIS to compile and analyze the GIS information and to generate the materials for the micro-planning exercises
(4) On-the-job and/or hands on training in the OEdMap operation, management, and update by i) conducting school location surveys; ii) preparing the school map for the additional woredas in West Arsi zone; iii) developing presentation materials using the OEdMap data.

The Task Force, in consultation with the SMAPP Project Team, set up immediate plans of the operation of the OEdMap including 1) update of the OEdMap database; 2) use of the OEdMap for education planning and monitoring; and 3) formulation of action plan. The OEB and BoFED agreed to secure government budget for the OEdMap. The OEB also appointed the EMIS Team as a responsible organ for the operation and management of the OEdMap.

7. Micro-Planning

Micro-planning was the core activity of the SMAPP Project. All the results from enhancement of EMIS and development of OEdMap were incorporated into micro-planning exercise.

The ultimate objective of the micro-planning at the woreda level in the SMAPP Project was:

To help the OEB, ZEOs and WEOs develop a WPEDP and formulate and practice strategies which generate the necessary support and participation among the relevant government agencies, the community, and the key stakeholders.

thin this framework, the OEB and SMAPP Project Team jointly identified the following six main purposes of micro-planning exercises to;

(1) create greater awareness among the woreda leaders and officers about the education and development policies of the federal and regional governments.
(2) strengthen the linkage among the federal, regional, and woreda education policies.
(3) identify the key features of a participatory planning-budgeting process to build a teamwork in planning/management of education among the WPTs.
(4) identify and strengthen the role of the community and the stakeholders in the planning of the education system.
(5) develop the necessary skills for conducting the annual planning and budgeting process among the woreda officers.
(6) develop appropriate modalities for generating the necessary support among the key stakeholders at the woreda, zone, and region levels and the woreda government institutions for the successful implementation of the WPEDP.

To implemente micro-planning exercises smoothly and effectively, philosophical approaches to development of WPEDP were also determined as below;

(1) Realization of realism and pragmatism
(2) Integration of national, regional and woreda education policies
(3) Empowerment of woredas to make decision
(4) Congruence between decentralized governance process and micro-planning process
(5) Placing micro-planning in governance as practice
(6) Synchronization of micro-planning exercises with reality in woreda education system
(7) Appropriate to organization, human and technical capacity of the woredas.

A WPEDP contained 12 chapters. These 12 chapters followed the logical sequence of the outputs required for the development of the perspective plan. The sequence of the chapters in WPEDP was as follows:

Chapter 1: Vision and Mission of the Woreda Primary Education System
Chapter 2: Development Context of the woreda
Chapter 3: A Brief Overview of the woreda
Chapter 4: Situation Analysis of the Woreda Primary Education System
Chapter 5: Goals and Targets for the Fifteen-Year Perspective Plan.
Chapter 6: Enrollment Projections
Chapter 7: Estimation of the Demand for Four Key Inputs

Chapter 8: Distribution Strategy for Schools and Classrooms for the Medium-Term Plan
Chapter 9: Overall Strategies and Programs for Achieving the Goals and Targets
Chapter 10: Cost of Implementing the Plan
Chapter 11: Monitoring Plan
Chapter 12: Implementation Modalities.

In selecting the participants for the micro-planning workshops, the dual needs of decentralized planning and governance were considered. At least three or four professionals from each woreda education office lead by the woreda education head were invited to attend the workshops. Given the needs for identification and allocation of resources, a representative from the WoFED was also invited to attend. In addition, the heads of the woreda councils were encouraged to attend on the last day of the workshop.

The modules were designed to be output-oriented. Each module was designed to produce one or more outputs by the members of each WPT and these outputs together were designed to become the final output, namely the fifteen-year perspective plan for the woreda primary education development.

Four workshops were held in order to develop the WPEDPs. The first workshop dealt with the utilization of EMIS. The second and third workshops introduced school mapping and micro-planning to WEOs. The fourth workshop focused on developing the WPEDP using the knowledge and skills acquired from previous workshops.

As a result, all the 117 Woreda Education Office succeeded in formulating the respective WPEDP, which were later approved by the respective Woreda Council as official plan documents.

Once all the WPEDP were approved as official plans, the OEB and the SMAPP Project jointly designed and implemented a Marketing Fair on June 18 and 19, 2007. The first day was devoted to sharing the concepts and strategies of the Marketing Fair with the participating woreda representatives and to let the WPTs undertake the necessary preparations to market their respective WPEDPs. The second day was devoted to activities directly related to marketing of the WPEDPs by the woredas to the NGOs and other donor agencies. By observing the discourse held among the representatives of the NGOs and donor agencies and the participants from the woredas, one can confidently conclude that this objective was achieved successfully.

8. Monitoring and Evaluation on Capacity Development

To collect information of achievements, impacts and sustainability of the SMAPP Project from different viewpoints, the SMAPP Project conducted three types of the evaluation during the Project period, which were;

(1) Baseline survey (May 2005) to collect the data to understand the baseline situation of the primary education in Oromia Region, before starting the main activities of the SMAPP Project;
(2) Mid-term Evaluation (March 2006) to assess the progress and achievements of the SMAPP Project at the midst point of the project implementation period and to update the implementation plan, if necessary, based on the lessons learnt from the mid-term evaluation; and
(3) Terminal Evaluation (June 2007) To assess the relevance, efficiency, achievements, impacts and sustainability of the SMAPP Project, to identify lessons learnt from the Project, and to produce recommendations for the next step of the Project

In the Final Report, Chapter 10 and 11 summarize achievements, impacts and sustainability of SMAPP Project, while Chapter 12 deals with recommendations.

9. Conclusion

The SMAPP Project has achieved the project purpose and produced the planned outputs except for the OEB's capacity development of the EMIS data management and reporting. Before the SMAPP Project began, insufficient information sharing had existed between regions and respective woredas even after duty and responsibility for the development of primary education was devolved to the woreda level. This had made it difficult for the OEB to supervise whether primary education services hadbeen equally delivered to its population. In addition, due to the lack of the mechanism of accumulating woreda plans in the region, it had been also difficult for the OEB to obtain a budget for woredas based on those woreda plans. Thus, having a clear grasp of the spatial information of present education services and sharing woreda mid-term plans between the OEB and respective woredas were the two of the most important elements in order to breaking this situation. The OEB recognized, through the implementation of the SMAPP Project, that micro-planning methods with the OEdMap and participatory approach covered those two elements and helped effectively break the situation. In a broader sense, the OEdMap and participatory approach were the two effective methods to support the decentralization of the education sector. Based on the result of terminal evaluation, although there is no statistical evidence of achieving the overall goal, improving access to primary education, at this point, the post-project evaluation is expected to prove the project contribution to the overall goal.

The major impacts of the SMAPP Project are summarized as follows;

1) The OEB, ZEOs and WEOs' understanding of the importance of accuracy of education data and timely data collection and management was deepened.
2) The OEdMap school coverage maps were identified as a practical, visual planning tool for the WEOs to formulate distribution plans and strategies of schools and classrooms.
3) The importance of the micro-planning exercises in the decentralized governance was recognized by the OEB, ZEOs and WEOs in the SMAPP pilot area.
4) The WEOs has become confident in presenting their WPEDPs to the government organizations, NGOs, local private investors, and other external supporting agencies. Additionally, the WEOs' leadership and initiatives were promoted.
5) The OEB's leadership in education development was strengthened through the Task Forces activities, which increased the OEB's self-devoted efforts.
6) The approaches employed by the SMAPP Project to combine the region, zones and woredas in a unit to work together under the SMAPP Project functioned effectively to strengthen decentralized governance.
7) The OEdMap caught other sectors' interest as well as that of the MoE in the use of the GIS in development planning and management in the SMAPP Project.

The technical, institutional, organizational, and financial sustainability of the SMAPP Project are assessed as follows;

1) The results of the terminal evaluation indicated the competency improvement of the OEB officers in the operation and management of the OEdMap and the competency of the WEO officers was enhanced during the SMAPP Project by collecting nearly 430 data of newly constructed schools and previously un-surveyed schools.
2) Usefulness of the school coverage map was verified in formulating physical

development plans including construction plans of new primary schools.

3) The Planning Research and Project Department (PRPD) has been identified and officially designated as a unit that have duties and responsibilities for continuing activities carried out by the SMAPP Project, especially EMIS enhancement and operation and management of the OEdMap. Mobilization of the organizational experiences in any innovative programmes would contribute to institutional sustainability.
4) 117 WPEDPs were officially approved by the respective Woreda Cabinets. This was an essential step to place the WPEDP in the governance mechanism.
5) It was found that basic information of administrative and demographic data, including woreda and kebele boundaries, population, and other demographic data, is not systematically shared by the OEB, BoFED and/or any other authorities concerned. Inter-organizational arrangement to share these data regularly between the BoFED and OEB will improve the quality and efficiency of the OEB's updating of the WPEDP and the OEdMap
6) The education sector receives the largest share of the budget at the region level in general, and at the woreda level in particular. This is consistent with the first priority given to the education sector by both the regional and woreda administrations on public expenditure. Therefore, there should be enough room for WEO to secure the budget by utilizing the WPEDP
7) For the preparation of 2000 E.C. (2007/08) budget, the OEB submitted the budget proposal for the school records and OEdMap to the BoFED in March 2007. The OEB received an official notice from the BoFED on approved allocation of the OEB budget.

10. Recommendations

Recommendations are presented in accordance with three aspects; 1) technical recommendations; 2) institutional recommendations and 3) general recommendations.

Technical recommendations are summarized as follows;

(1) For the improvement of the EMIS

1) ***Improvement of school records for standardization:*** There was a request to improve the format of the attendance sheet at the monitoring. Continued process to improve school records for standardization is recommended not only for enhancement of data accuracy but only for school management.

2) ***Introduction of school registration system:*** Consistency among school IDs and school names should be improved. This is one of the fundamental issues for the improvement in data management of the EMIS the OEdMap. In this regard, the school registration system should be established in standardized forms and procedures under the OEB's directive and supervision.

3) ***Development of a guideline on the AEC:*** The office routine work should be simplified and shared among the officers concerned. Current situation, in which little sharing of routine work is observed, is a very risky situation in terms of the sustainability in a country like Ethiopia where a very high turn-over rate prevails. One of the solutions is to develop a guideline for the AEC procedures.

4) ***Development and dissemination of the AEC check list:*** Training in the AEC has been conducted for the ZEOs and WEOs by the OEB. However, data accuracy is not improved to the satisfactory level. One of the reasons may be insufficient data checking at the woreda level. To enhance the capacity at the

woreda level, the check list which shows the know-how on the AEC questionnaire booklet might be useful.

5) ***Improvement of the office efficiency:*** To ensure the sustainability of the operations, it is recommended that the work efficiency should be improved by reducing the work volume or simplifying the work procedures. This shall be done through conducting a series of workshops, where the current practices and performance of the tasks of the PRPD and the EMIS Team are reviewed for their effectiveness and efficiency improvement..

6) ***Enhancement of the data analysis and reporting capacity:*** Considering the wider scope of EMIS framework, enhancement of analytical capability of statisticians, planners, monitoring and evaluation experts of the OEB is recommended through on-the-job trainings.

(2) For Operationalization of the OEdMap

1) ***Strengthening of the Institutionalization of the OEdMap:*** Based on a common recognition of the usefulness of the OEdMap for education data management and planning, it is recommended that the tasks necessary for the operation and management of the OEdMap should be institutionalized as part of the routine work performed by the OEB, ZEO and WEO.

2) ***Expanding the OEdMap Coverage:*** The expansion of the OEdMap, although it is challenging, is suggested in order to reach the goals set in the UPE. The expansion of the OEdMap coverage to the entire Oromia Region shall make the OEB possible to include selective thematic maps of all the woredas in annual Education Statistics Annual Report and renewed ESDP in the future.

3) ***Establishing inter-organization information sharing mechanism:*** Firstly, The EMIS Team shall be responsible for technical consultation with the MoE and UNESCO in order to keep both database systems with good linkage for fully functioning. Secondly, for effective and efficient update of the OEdMap data, it is recommended that the OEB, especially EMIS Team of the PRPD, shall consult with the BoFED on regular basis to collect the basic administrative information. Thirdly, during the SMAPP Project, three sector organizations showed their interests in the products of the OEdMap. This is an indication of possibility to build multi-sector information database using GIS. In response to this phenomenon, the OEB in consultation with the SMAPP Project Team came up with an idea that multi-stage development approach to GIS based administrative function can be introduced and established in the Oromia Region.

(3) For Enhancement of the Micro-Planning

1) ***Institutionalization of the micro-planning:*** Firstly, it is recommended that routine work of the OEB, ZEO, and WEO should correspond to the WPEDP. The presentation and use of the WPEDP shall build public awareness on a woreda's official plan and create transparency of its progress. Secondly, it is important for development administration to place a mid-term development plan with a long-term perspective in the planning and budgeting cycle every year. It is suggested that the WEO shall use the WPEDP as basic and official reference to prepare annual plan and budget for the next fiscal year. Thirdly, it is recommended that the monitoring and evaluation of the WPEDP should be strengthened. Fourthly, it is recommended that the OEB shall provide the ZEO officers, especially planning and statistics professionals,

with technical and professional supports so that they could help the WEO prepare the annual plan and budget to achieve the goals and targets set in the WPEDP. Fifthly, reviewing the functions and responsibilities of the PRPD is suggested the present and future needs of sustaining region-wide micro-planning.

2) ***Expand the coverage of the micro-planning to the non- pilot zones:*** It is recommended that the OEB should expand the woreda-level micro-planning exercise to cover the remaining 10 zones. This will assure uniformity of planning processes in all the woredas in the region and build up their capacities to promote equitable development of the primary education system across the region.

3) ***Deepen the level of the micro-planning by expanding the scope of planning:*** It is recommended that activities to improve the quality and quantity of education provided will be undertaken not only at the woreda level but also at the school level by setting the Cluster Resource Centres (CRCs) as a centre of the activities.

Institutional recommendations are summarized as follows;

1) ***Continuous Capacity Development in Data Management and Planning:*** It is recommended that the capacity development in education data management and planning should be strengthened at all the levels of the region, zone, and woreda. Since data accuracy heavily depends on the reliability of the data management at the school level, it would be suggested that the scope of capacity development would be deepened into the level of the CRC, which also has function to guide non cluster schools.

2) ***Continuous Use of the Products of the SMAPP Project for Institutionalization:*** The General Education Quality Improvement Program (GEQIP)'s policy line describing that increase access to educational opportunities have to come in line with improving the quality of education agrees with the basic principal of the SMAPP Project. Moreover, the OEdMap and WPEDP are expected to function as a monitoring tool in order to make a policy recommendation in the future. Utilizing these data as spatial information for reviewing the Minimum Standard of Services (MSDS) is especially recommended.

3) ***Building Institutional Memory at All the Levels:*** Some recommendations are to be made in order to ease the negative impact of discontinuance of the government services due to the high turn-over rate so that the positive impact of the SMAPP project can be maintained within the OEB. It is recommended that all the offices of education administration, i.e., the OEB, ZEO, and WEO, consciously establish an office work mechanism to maintain and improve office work efficiency and effectiveness through collective working relationship and leadership.

4) ***Improving Coordination for Development and Planning Network:*** The OEB should play a leading role to coordinate activities for individual systems of the EMIS and the OEdMap. Annual activities of the EMIS and the OEdMap should be systematically arranged into one work calendar. It is also suggested that the OEB should establish a network in collaboration with the governmental agencies and external supporting agencies to implement the WPEDP.

5) ***Strengthening Inter-linkage of Multi-levels of Data Management and Planning:*** To address the education development issues, a multi-level approach is of importance to improve the awareness of education development/improvement at

the school, community, and household levels. It is recommended that the scope of data management and micro-planning shall be deepened into a level where woreda education officers can directly contact with school directors or teachers. The WPEDP may need to expand its scope of planning into the CRC that shall take a leading role to improve data management at the school level.

6) ***Improvement in Institutional Understanding of the Computer Security:*** It should be noted that the computerized systems, such as the EMIS and the OEdMap, are very convenient but, at the same time, they require various types of activities for data and computer security to make them function properly.

General recommendations are summarized as follows;

1) ***Information Sharing among the Development Projects:*** At this moment, there is little adjustment of project activities among several projects implemented in the Oromia Region. It is suggested, firstly, that the OEB shall establish a mechanism to share information of different projects regularly and publicly to avoid overlaps. Secondly, it is also suggested that the OEB shall have a collective consultation meeting periodically so that each project office shall know invaluable outputs from each project implementation.

2) ***Integration of the SMAPP and the ManaBU projects:*** Under decentralized governance, it is well recognized that woreda planning plays a central role. It is suggested that the OEB shall gradually adopt micro-planning exercise to school management planning in accordance with intended policy directives disclosed in the GEQIP. In this line, it is recommended that all the products of the ManaBU Project shall be integrated in micro-planning exercises in order to strengthen and enhance primary education and its planning system at the regional, woreda and CRC levels in the Oromia Region.

The Project on Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-planning in Oromia Region (SMAPP)

FINAL REPORT: MAIN REPORT

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ABBREVIATIONS

ABE	Alternative Basic Education
ABEC	Alternative Basic Education Centre
ADF	African Development Fund
AEC	Annual Education Census
AfDB	African Development Bank
AIR	Apparent Intake Rate
ARM	Annual Review Meeting
BDA	Budget Development Assistance
BESO I	Basic Education System Overhaul Project
BESO II	Basic Education Strategic Objective Project
BoFED	Oromia Bureau of Finance and Economic Development
CEI	Complementary Education Initiatives
CRC	Cluster Resource Centre
CSA	Central Statistic Authority
DAG	Development Assistance Group
E.C.	Ethiopian Calendar
EFA	Education For All
EMA	Ethiopian Mapping Authority
EMIS	Education Management Information System
EoJ	Embassy of Japan
ETM +	Enhanced Thematic Mapper Plus
ETP	Education and Training Policy
ESDP	Education Sector Development Programme
ESDSP	Education Sector Development Strategic Plan
EU	European Union
GEQIP	General Education Quality Improvement Programme
GER	Gross Enrolment Rate
GIS	Geographic Information System
GLCF	Global Land Cover Facility
GoE	The Government of Ethiopia
GPS	Global Positioning System
HDD	Hard Disc Drive
ID	Identification (Number
IC/R	Inception Report
IDA	International Development Assistance
JICA	Japan International Cooperation Agency
JRM	Joint Review Mission
KETB	Kebele Education and Training Board
ManaBU	Community-Based Basic Education Improvement Project
MDG	Millennium Development Goal
M & E	Monitoring and Evaluation
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
MSDS	Minimum Service Delivery Standard
NER	Net Enrolment Rate
NGO	Non Governmental Organisation
NIPDEP	The National Implementation Programme for District Education Plans
NIR	Net Intake Rate
NISPED	National Initiatives to Support Primary Education Development
OEB	Oromia Education Bureau

OECBB	Oromia Education and Capacity Building Bureau
OEdMap	Oromia Education Map
OLAP	On-Line Analytical Process
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PBS	Protecting Basic Service
PEI	Primary Education Improvement
PRSC	Poverty Reduction Support Credit
PRPD	Planning Research and Project Department
PTA	Parent-Teacher Association
RAM	Random-Access Memory
SDPRP	Sustainable Development and Poverty Reduction Programme
SMAPP	Project on Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-planning
SNNPR	Southern Nations, Nationalities and People's Region (State)
ToT	Training of Trainers
TTC	Teacher Training College
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute of Statistics
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Science, and Cultural Organization
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education
UPS	Uninterruptible Power Supply
USAID	US Agency for International Development
WAO	Woreda Administration Office
WCBP	Woreda Capacity Building Programme
WEO	Woreda Education Office
WoFED	Woreda Finance and Economic Development
WPEDP	Woreda Primary Education Development Plan
WPT	Woreda Planning Team
ZEO	Zone Education Office

PART I:

BACKGROUND

CHAPTER 1: OVERVIEW OF THE SMAPP PROJECT

1.1 BACKGROUND

The Government of Ethiopia (GoE) adopted a new Education and Training Policy (ETP) in 1994, proclaiming a new education system with a focus on the increase in access to educational opportunities with enhanced equity, quality and relevance. The ETP is promulgated as a national response to the global agenda on "Education for All (EFA)" as well as to meet the needs of Ethiopia's socio-economic development goals and poverty reduction strategy. The ETP provided a basis for formulating the multi-year Education Sector Development Programme (ESDP) with the long-term goal of achieving Universal Primary Education (UPE) by the year 2015.

The implementation of the ESDP I, which started in 1999 E.C. (1997/98) for the first four years, brought about a rapid improvement in enrolment. Gross Enrolment Rate (GER) for the primary education (Grade 1 to 8) in Ethiopia increased from 30.1 %, the baseline ratio in 1988 E.C. (1995/96), to 64.4 % in 1995 E.C. (2002/03). Yet this GER was still much lower by comparison with the average ratio of Sub-Saharan countries of 84.9 % in 2001. Also, gender and geographic disparity still remained critical. These data strongly indicated that the government had to make further investments and efforts to reach their UPE goals. Thus, the ESDP II, covering three years from 1995 E.C. (2002/03) to 1998 E.C. (2005/06), and the ESDP III for four years from 1998 E.C. (2005/06) to 2002 E.C. (2009/10) followed the ESDP I.

The ESDP II guided the country continuously to expand opportunities for primary education through tackling various issues for the improvement in educational equity, quality and relevance such as: reduction of gender and geographic disparity; decrease in the dropout and repetition rates; and the improvement of student-teacher and student-textbook ratios. In addition to this, the ESDP II adopted a new low-cost approach applied to the first cycle of primary school mobilizing community participation.

Facilitating the process of the community participation approach to the first cycle of primary education, the Oromia Education Bureau (OEB) formerly the Oromia Education and Capacity Building Bureau, launched a project entitled "Community-Based Basic Education Improvement Project (ManaBU Project)" in November 2003 with the technical cooperation of the Japan International Cooperation Agency (JICA). This project has been implemented with the aim of developing a model for community-based basic education, school construction and management.

In order to accommodate the above education issues and the idea of a community participation approach, the OEB recognized, in its Education Sector Development Strategic Plan (ESDSP), urgent needs for the enhancement of the Education Management Information System (EMIS) and the sector development planning capacity at the regional and woreda (district) levels. This enhancement was believed would accelerate increased access to primary education opportunities in the Oromia Region, through the strengthening of decentralized governance. In this context, the former Oromia Education and Capacity Building Bureau (the present OEB) made an official request to the Government of Japan for technical assistance. In response to this, the JICA dispatched its Preparatory Study Team in October 2004 to discuss a detailed outline of the required technical assistance. A series of official deliberations resulted in a bilateral agreement of the Scope of Work on December 17, 2004 in order to

implement "The Project on Increasing Access to Quality Basic Education through Developing School Mapping and Strengthening Micro-planning (hereinafter refer to as the SMAPP Project)".

The SMAPP Project was launched in April 2005. Six months after the commencement of the SMAPP Project, the Region ESDP III was prepared to guide the region to further accelerate the pace of the planned expansion of access to quality and equitable primary education in the Oromia Region. Strengthening of the planning and management capacity at all the levels of administration was emphasised as one of the highlighted strategies. Within this strategy, activity carried out by the SMAPP Project was specifically referenced for continuance in the ESDP III as "strengthen micro-planning through establishing school mapping system," as already started in collaboration with the JICA (SMAPP)'[1].

The SMAPP Project was officially recognized as an engine to achieve the goals of the ESDP III.

1.2 OBJECTIVES AND STRATEGIES

The main purpose of the SMAPP Project was:

To develop the capacity of WEO officers in the areas of data management and planning in the seven pilot zones in Oromia Region with the enhanced technical support of the OEB.

The attainment of the project purpose was expected to contribute towards the achievement of the overall goals of UPE and the Millennium Development Goals (MDGs).

To achieve the project purpose and overall goals, the SMAPP Project adopted the strategies to enhance capacity in the areas of:

1) operations and maintenance of the school-mapping database with Geographic Information System (GIS);
2) planning based on EMIS data, school mapping and stakeholders' needs at the woreda level; and,
3) support for woredas in data management of micro-planning at the OEB and zone levels.

In line with these strategies, the SMAPP Project carried out five activities which were:

1) To provide an overview of the educational development status in Oromia Region;
2) To strengthen the EMIS;
3) To develop the school mapping database with the GIS for better planning of education development;
4) To formulate Woreda Primary Education Development Plans (WPEDPs); and,
5) To improve the institutional capacity and human resources of Woreda Education Offices (WEOs), Zone Education Offices (ZEOs), and the OEB through knowledge and skills transfer.

1.3 PILOT AREAS AND PROJECT PARTNERS

The SMAPP Project covered the entire region of Oromia, while three activities of

[1] Oromia Education Bureau (2005), Education Sector Development Program III (ESDP-III), page 37, Finfine (Addis Ababa), October 2005

school mapping, micro-planning and capacity-building at the woreda level addressed 117 woredas in the seven SMAPP pilot zones: East Arsi Zone: West Arsi Zone; North Shewa Zone: West Shewa Zone: South West Shewa Zone: East Shewa Zone: and West Harerge Zone. The pilot areas and main partners for each component are presented in Table 1-1.

Table 1-1: Pilot Areas and Main Partners of the SMAPP Project

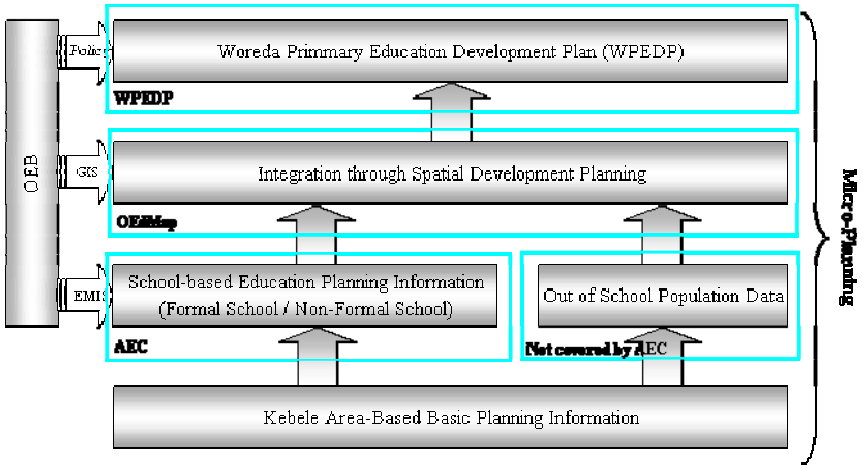
(As of June 2007)

Activities	Pilot Areas	Main Partner
1) Overview	whole Oromia Region[2]	OEB, ZEO
2) EMIS Strengthening	whole Oromia Region[2]	OEB, WEO, Primary Schools
3) School Mapping	117 woredas in 7 zones[3]	OEB, ZEO, WEO
4) Micro-planning	117 woredas in 7 zones[3]	OEB, ZEO, WEO
5) Capacity building	117 woredas in 7 zones[3]	OEB, ZEO, WEO

(Source: prepared by the SMAPP Project Team)

1.4 BASIC FRAMEWORK AND PROJECT COMPONENTS OF THE SMAPP PROJECT

The OEB conducted an Annual Education Census (AEC) exercise to collect school data for the EMIS, based on the OEB regional education statistics abstract which was published to be used for planning, monitoring and evaluation of education development policies and programmes.



(Source: prepared by the SMAPP Project Team)

Figure 1-1: Operational Framework of the SMAPP Project

Figure 1-1 presents basic framework to illustrate components and their linkages to the

[2] As of June 2007, the Oromia Region constituted 288 woredas (including 7 special town woredas) in 17 zones.

[3] Administrative units in the SMAPP target areas were continually changing. The main changes in the number of administrative units in chronological order were;
1) December 2004 (at the time of the S/W): 82 woredas in 7 zones.
2) May 2005 (at the time of the Inception Report): 92 woredas in 7 zones
3) March 2006 (at the time of the Interim Report): 115 woredas in 7 zones
4) September 2006 (just before the micro-planning workshop): 117 woredas in 7 zones
5) November 2006: 118 woredas (including 5 special town woredas) in 7 zones. Special town woredas included Adama, Bishofuto, Asela, Sheshemane, and Burayu.

SMAPP Project.

The AEC data has some limitations, especially in terms of data coverage. The AEC data was confined to school-based education information, which did not contain area-based data at the lowest administrative unit of kebele (administrative village), including out-of-school-population data. As a result, there was no information about a kebele without a school was available through the AEC. Such area-based data are required for the formulation of a strategic education development plan. It is desirable that both school-based and area-based data and information be available. It was necessary to combine the only two databases available, the school mapping database with the GIS maps (hereinafter referred as to the OEdMap: Oromia Education Map) was utilized in the SMAPP Project. The problem of how to transform these combined data into a development plan was one of the challenges of the SMAPP Project.

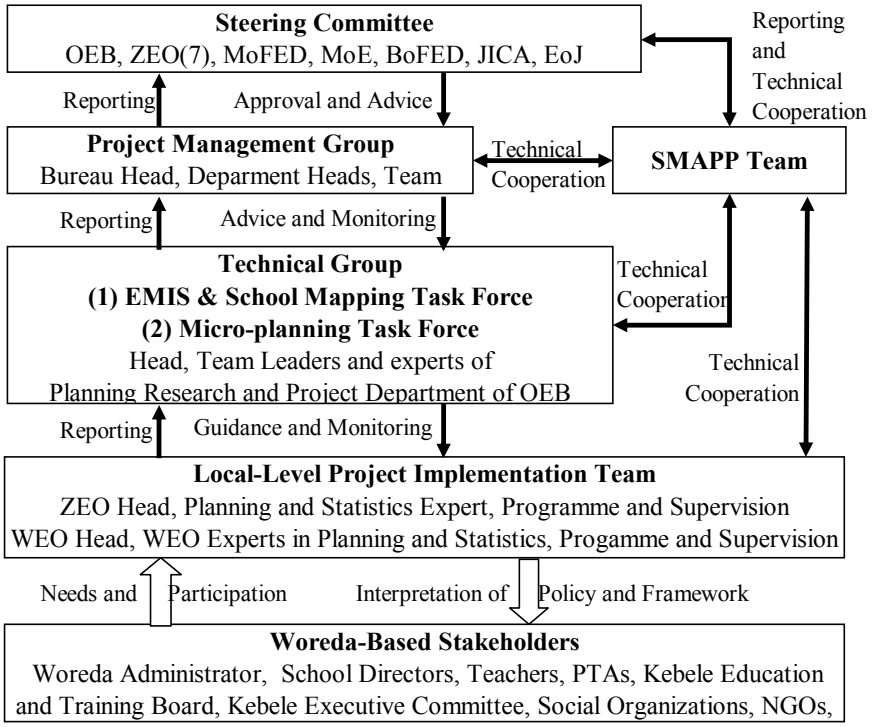
Within the framework shown in Figure 1-1, the SMAPP Project was comprised of four (4) components as follows;

1) Component A: Overview: to grasp the state of primary education development in Oromia Region
2) Component B: EMIS and School Mapping: to develop the OEdMap, based on the EMIS with the establishment of a sustained operation and management system
3) Component C: Micro-planning: to assist the OEB, selected ZEOs and WEOs in the formulation of WPEDPs through capacity building in data management and micro-planning; and,
4) Component D: Recommendations: to formulate programmes or projects for the next step

1.5 OPERATION STRUCTURE

The decision-making body of the SMAPP Project was a Steering Committee chaired by the OEB. The Committee consisted of the respective representatives from the Ministry of Finance and Economic Development (MoFED), Ministry of Education (MoE), Oromia Bureau of Finance and Economic Development (BoFED), as Ethiopian partners, and JICA Ethiopia Office, ManaBU Project and Embassy of Japan. Under the Steering Committee, a project management unit was formed within the OEB to manage day-to-day activities of the SMAPP Project. The list of the members of the SMAPP Project is shown in Appendix-1.

The main operation structure for the SMAPP Project was constructed by establishing two Task Forces at the regional level specifically for the smooth implementation of the two main components of: i) EMIS and school mapping and ii) micro-planning components respectively. Positioning of these two Task Forces in an interactive process with stakeholders is illustrated in Figure 1-2.



(Source: prepared by the SMAPP Project)

Figure 1-2: Project Operation Structure

1.6 MAJOR ACTIVITIES

The SMAPP Project carried out the major activities as outlined in the Figure 1-3.

1st Activities in Japan (April 2005)	**Preparatory Work** (1) Gather information in Japan (2) Prepare the Inception Report (IC/R)
First Field Activities in Ethiopia (May 2005 – March 2006)	**Overview Study, Development of School Mapping and Preparation of Micro-planning** (1) Explain and discuss the IC/R (2) Agree with concept and implementation framework of the SMAPP Project (3) Conduct a baseline survey (4) Verify EMIS and Design school mapping (5) Prepare, explain, and discuss the Overview Report (6) Prepare base map (7) Conduct 1st SMAPP Training Workshop in data management (8) Prepare, explain, and discuss Progress Report I (9) Develop and print Oromia school records (10) Complete development of OEdMap (11) Conduct 2nd SMAPP Training Workshop in introduction to micro-planning (12) Conduct mid-term evaluation (13) Prepare, explain, and discuss the Interim Report
Second Field Activities in Ethiopia (April 2006 – March 2007)	**Formulation of WPEDP with Establishment of Operation and Management of OEdMap** (1) Monitor distribution and use of school records (2) Conduct 3rd SMAPP Training Workshop on preparation of micro-planning (3) Design and conduct trainings in development, operation and management of OEdMap (4) Prepare data and information required for micro-planning (5) Conduct 4th Training Workshop in formulation of WPEDP (6) Prepare, explain, and discuss the Progress Report II (7) Conduct exercises in use of WPEDP (8) Prepare Marketing Fair (9) Undertake rapid assessment on the quality of WPEDP (10) Prepare Recommendations
Third Field Activities in Ethiopia (April – July 2007)	**Evaluation of the SMAPP Project** (1) Hold a Marketing Fair (2) Conduct internal and terminal evaluation (3) Prepare and submit the Draft Final Report
2nd Activities in Japan (July -August 2007)	**Revision and Completion of Final Report** (1) Revise and complete the Final Report (2) Submit the Final Report to OEB

(Source: prepared by the SMAPP Project Team)

Figure 1-3: Main Activities and Steps of the SMAPP Project

The main activities and outputs of the SMAPP Project are summarized below.

1.6.1 Enhancement of EMIS

For the purpose of development of the OEdMap, the EMIS enhancement consisted of three main activities; namely: i) training in data collection and management; ii) development of school records and their monitoring; iii) coordination with the OEdMap and data preparation for micro-planning projections and iv) completion of a comparative study between the UIS (UNESCO Institute of Statistics)-EMIS and the previous EMIS with impact identification of the UIS-EMIS on the AEC. As an integral and central part of activities, the design of a database for the OEdMap was conducted. It should be noted that the EMIS data for the Alternative Basic Education Centres (ABECs) was not available due to changes in the data format caused by the introduction of the UIS-EMIS. Detailed information is presented in Chapter 5.

1.6.2 Development of School Mapping (OEdMap)

The development of the OEdMap was accomplished through the carrying out of the following activities by: i) conducting a sample woreda school mapping exercise for helping to design the database; ii) designing and preparing a base map; iii) conducting introductory training for concept familiarization; iv) collecting and entering data, including the results of a school location survey, the digitization of topographic maps, roads, rivers, and satellite images; v) the integration of EMIS data; and vi) the integration of all of data into one database. Institutionalization followed the development of the OEdMap. This included: i) data verification and preparation for the micro-planning exercise; ii) data collection for updating; iii) modification of the OEdMap structure to be compatible with the UIS-EMIS; and iv) trainings in the OEdMap for establishment of sustained operations and management. Detailed information is presented in Chapter 5.

1.6.3 Micro-planning

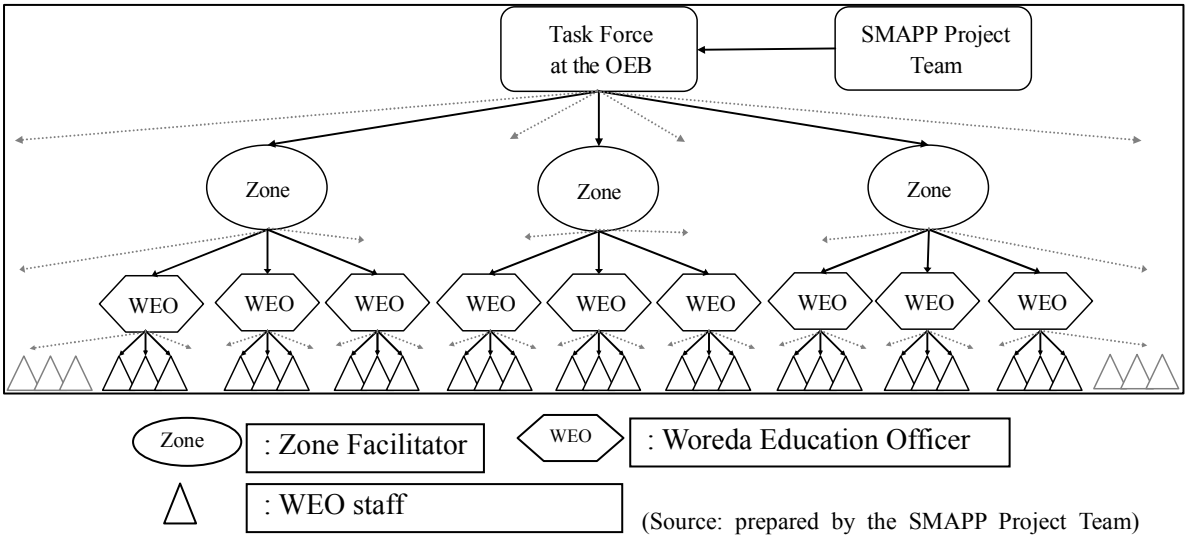
The enhancement of the EMIS and the development of the OEdMap were considered, in broad terms, to be the preparation of basic inputs for the micro-planning exercise. The main activities of the micro-planning were: i) the preparation of a micro-planning exercise including familiarization of a conceptual framework; ii) the formulation of a modality for implementation; iii) the development of training programmes in the sequential flow of trainings; iv) the preparation of the data required and the preparation of training modules and v) the conduct of SMAPP Training Workshops for the formulation of WPEDPs and to monitor the implementation of the 117 WPEDPs. Detailed information is available in Chapters 6 and 7.

1.7 CAPACITY DEVELOPMENT

The capacity development activities encompassed all of the components of the SMAPP Project to serve as an engine in order to improve the effectiveness and sustainability of the outputs and impacts of the SMAPP Project.

A cascade approach for capacity development, shown in Figure-1-4, was employed by the SMAPP Project. Under this, four main types of trainings were organized: including in-house training; trainings of trainers; training workshop and on-the-job training. All of the trainings were used a participatory mode of instruction and were output-oriented,

by which training participants were expected to produce some outputs related to the EMIS enhancement, school mapping and micro-planning.



(Source: prepared by the SMAPP Project Team)

Figure 1-4: Illustrated Diagram of Cascade Approach for the Capacity Development

1.7.1 Trainings

(1) In-House Training

Task Force meetings for both EMIS/school mapping and micro-planning were periodically held during the SMAPP Project. During the Task Force meetings, the tasks were identified and discussed, the progress of each activity was presented, the issues and problems were identified and discussed to plan actions for solutions or identify alternative solutions, while, at the same time, ideas on how and what to monitor and evaluate were raised and shared among members. Those meetings were considered as trainings for resource persons of the OEB who subsequently provided orientation, guidance and trainings for the ZEO and WEO officers.

(2) On-the-Job Training

In addition to the training workshops or training courses, practical and technical trainings were provided through on-the-job trainings related to the GIS and the Global Positioning System (GPS) to transfer required skills and knowledge. On-the-job trainings were also conducted as output-oriented training. The trainees updated 439 data entries from the school location survey and produced a base map of five expanded woredas, representing typical output examples from the on-the-job training.

(3) Trainings of Trainers

The OEB's resource persons, in collaboration with the SMAPP Project Team, provided the ZEO officers with trainings of trainers (ToT). In the case of the micro-planning, the officers worked as training facilitators in a series of SMAPP Training Workshops for the WEO officers. As a result, thirteen (13) ZEO officers, including both of the SMAPP pilot and the non-pilot zones, energetically worked as training facilitators in

the 4th SMAPP Training Workshop for the formulation of the WPEDP, while six (6) ZEO officers were trained as instructors for the GPS.

Table 1-2: Main Training of Trainers

Training of Trainers	Outline
Two-day ToT for 2nd SMAPP Training Workshop, 18-19 February 2006	Participants: One from each ZEO Total Participants: 6 from 6 ZEOs
One-day ToT for 3rd SMAPP Training Workshop, 19 May 2006	Participants: One from each ZEO Total Participants: 10 from 7 ZEOs
Three-day ToT for 4th SMAPP Training Workshop, 4-6 October 2006	Participants: One from each ZEO Total Participants: 17 from 13 ZEOs Outputs: 13 participants worked as facilitators and / or instructors of the GPS

(Source: prepared by the SMAPP Project Team)

(4) Training Workshops

Four (4) SMAPP Training Workshops and two introductory training workshops were conducted for a total number of 1,419 officers from WEOs and ZEOs (5,166 man-days). 117 draft WPEDPs were produced and five (5) school records were improved through the workshops. The training workshops, that were undertaken, separately or in a combined way, for EMIS enhancement, school mapping and micro-planning, are listed in Table 1-3.

Table 1-3: SMAPP Training Workshops

Training Workshop	Outline
Introductory Training Workshop in School Mapping 9 June 2005	Participants: Counterpart personnel and related former OECBB staff Main topics: Introduction of school mapping, case study from South Africa
1st SMAPP Training Workshop Two batches (two days / batch) 14-15 & 20-21 September 2005 Ras Hotel, Adama	Title: Improvement of data collection and management and strengthening the EMIS at the woreda level Participants: three from each WEO, one from each ZEO Total participants: 177 from 92 WEOs, 1 from each ZEO Main Topics: Introduction of SMAPP, key terminologies in EMIS, data management in planning Main Products: Training manuals, suggestions to develop improved school records
Introductory SMAPP Training Workshop in School Mapping Database 8 October 2005	Participants: EMIS/School Mapping Task Force Main topics: Updating the GIS, how to develop school mapping with GIS, exercise of base map preparation
2nd SMAPP Training Workshop Three bathes (two days / batch) 20-21, 22-23 & 24-25 February 2006, Global Hotel, Addis Ababa	Title: Introduction of micro-planning Participants: three from each WEO, one from each ZEO Total participants: 288 from 103 WEOs, 6 from 6 ZEOs Main Topics: Introduction of micro-planning, Oromia education policies, exercise to develop woreda annual education development plan, & data verification for school mapping Main Products: Training manuals, planning exercises on situation analysis, enrolment target settings, estimated cost.
3rd SMAPP Training Workshop Three batches (two days / batch)	Title: Preparation for micro-planning Participants: three from each WEO, two from each ZEO

22-23, 24-25 & 26-27 May 2006, Global Hotel, Addis Ababa	Total participants: 317 from 114 WEOs, 10 from 7 ZEOs Main Topics: Micro-planning and school mapping Main Products: Training manuals, exercises on mission statement, situation analysis, gap analysis, stakeholder analysis
4th SMAPP Training Workshop Four batches (six days / batch) 9-14 & 23-28 October and 7-12 & 20-25 November 2006, Adama Teachers Training College, Adama	Title: Development of WPEDPs Participants: three from each WEO, one from Woreda Finance and Economic Development (WoFED), one from Woreda Administration Office (WAO), one from ZEO (excluding facilitators) Total participants: 428 from 117 WEOs, 100 WoFED, 69 WAOs, 3 ZEOs and 13 ZEO facilitators Main Topics: whole process of developing WPEDPs Main Products: 117 draft WPEDPs

(Source: prepared by the SMAPP Project Team)

1.7.2 Monitoring and Evaluation

Monitoring and evaluation of the SMAPP Project were undertaken in order to assess the progress and subsequent formulation of an adjustment plan of action regularly at the Steering Committee meetings. The outline of the evaluation was shown in Table 1-4.

Table 1-4: Timing and Main Purpose of Monitoring and Evaluation

Type of M & E	Timing	Main Purpose
Baseline Survey	June 2005	To understand "before the project" existing conditions to see changes
Mid-term Evaluation	March 2006	To assess the process used and outputs, gain lessons for the next steps and adjust the plan of action, if necessary
Terminal Evaluation	June 2007	To assess achievements, impacts and sustainability and compile lessons learnt for future project activities

(Source: prepared by the SMAPP Project Team)

1.8 KNOWLEDGE AND TECHNOLOGY EXCHANGE

Two major opportunities to exchange views and experiences outside of the country were provided for the OEB in the areas of data management to learn more about how to make a fair allocation of resources in the context of a decentralized governance and administration system.

A study tour was conducted to a JICA-assisted education project in Malawi, that was entitled "The National Implementation Programme for District Education Plans (NIPDEP)", while the other tour was a counterpart training in Japan.

The study tour to Malawi was undertaken for the period 4 to 12 August 2005 with three main objectives: i) to understand the NIPDEP objectives, strategies, and activities; ii) to exchange views with the NIPDEP team, Malawi central and local education officers, local consultants, and school managers; and iii) to have a forum to discuss with the central and local governments of Malawi, concerning constraints and possible mechanisms for implementing a decentralization process and its administration under a decentralization policy.

The findings and outcomes of the Malawi study tour were briefed by the OEB staff at the 1st SMAPP Training Workshop in order to share the Malawian experiences and views with the workshop participants, highlighting the following implications for the SMAPP Project to:

(1) recognize the Malawian achievement of more than 100 % GER in the primary education sector as an encouraging African experience;

(2) understand the progress made in Malawi, its constraints and potentials for the success of the decentralization policy in the Malawi education sector for the enrichment of the vision of improved education in the future; and,

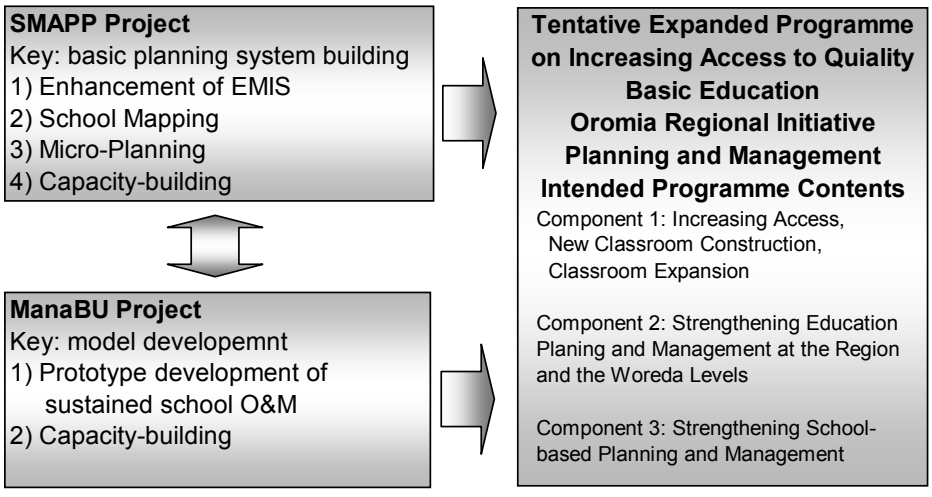
(3) show the process and experience of a community-based approach in education improvement planning and management through the NIPDEP.

The counterpart training in Japan was conducted for one (1) month from 22 August to 22 September 2006 with four objectives: i) to understand the central and local educational administration system in Japan; ii) to understand the significance and relevance of the EMIS, school mapping as well as micro-planning through exchanging views and experiences; iii) to understand school management through visiting various levels of education services, and iv) to have consultative meetings for further cooperation between Ethiopia and Japan.

Lessons learnt from the training in Japan were shared with the WEO officers throughout the 4th SMAPP Training Workshop for the formulation of the WPEDPs and presented in the 5th Steering Committee meeting in December 2006.

Knowledge and technology exchanges were found to be one of the core references, which encouraged not only the OEB but also the ZEOs and the WEOs in the development of the WPEDPs.

1.9 SMAPP PROJECT IN OEB-JICA PROGRAMME FRAMEWORK



(Source: prepared by the SMAPP Project Team)

Figure 1-5: The SMAPP Project and the OEB-JICA Education Programme Framework

An OEB-JICA programme framework in Figure 1-4 illustrates a future OEB's initiative to mobilize expected outputs from the two JICA-assisted projects, the SMAPP Project and the ManaBU Project, and to accelerate a process to improve access to quality primary education in the Oromia Region. The SMAPP Project was

concerned with the region and woreda levels of planning and management, while the ManaBU Project was addressed to the woreda and the lower levels, including kebele, as well as neighbourhood communities. The two Projects complemented each other in order to maximise their effects, resulting in an integrated programme to be initiated by the OEB in the future.

1.10 COORDINATION WITH OTHER PROJECTS OR DONORS

The SMAPP Project built substantial relationship with related projects in order to more effectively achieve common goals for the improvement of access to quality basic education in the Oromia Region. With respect to specific relationships with data management, school mapping and micro-planning, the SMAPP Project identified the g projects or donors identified below in order to gain lessons learnt from them as well as to have close consultation with each other.

1.10.1 ManaBU Project

The ManaBU Project was undertaken by the OEB with the technical assistance of JICA. Inter-institutional cooperation was established within the JICA's programme approach to primary education development in the Oromia Region. Field study to the respective WEOs, where the ManaBU Project operated, the organization of Joint Steering Committee meetings, the publication of a joint brochure were carried out to disseminate and share the views of the OEB and JICA with other stakeholders. For example, the ManaBU had experiences in school mapping for micro-analysis at the kebele level of value to one another. Despite the fact that the level of planning was different between the ManaBU and the SMAPP Projects, i.e. the kebele level in the ManaBU Project and at the regional and woreda levels for the SMAPP Project, technical experiences gained from the ManaBU Project contributed to the development of a workable framework and a plan of action for the SMAPP Project to develop the OEdMap.

Dissemination of the community approach formulated through the ManaBU Project was also sought. As a result, the guidelines that the ManaBU Project developed were presented and distributed to 117 WEOs during the 4th SMAPP Training Workshop and general project outline was shared at the Marketing Fair through setting up an information booth for the ManaBU Project.

1.10.2 USAID / BESO Project

The USAID-funded project, Basic Education System Overhaul Project (BESO I) and Basic Education Strategic Objective Project (BESO II) which were in operation since 1995 had generated relevant experiences in the areas of interest of the SMAPP Project: such as capacity development activities for the WEO. Although no overlapping was recognized before the commencement of the SMAPP Project, demarcation of the two projects was needed and subsequently clarified as in Table 1-5.

Table 1-5: Demarcation between BESO and SMAPP

	Type of current support and areas of training	BESO	SMAPP
1	Development of School Mapping with related trainings	-	○
2	Training for school teachers in active learning	○	-
3	Training for school directors in leadership in school management	○	-
4	Provision of materials for cluster schools with reference textbooks, duplicating machines, teaching aids, type writers, etc.	○	-
5	Capacity Building of WEO in education supervision and management	○	-
6	Capacity building of WEO in micro-planning	-	○
7	Support to installation of new UIS-EMIS: translation of questionnaire for AEC	○	-

(Source: SMAPP Project Team)

In reference with the above demarcation, further technical consultations were made during the project life. As one of the outcomes from the technical consultations between BESO and the SMAPP Project, the BESO-assisted OEB guideline on how to complete AEC questionnaires resulted in the improvement of data collection and management during the 1st SMAPP Training Workshop.

1.10.3 UNESCO

In September 2005, four months after the commencement of the SMAPP Project, the MoE and the respective regional education bureaus, including the OEB, reached final consensus on how to replace the previous EMIS database system with a new EMIS database invented by the UIS. This nation-wide programme on the new installation of the UIS-EMIS database, eventually, affected the SMAPP Project activities, especially with regard to the development of the OEdMap database structure and data contents and with respect to micro-planning in the data preparation for baseline data and projections used for the WPEDP.

Throughout the project life of the SMAPP Project, technical consultation continued with the programme office of the UIS. Irregular but continuous technical consultation facilitated the SMAPP Project Team to conduct a verification study on the compatibility and accuracy of the OEdMap, which involved a comparative study between the previous EMIS and the current UIS-EMIS for the AEC and a rapid impact assessment of the UIS-EMIS on the AEC activities.

1.10.4 UNICEF

United Nations Children's Fund (UNICEF) began a new country assistance programme in Ethiopia in 2006/07. In response to the urgent country needs to improve planning and management capacity of the respective region education bureaus and the WEOs, UNICEF is currently implementing a project for school mapping and micro-planning in the Amhara Region by adopting a different technical approach, that does not employ GIS technology. Consultation meetings were held during the SMAPP Project to exchange experiences and views for the further possible use in nation-wide school mapping and micro-planning.

1.11 PUBLIC RELATIONS

The SMAPP Project needed to introduce and inform its project activities and progress to the stakeholders involved in education sector development in Ethiopia through the following objectives by:

1) disseminating ideas and progress of the SMAPP Project for increasing understanding and support from the stakeholders;
2) receiving feedback to improve the SMAPP Project performance; and,
3) creating a social forum to exchange views and experiences with stakeholders.

To attain the above objectives, the SMAPP Project:

1) created a nickname for the project, ‘‘SMAPP’’ and designed a logo;
2) issued periodically a SMAPP newsletter; and,
3) published brochures

One of the brochures was published jointly by the ManaBU and SMAPP Projects in order to promote understandings on JICA's approach to improvement of primary education in the Oromia Region. Newsletters and brochures are presented in Appendix-10.

The SMAPP Project Team sought other opportunities to disseminate ideas and give information on the progresses of the SMAPP Project. In line with this, the SMAPP Project had two significant opportunities, through which Ethiopian local mass media, including Ethiopian TV, radio, and newspapers, were mobilized. They were;

1) a handing-over ceremony of the JICA donated motor-bikes in June 2006
2) the SMAPP Marketing Fair in June 2007

1.12 SMAPP DOCUMENTS

The SMAPP Project produced various documents. The main documents are listed in Table 1-6.

Table 1-6: List of the Main Outputs of the SMAPP Project

Categories	Main Products
(1) In the area of the EMIS	School Records forms for all primary schools Registry of new students or intake into Grade 1 Registry of transfer 1) Transfer-in 2) Transfer-out 3) Transfer certificate Class Registry
(2) In the area of the OEdMap	OEdMap (database system) "OEdMap Manual" ** "An Introductory GIS and School Mapping" ** "An Intermediate GIS and Utilisation and School Mapping" ** "OEdMap Operation Management and Updating" ** "Using a GPS for School Mapping" ** "OEdMap Supplemental Manual" ** "Data Transfer from EMIS to OEdMap"** Booklet "Quick Start Guide" for GPS operation** "OEdMap Field Guide" ** OEdMap Products used for Micro-planning Exercise 117 sets of School Coverage Maps, School Information Maps and School Information Matrix
(3) In the area of the WPEDP	"Micro-planning Training Manual" (English version)** "Micro-planning Training Manual" (Afan-Oromo version) "117 WPEDP" (Afan-Oromo version) "117 WPEDP" (English summary version) *
(4) Report	1) Inception Report (May 2005) 2) Overview Report (June 2005) 3) Progress Report (1) (October 2005) 4) Interim Report (March 2006) 5) Progress Report (2) (December 2006) 6) Draft Final Report (May 2007)

Note) * = A copy of the documents or the sample is included in the Appendix of the Main Report

** = A copy of the documents is included in the DVD Reference.

(Source: SMAPP Project Team)

CHAPTER 2:EDUCATION ADMINISTRATION AND FINANCIAL MANAGEMENT

2.1 EDUCATION AND DEVELOPMENT POLICY FRAMEWORK

2.1.1 The Education and Training Policy (ETP)

The ETP is the backbone of educational development. The ETP was prepared and issued by the Transitional Government of Ethiopia in 1994 that was established to transform the country from the rule of the socialist oriented military government (the *Derg*) into the present market-oriented and democratized government.

The ETP document identified relevance, quality, accessibility and equity as the major issues facing the country's education system. In more specific terms, the ETP pointed out these issues highlighted by low GER at primary level, inadequate infrastructure, especially in rural areas, wide regional and gender disparities in access to education opportunities, and a lack of clear linkage between educational objectives and the present and the future development goals of the society.

The major educational goals reflected in the 1994 ETP are:

1) To develop the physical and mental potential and problem solving capacity of the individuals so as to utilize the nations resources wisely;
2) To relate education to environment and societal needs appropriately; and,
3) To develop a positive attitude towards the development and dissemination of science and technology in society and respect democratic values and human rights

The strategies to achieve these general goals are the:

1) Development of curriculum on the basis of the above stated goals and objectives;
2) Implementation of a new structure of education system which is an eight-year primary education (1-8) and four-year secondary education (9-12);
3) Provision of a greater emphasis on research at degree and diploma levels of higher education;
4) Development of non-formal education parallel to formal education, with appropriate linkages to the formal education system, especially at the primary level;
5) Provision of technical and vocational training to all those who leave the school system at various levels;
6) Emphasis on measurement and assessment of student achievements and aptitudes;
7) Expansion and strengthening of the pre-service teacher training and in-service teacher training for continuous professional development of teachers;
8) Use of nationality languages (mother tongue) as a medium of instruction at the primary level;
9) Development of mechanisms for coordinated production and distribution of educational support inputs of relevance and quality and their proper utilization; and,
10) Decentralization of educational management with clear guidelines stating the rights and duties of all involved in education

Based on the above goals and strategies, the ETP identified three areas for special attention as priorities for immediate action. The three areas are to:

1) Change curriculum and the preparation of educational materials;
2) Focus on teacher training and overall professional development of teachers and other personnel; and,
3) Change educational organization and management

In order to achieve the strategic goals set in the ETP for the country's education system and to translate the strategies into a viable programme of action, the MoE developed the concept of ESDP in collaboration with the regions, donors, and other key stakeholders.

2.1.2 Education Sector Development Programme (ESDP)

ESDP I started in the Ethiopian fiscal year[4] of 1990 E.C. (1997/98) and ended in 1994 E.C. (2001/02). ESDP II was developed for three-years from 1996 E.C. (2003/04) to 1998 E.C. (2005/06) to synchronize the ESDP implementation period with the national development plan implementation. Implementation of ESDP III was started in 1998 E.C. (2005/06) and will end in 2002 E.C. (2009/10). The concept of ESDP brought many benefits to the planning of the education system in the country. Those benefits are summarized as follows;

1) ESDP takes a sector-wide approach to education planning and allocation of resources as opposed to a component approach to plan for education. This helped to reduce the structural imbalances between various components within the education sector such as primary, secondary, technical and vocational, higher and, non-formal education.
2) ESDP provides a coordination mechanism to channel the funds from the government, donors and community to the education sector without the duplication of efforts. Joint government–donor forums during the preparation of the ESDP, Annual Review Meetings (ARM) and Joint Review Missions (JRM) provide sufficient opportunities for effective allocation of resources without duplication and adjustments to the programmes during implementation.
3) ESDP approach has promoted closer linkages between the country's development goals and the education sector. Especially during the development of ESDP II, closer linkages were forged between investment in the education sector and the objectives of the Sustainable Development and Poverty Reduction Programme (SDPRP) followed by the Plan for Accelerated and Sustained Development to End Poverty (PASDEP).
4) ESDP approach has contributed to fostering closer integration between the regional and national education goals and strategies. Through this closer integration, the regional disparities in the development of education were brought to focus and remedial actions through special programmes and resource allocation were made possible.

In order to accelerate the pace of achievements gained through the implementation of ESDP I and II, ESDP III has continued to focus on primary education. The main objectives of primary education for the coming five years are to;

1) raise enrolment;
2) improve equity and quality;
3) reduce dropout and repetition rates; and
4) bring down student-teacher and student-section ratios to the standards set.

By the end of the ESDP III programme period (2009/10), the targets were set; such as a GER of 112.6% with a student-section ratio of 50 and a student-teacher ratio of 50 for first cycle and 45 for second cycle primary. The programme focuses on reaching not only children at the official admission age (age 7) but also 4 million out-of-school children, those who did not get the opportunity to enter schools at their appropriate age. Therefore, a target of over 100% GER is set due to the inclusion of overage

[4] The fiscal year of the GoE starts on July 1. The figure without the acronym of 'E.C.', meaning Ethiopian Calendar, should be read as Gregorian (western) calendar in this report. In other words the figure of the year with 'E.C.' connotes the Ethiopian fiscal year.

children in the total enrolment.

The overall federal ESDP policy framework was translated into the respective regional policy frameworks. As a result, Oromia Region issued Oromia ESDP III.

The overarching strategic goal of primary education for Oromia Region is the achievement of UPE by 2015. Based on an operational definition of UPE developed for Ethiopia[5], a fifteen-year perspective plan for primary education was developed in July 2004 by the OEB. Based on the fifteen-year perspective plan to achieve UPE, key policy-issues and strategies developed by the OEB with close participation by the zones and the woredas, are to:

1) focus on increasing Net Intake Rate (NIR);
2) promote Alternative Basic Education (ABE) to improve access to school;
3) reduce dropout rate, specially for Grade 1;
4) improve repetition and continuous assessment;
5) achieve gender and geographical equity;
6) improve access to school through reducing the distance between school and community;
7) promote low cost construction of schools;
8) promote decentralization, community participation, and financing of education;
9) change from double shift to single shift;
10) strengthen teacher training in collaboration with the private sector; and
11) reduce student-section, student-teacher and student-textbook ratios.

In line with the above, the OEB issued a policy directive, by which, at least, one formal first cycle primary school and one ABEC shall be built per kebele.

2.1.3 Plan for Accelerated and Sustained Development to End Poverty

Poverty reduction continues to be the core objective for Ethiopia's development. The GoE places a very high priority on poverty reduction as part of its overall goal for the socio-economic development of the country.

In order to achieve this goal, the GoE, with the support its partners, in 2002 developed its first comprehensive programme, known as SDPRP. The SDPRP was built on four pillars. The four pillars were: i) agriculture led industrialization; ii) reforms in the justice system and in the civil service, iii) decentralization of governance and the empowerment of the communities, and iv) capacity building in public and private sectors. The SDPRP identified investment in four priority sectors as a key element to support the above mentioned four pillars. The four priority sectors were: i) roads, ii) education, iii) agriculture and natural resources, and iv) the health sector.

Based on the results from the implementation of the SDPRP, the current poverty reduction effort was codified into the "Plan for Accelerated and Sustained Development to End Poverty (PASDEP)" in October 2005. It characterized the current poverty profile of Ethiopia as 'poverty traps' that was self-reinforcing mechanisms that prevent the country from breaking out from a combination of low income levels and low productivity growth. The PASDEP identified five (5) major factors that interact with each other to form the 'poverty traps'. Those five factors are: i) population pressures with the productive resource base: limited useable farm land per household; ii) low investment in human capital and low educational investment; iii) a

[5] See, Bastian, Joseph M (2004). Universal Primary Education: An Operational Definition for Ethiopia, USAID/BESO II Project, Ministry of Education, Addis Ababa, Ethiopia.

low level of infrastructure; iv) a low-risk/low-return trap, i.e., low involvement of farmers in market-oriented cash crop production; and v) early childhood trap, i.e., poor nutrition of children. Education can be identified as one of the critical instrumental sectors to break through the chain of poverty traps.

Within the above framework of the PASDEP, education remains as the core sector among non-economic sectors to serve the objectives of poverty reduction as well as to reach the MDGs. The primary education sub-sector is highlighted as the main tool for achieving objectives. Three main and interrelated issues stressed in the PASDEP are; i) making adjustments to improve quality; ii) continuing expansion to out-of-school children; and iii) the reduction of dropouts.

2.2 DECENTRALIZATION POLICY IN EDUCATION

2.2.1 Decentralization of Governance in Ethiopia

The GoE has embarked on the decentralization of governance to bring it closer to the community level as one of its key strategies in order to achieve its goal of social, economic and political development. Decentralization of governance in education is, also, a key strategy in achieving the goals of UPE. The ETP recognized the decentralization of educational management and administration as a key reform strategy. Due to decentralization, many of the functions and responsibilities for management of education have been devolved to the regions. The regions also have further decentralized roles and responsibilities to the woredas for the management and administration of primary and lower secondary education. The MoE developed new guidelines specifying and assigning the various management and administrative functions and responsibilities to the different levels of the education system. The initiative of the MoE follows the reorganization of the overall governance process currently taking place in Ethiopia. As mentioned above, the education decentralization initiative gave the woredas power for managing and administering primary and lower secondary education. These include improvement of educational access, equity, and quality. The objectives of decentralizing educational governance to woreda level are to: bring the decision making closer to the communities and their needs; promote community ownership of the education system; increase accountability and efficiency at the local level; and increase the availability of additional resources for education.

The decentralization of educational governance is helping to make progress towards the realization of the government's current emphasis on improving quality in the provision of education, particularly in primary education. Significant needs are also being identified for improving efficiency (reduction of dropout and repetition rates) and for reaching gender equity in the primary education system.

The successful implementation of the decentralization policy has posed many challenges to the governance of the education system. The continuing regional inequalities in the education system has posed many questions as to the role and efficacy of the federal, regional, zone, and woreda structures within the decentralized system to promote equity and balanced growth of the education system in the country as a whole. The ESDP ARMs have repeatedly pointed out the lack of sufficient organizational capacity as the key bottleneck to providing the necessary managerial and logistical support for the implementation of the programmes.

2.2.2 Organization of the Education System under the Decentralized Governance

(1) Federal Level

At the federal level, the MoE is responsible for the governance of education. The MoE is a member of the Federal Cabinet. The Capacity Building Ministry has limited oversight function over the MoE.

Reporting to the Minister are three Vice-Ministers, each responsible for general, technical and vocational, and higher education. Within the MoE, the Department of Educational Programmes, the functions of supervision, and teacher development supports primary and secondary education at policy levels. The Planning and Programmeming Department integrates these functions for all sectors of education at the national level and is responsible for coordinating the development of the ESDP. In addition, three central organizations - Institute for Curriculum Development and Research, the Educational Media Agency, and the Agency for National Examinations – report to the MoE.

Overall, the functions of the MoE within the decentralized environment, remains primarily policy coordination, standard setting, and the assurance of the equitable distribution of educational resources to all populations. Some of the more specific functions of the MoE are to:

1) Develop education policy
2) Develop ESDP and make the necessary follow up
3) Set national standards
4) Provide technical and professional support to Regional Education Bureaus (REB)
5) Design strategies to provide primary education for the whole school-age population
6) Provide support in order to attain quality, efficiency, and access
7) Provide support to the REBs in developing curriculum for primary education
8) Check whether the education is secular
9) Develop curriculum for secondary education

(2) Governance of Education at the Region Level

As of fiscal year 2006/07, the governance of education at the regional level was further re-organized. For a brief period until 2006/07, the governance of the education sector was combined with the capacity building sector under the Oropmia Education and Capacity Buidling Bureau (OECBB). One of the two deputy bureau heads of the OECBB was responsible for the education sector and reported to the OECBB head. However, in 2006/07, the Region Bureau of Education became independent of the Capacity Building Bureau, and is now headed by a Bureau Head.

The OEB at the regional level consists of several departments: Planning, Educational Programmes and Ssupervision, Curriculum Development, Non-formal Education, and Gender. The functions of education at the level of the OEB are to:

1) Develop curriculum for primary education
2) Establish and manage Teacher Training Institutes (TTIs) and Teacher Training Colleges (TTCs), and Technical and Vocational schools
3) Give the necessary support to woredas
4) Organize training for primary school teachers

5) Assess whether the education given in the region is in accordance with the standards set at the national level
6) Coordinate different state institutions to attain the goals of education
7) Assign newly trained teachers to woredas
8) Develop programmes to strengthen the capacity of school principals

(3) Zone Education Office (ZEO)

Under the new decentralized governance system, ZEOs became a branch of the OEB. The budgets for the ZEOs come from the OEB. ZEOs function as an agent of the OEB to communicate and coordinate the activities of the woredas. In Oromia Region, the ZEOs consist of the following specialists or experts in educational programmes and supervision, planning, statistics specialist, non-formal education, and gender.

(4) Woreda Education Office (WEO)

WEO reports directly to the head of the Woreda Council. The Woreda Education and Training Board is responsible for creating the necessary conditions community ownership of the education system and to scrutinize the woreda plans.

Membership of the Board consists of the following:

1) A representative of the WEO (chairperson)
2) Representatives of Kebele Education and Training Board (5 kebeles of which 2 are members of Parent-Teacher Association (PTA))
3) Representatives of teachers' women, and youth associations.

Reporting to the woreda education head are the following experts: educational programmes, statistics, supervision, non-formal education, and gender. Administrative support functions such as finance, personnel etc are provided through a pool system.

The major functions of the WEO are to:

1) Establish and manage primary and secondary schools
2) Develop short and medium-term educational plans
3) Assess whether the education given in the woreda (government or non-government) is in line with the standards of education set at national or region level
4) Plan and implement primary education for all in the woreda
5) Identify people who lack access to education and plan to provide education accordingly
6) Select and decide areas where new schools shall be constructed
7) Establish a supervision scheme at woreda and school level to improve the efficiency and quality of education
8) Mobilize the communities to take part in committees at woreda and school levels (e.g., PTA)
9) Prepare symposiums and seminars on educational problems
10) Arrange for experience-sharing programmes among the kebele education committees and PTA
11) Provide encouragement to public associations, organizations, educational experts, individuals, and schools.
12) Recruit primary school teacher
13) Manage the academic and support staff
14) Promote community participation

15) Develop plans to mobilize resources
16) Decide on disciplinary cases of directors with the Woreda Education and Training Board and follow-up the implementation

(5) Kebele

At the kebele level, the management and supervision of primary education rests with the Kebele Education and Training Board (KETB). Members of the KETB include:

1) A representative of kebele administration (chairperson)
2) Director of the school (secretary)
3) Three parent representatives of PTA (members)
4) A representative of women and youth association (member)
5) A representative of teachers' association in the kebele (member)

KETB is accountable to the Council of the kebele. Its major duties and responsibilities are to:

1) Approve the annual plan and budget of the schools
2) Prepare training and experience-sharing activities at the school level to assist and familiarize teachers with new findings and methods
3) Design mechanisms to generate income and use it for the improvement of access and quality
4) Coordinate the communities and parents to financially support schools
5) Take active participation in school leadership
6) Monitor the school performance.

(6) School

At the school level, the academic and administrative leadership rests with the head teacher. Many schools have faculty committees to assist the head teacher in the day-to-day running of school activities. Major functions of the schools are to:

1) Design mechanisms to generate income and use it for the improvement of access and quality
2) Provide secular education
3) Prepare training and experience-sharing activities at the school level to assist and familiarize teachers with new findings and methods
4) Produce citizens who have positive attitudes towards work and who respect the law, human, and democratic rights.
5) Provide skill and knowledge to youths that enable them to solve problems and improve the economic, political, and social life of the society
6) Provide guidance and counselling services to students
7) Arrange supervision services for teachers that can be given by capable teachers
8) Conduct research to identify problems of the teaching-learning process and identify solutions based on the existing conditions

The management of the school is supported by a PTA.

Membership of the PTA consists of :

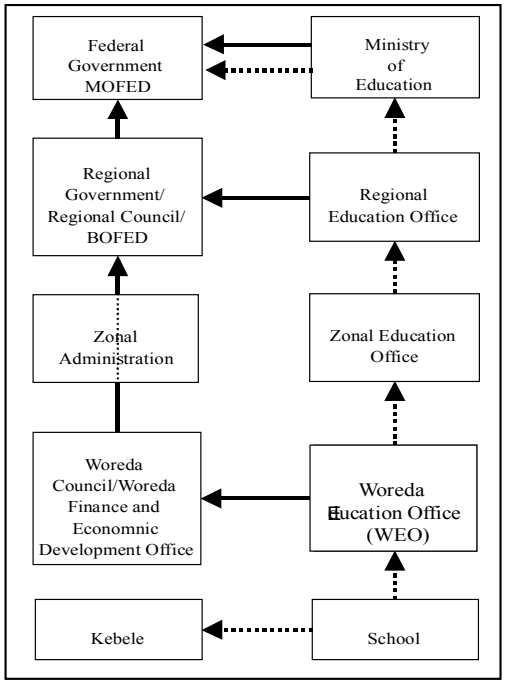
1) A parent elected by the Parent Teacher Conference (chairperson)
2) Two teachers elected by the Parent Teacher Conference (member)
3) Representatives of parents (up to four) (members)

Detailed duties and responsibilities of the PTA are presented in the Guidelines provided by the MoE directive. These functions and responsibilities of the PTA can be summarized as to:

1) support the headmaster to maintain discipline among the students and to support the teaching learning processes.
2) assure that the teachers perform their functions and responsibilities according to the set norms.
3) evaluate the teacher performance.
4) mobilize the community to support the school activities.
5) prepare/approve school plans and budget.

2.3 EDUCATION PLANNING AND BUDGETING UNDER THE DECENTRALIZED GOVERNANCE

The linkage between planning and budgeting has faced severe strains under the new decentralized financial flow and budgetary process. A budget is considered as nothing more than an annual plan expressed in monetary terms. If so, how does a woreda level budget express priorities of the education sector in the region and national budget?



(Source: prepared by the SMAPP Project)

Figure 2-1: Financial Reporting under Decentralized Governance

Under the present decentralized environment, establishing the linkage between the national, region, and woreda strategic goals and objectives through the annual plan development is an ad-hoc process.

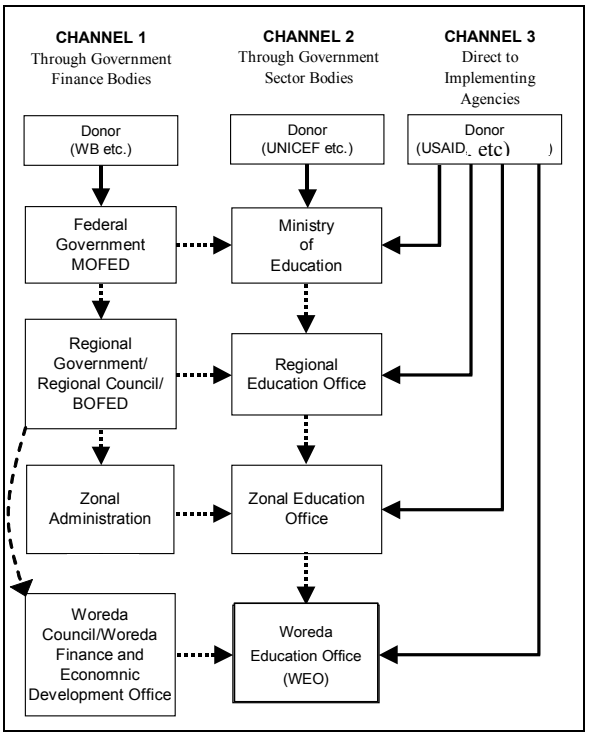
At the national level, the ESDP development process provides an opportunity to link the national goals and the regional goals. The methodology and process should call for improvement. This process can develop into a systemic planning process to link the strategic goals, strategies and programmes. However, such a process does not exist at the regional level to link the planning process between the region and the woredas. An

annual education conference at the regional level, in which all the woredas participate, might be the closest effort to have such a planning process. However, the agenda for the conferences are far too general to meet the needs of an annual planning exercise.

The Woreda Capacity Building Programme (WCBP), which was implemented by the MoE nation-wide, was designed to fill this gap and to link the woreda level planning process and contents with that of the regional education planning. But the sustainability of the WCBP, which was integrated into the regional planning process, has not been assured.

2.4 FINANCIAL FLOW UNDER THE DECENTRALIZED GOVERNANCE

Figures 2-2 and 2-3 show the financial flows from external sources and internal sources through the various governance levels. Figure 2-2 represents three different modalities for fund flow from donor agencies: both grants and loans.



(Source: prepared by the SMAPP Project)

Figure 2-2: Types of Donor Disbursement Channels

Channel-1 corresponds to the intergovernmental fiscal transfer mechanisms used by the government itself. The aid agency transfers the funds to the MoFED in the form of general budgetary support. The MoFED in turn uses the same procedures as the central government uses to transfer inter-governmental transfers. The aid funds flowing into the country through direct budgetary support will flow to the lower levels of governance through the regular inter-governmental transfers.

Channel-2 is employed by several bi-lateral and multi-lateral agencies. They provide aid funds through the MoE. Sector bodies at each governance level are responsible for managing the funds and for reporting. African Development Bank (AfDB), UNICEF, and Italian Aid are the examples using Channel-2 for disbursing their funds.

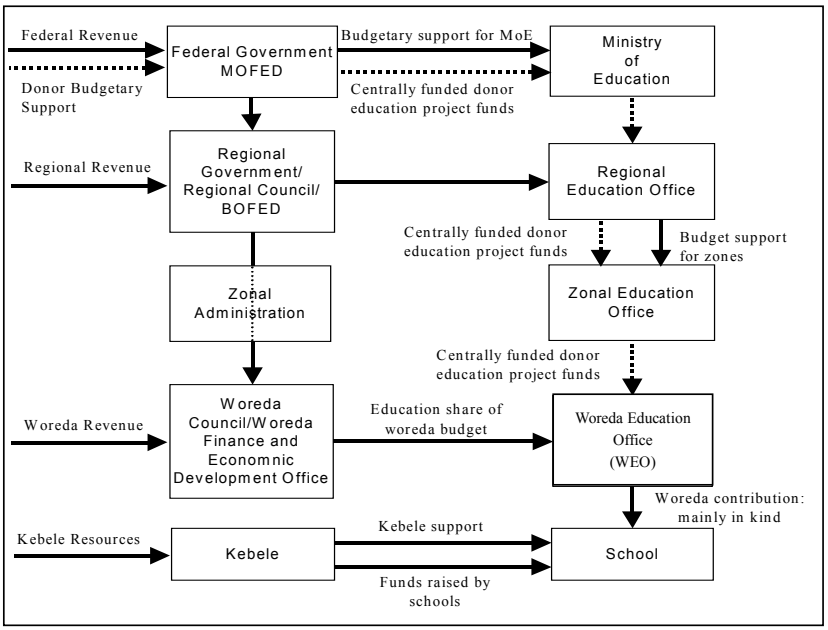
Channel-3 is direct disbursement by donors. Either donors or their agents, such as

consulting firms, hold the funds and undertake activities agreed upon and outlined through a project document, and pay for these activities directly. Many bi-lateral donors and Non Governmental Organisation (NGOs) prefer this channel as the donors have more control over how their funds are spent. In addition, since aid monies are allocated to specific activities within a sector, it is easier to assess the impact of the projects and to report back to their respective governments on the performance of the aid monies.

Figure 3-3 presents the modalities for inter-governmental transfers between various levels of decentralized governance. Federal revenue along with donor budgetary support is divided into two parts. One part is allocated to MoE for their annual budget development. The other part is channelled to the regional governments through the BoFED. The MoFED uses several criteria for deciding the size of the allocation to the regions. Size of the population, the level of development, and ability to raise revenue by the region are among the criteria to decide the region allocation.

The BoFED combines the federal allocation with the regional revenue. Just as at the federal level, this total financial resource at the regional level is divided into two parts. One part goes to the budgetary support for the regional bureau and their activities. The other part is transferred to the woredas directly in the form of a block grant. Oromia Region uses several criteria to decide on the size of the block grant. Each criterion is assigned a weight. These criteria in the case of Oromia Region include size of the woreda population (weight 65%); level of development (weight 25%); and revenue generation (weight 15%).

The WEOs are supposed to provide block grants to schools based on calculations of unit cost for non salary expenditures. However, this has not yet been implemented in the Oromia Region. The WEOs provide some in kind support such as stationery materials to the schools in the Oromia Region. In addition, the MoE, the REBs, and the WEOs receive donor funds given to the government through Channel-2. These funds will eventually be reflected in the annual budget of the governance level receiving the funds.



(Source: prepared by the SMAPP Project)

Figure 2-3: Inter-governmental Transfer of Funds in Oromia Region

2.5 BUDGET FORMULATION PROCESS

The budget formulation process in Oromia Region starts in the month of January for the upcoming fiscal year. The BoFED, based on the trend analysis, gives a budget ceiling for the regional bureau and for the woredas. The region bureaux present their preliminary budget requests in April. By the end of April, the BoFED holds budget hearing. On the basis of the budget hearing, the sector budgets are presented to the region cabinet before presenting to the region council for approval.

At the woreda level, a similar process is carried out. For allocation of the block grant, various criteria are used. To determine the allocation to education sector at the woreda level, several indicators, such as total enrolment, average teacher salary per student, student section ratio, and unit cost of construction, are considered. In addition, the WoFED office holds budget hearings.

Once approved by the woreda council, the woreda budget is sent to the zone office for consolidation. The zone office consolidates budgets for all the woredas within the zone using Budget Development Assistance (BDA) software specifically developed for this purpose. These consolidated zone budgets are transferred to the BoFED for consolidation at the regional level.

The woreda budgets, once approved by the woreda councils, need not to go through an approval process at the region level. Until the last fiscal year, the woreda budget ceilings provided by the MoFED were inclusive of the direct revenue collected by the woredas. In other words, if the woredas revenue plus the block grant exceeded the budget ceiling, the woredas were expected to surrender the excess revenue to the region treasury. However, starting with the upcoming fiscal year, the woredas will have the freedom to spend all the revenue they collect.

CHAPTER 3:PRIMARY EDUCATION PROFILE IN OROMIA REGION

3.1 PRIMARY EDUCATION PROFILE IN OROMIA REGION

3.1.1 Educational Provision

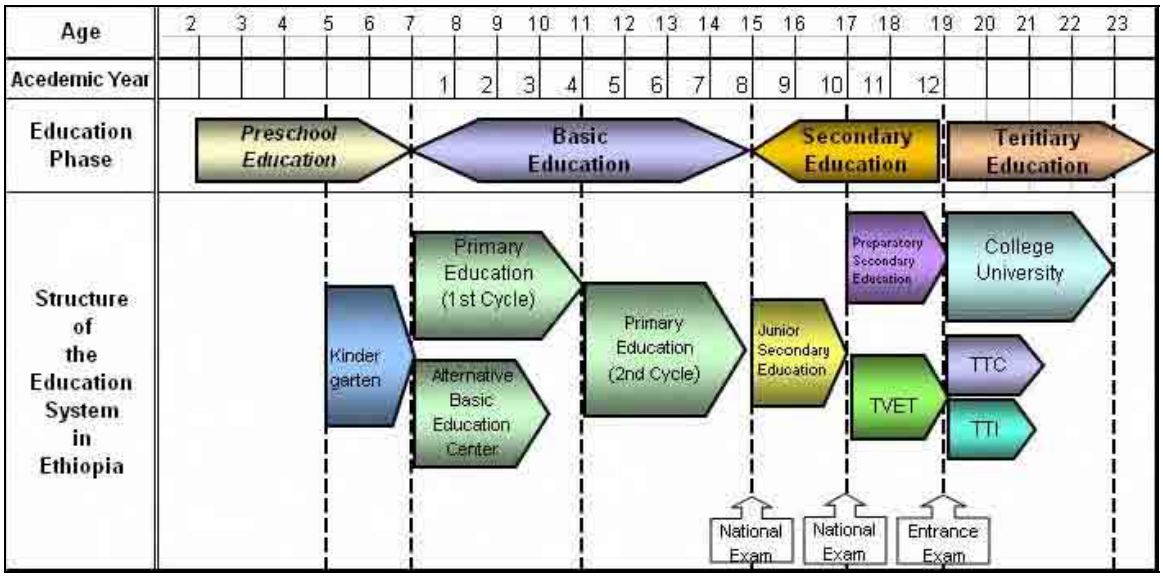
(1) Formal School

Primary education that is provided from Grade 1 to 8 is divided into two cycles. The first cycle covers Grade 1 to 4 for children aged 7 to 10. The second cycle covers Grade 5 to 8 for children aged 11 to 14.

The first cycle of primary education is intended to provide children with functional literacy, numeracy and the realization of environment. The second cycle aims at providing general education to prepare students for further general education and training in secondary schools.

(2) Alternative Basic Education Centre (ABEC)

Besides formal primary education, Oromia Region has an ABE programme to increase access to formal primary education. ABECs usually have lower-quality facilities compared with the formal primary schools. The centres are mainly managed by the community with technical support from WEOs and/or NGOs. The ABE programme is recognized by OEB as one of the strategies to achieve UPE by the year 2015.



(Source: prepared by the SMAPP Project)

Figure 3-1: Education System in Ethiopia

In the region, ABE curriculum is prepared by the OEB in collaboration with various NGOs. The curriculum is systematically linked to the first cycle (1-4) primary school curriculum to enable children who want to continue their education in the second cycle (5-8) primary education. The ABE programme embraces literacy, numeracy, and the realization of environment. A student who completes the ABE programme is equivalent to a student who completed the first cycle of primary education. However,

a child can join formal primary school before completing the ABE programme. From the information collected by the OEB, 23,480 children who attended the ABE programmes joined the formal primary schools in FY2003/04.

Table 4-1 shows the number of formal primary, junior secondary, preparatory and secondary schools in each zone in Oromia Region in 1997 E.C. (2004/05).

3.1.2 Achievements in Access, Quality, and Equity

(1) Access

As of October 1997 E.C. (2004/05), there were 6,463 formal primary schools in Oromia Region; in the 7 SMAPP pilot zones, there were 2,701 formal primary schools, as shown in Table 3-1. The formal primary schools included both government schools and non-government schools, such as private schools, public schools, missionary schools etc. There were, on average, 20-40 formal primary schools in each woreda. According to the federal education policy, each kebele should have one formal primary school and one Alternative Basic Education Centre (ABEC). There were some kebeles, which had neither formal schools nor ABEC. To complement this policy, the Oromia Region introduced an idea of school catchments' area by which one formal primary school covered 3 km radius.

Table 3-1: Number of Formal Primary, Junior Secondary, Preparatory and Secondary Schools by Zone in the Oromia Region in 1997 E.C. (2004/05)

Zones	Primary (Grades 1-8)	Junior Secondary (Grades 9-10)	Preparatory (Grades 11-12)	Secondary (Grades 9-12)
Arsi (P)*	700	28	8	29
Bale	527	21	7	22
Borena	203	5	3	5
East Harerge	577	15	5	15
West Harerge (P)	374	6	5	6
Ilbabor	432	12	5	12
Jimma	593	18	5	19
East Shewa (P)	585	29	12	32
West Shewa (P)	426	19	7	19
North Shewa (P)	340	15	7	15
East Wollega	509	26	7	27
West Wollega	648	26	9	26
South West Shewa (P)	276	9	4	9
Guji	273	6	3	6
Total of Oromia	6,463	235	87	242
Total of the pilot zones of the SMAPP Project	2,701	106	43	110

Note: * (P) = The Project pilot zones , which are Arsi Zone, West Harerge Zone, East Shewa Zone, West Shewa Zone, North Shewa Zone and South West Shewa Zone. In the table, Adama special zone is included in Arsi Zone. (Source: EMIS 1997 E.C. (2004/05) of the OEB)

As shown in Table 3-2, the apparent intake rate (AIR) of Grade 1 of the formal primary schools in Oromia Region, in 1997 E.C. (2004/05), was 168.4%, while the NIR was 49.8%. The AIR was increasing annually since ESDP started in 1997; however, the NIR still remained below 50%. When looking at the 7 pilot zones, West

Harerge Zone and South West Shewa Zone had AIR of more than 200%, while East Shewa Zone, West Shewa Zone and North Shewa Zone had the lower rates of AIR than the region average. North Shewa Zone had the second lowest AIR of 140.0% after Borena zone.

The GER of Oromia Region in 1997 E.C. (2004/05) was 85.4% and the net enrolment rate (NER) was 73.8%. Considering that the GER of the region in 1995 E.C. (2002/03) was 66.7%, this was a substantial increase for the region. Both the GER and the NER showed stable growth under ESDP I and ESDP II. The GERs of Oromia Region showed that accessibility to formal primary schools had been increasing successfully; however, the NER needs to be further improved.

By using EMIS 1998 E.C. (2005/06) data, trends of increasing in the number of primary schools in the SMAPP pilot zones in Oromia Region are shown in Appendix-4.

(2) Quality

The student-teacher ratio in Oromia Region was 78 in 1997 E.C. (2004/05), while the student-section ratio was 74. The region government tried to improve the classroom environment to decrease the student-section ratio to 60 and to stop the double- and triple- shift classes in 1998 E.C. (2005/06) through increasing the number of classrooms with a low cost construction scheme all over the region. Grade 1 had the highest student-section ratio of 84 among the 8 grades. To decrease the repetition and dropout rates, it was critical to improve this situation. The numbers decreased; but still will require a lot of effort to show improvement. Among the 7 SMAPP pilot zones, West Harerge Zone had the highest student-teacher ratio of 95, the student-section ratio of 97 and the student-section ratio in Grade 1 of 116 in Oromia Region.

Table 3-2: Apparent Intake Rate (AIR) and NIR of Grade 1 of Formal Schools by Gender, by Zone in the Oromia Region in 1997 E.C. (2004/05)

Zones	AIR (%)			NIR (%)		
	Male	Female	Total	Male	Female	Total
Arsi (P)*	183.2	182.0	182.6	59.7	60.3	60.0
Bale	162.1	123.6	142.7	43.0	34.4	38.7
Borena	128.4	103.9	116.4	30.1	28.0	29.0
East Harerge	184.0	148.4	166.6	62.9	51.6	57.5
West Harerge (P)	226.6	174.9	201.7	67.9	54.2	61.3
Ilbabor	179.8	188.5	184.2	79.5	75.3	77.4
Jimma	186.6	186.4	186.5	57.4	59.2	58.3
East Shewa (P)	175.2	159.4	167.4	44.7	43.9	44.3
West Shewa (P)	156.5	156.0	156.3	37.8	34.7	36.3
North Shewa (P)	146.9	132.9	140.0	30.9	29.5	30.2
East Wollega	157.0	162.8	159.9	44.9	40.4	42.6
West Wollega	146.2	162.6	154.4	52.7	49.1	50.9
South West Shewa (P)	202.5	199.5	201.0	58.9	56.7	57.8
Guji	198.0	144.6	171.8	41.5	30.2	36.0
Oromia	174.9	161.7	168.4	51.9	47.7	49.8

Note: * (P) = The Project pilot zones , which are Arsi Zone, West Harerge Zone, East Shewa Zone, West Shewa Zone, North Shewa Zone and South West Shewa Zone. In the table, Adama Special Town Woreda is included in Arsi Zone.
(Source: EMIS 1997 E.C. (2004/05) of OEB)

When looking at the figures for the student-teacher ratio and the student-section ratio, superficially it might be said that the quality of the education services in Oromia Region has increased. However, based on the field survey of the SMAPP Project Team, the classroom environment has deteriorated because the majority perception was that there has been too much government dependence on low cost classroom construction built with community participation, resulting in a limitation on quality control by the local government. The conditions of the newly built classrooms were quite poor and the furniture was inadequate. These situations might affect seriously the quality of education, which was reflected in the increase in dropout and repetition rates. Although the low cost construction scheme might contribute to the increase in access to schools, the OEB and WEOs were required to control the quality of the classroom blocks and environment in addition to focusing on increasing the number of classrooms for the purpose of increased student access to schooling.

In the 1st cycle primary schools, most of the zones had a good percentage of the qualified teachers to the total number of teachers was more than 90% in Oromia Region in 1997 E.C. (2004/05). All of the 7 SMAPP pilot zones had percentages of qualified teachers of more than 90%; East Shewa Zone had the lowest figure, 93.0%, which was lower than the region average of 96.8%. However, the percentage of qualified teachers in the 2nd cycle primary schools and the secondary and preparatory schools was quite low; 43.1% and 31.4% respectively. Seven (7) SMAPP pilot zones had percentages of qualified teachers between 38.4% (Arsi Zone) to 52.4% (East Shewa Zone) for the 2nd cycle primary schools.

(3) Equity

When looking at the AIR, NIR, GER and NER data by gender, the figures for females were still much lower than the ones for males. The region GER for males was 97.9% in 1997 E.C. (2004/05), while the one for female was 72.6%. The gender gap was 25.3%. Among the 7 SMAPP pilot zones, West Harerge Zone had the largest GER gender gap of 42.9%. The percentage of female teachers in Oromia Region was 33%. Among the 7 SMAPP pilot zones, Arsi Zone had the lowest percentage of 27% and East Shewa Zone and North Shewa Zone had the largest percentage of 39%. The low percentage of female teachers has negatively affected the girls' enrolment ratio in the Oromia Region.

The differences in the GERs between the rural and the urban areas were, also, very critical. In the rural area, the accessibility to primary schools needed to be increased, although the overall average GERs for the zones increased. On the other hand, in the urban area, the GER showed that classrooms were overcrowded. Both of the situations in the rural and urban areas require improvement.

Apart from the above primary education profile in Oromia Region, by using 1998 E.C. (2005/06) officially undisclosed EMIS data, trend analysis were attempted in order to describe more definitively the performance of the region's primary education. The results of the analysis are presented in Appendix-3.

3. 1.3 Donor's Intervention in Primary Education Development

A donor coordination forum known as the Development Assistance Group (DAG) has been in operation for several years. All the major donor countries and international agencies, including Japan, EU, World Bank, and United Nation (UN) organizations, are members of this forum. In addition, the donors and other development partners

participated in the development of the ESDP. The donors are active participants in the JRM. The JRMs, every year, devote special attention to problems and bottlenecks that affect the implementation of the ESDP. The ARM reviews the recommendations of the JRMs and coordinates the future implementation strategies for the education sector.

For example, most of World Bank's support to the education sector, including primary education, comes in the form of direct budgetary support; Channel-1 of Figure 2-2. A portion of the Bank's support to education sector still comes in through Channel-2 of Figure 2-2. Support to higher education is the example. The Bank's direct budgetary support is a part of the Poverty Reduction Support Credit (PRSC) for the implementation of the SDPRP.

The master plan of operations, 5th country programme 2002-2006, emphasized education and capacity building as the two priority areas for UNICEF support for Ethiopia. During the 5th country programme, UNICEF implemented three regular projects in education. These were: National Initiatives to Support Primary Education Development (NISPED); Primary Education Improvement (PEI); and Complementary Education Initiatives (CEI).

The project funded by Save the Children Denmark in Oromia Region, "Access to Basic Education for Children in North Shewa" started in December 2004 and ended in 2006. The development objective was to improve and develop new opportunities for children in the seven woredas of North Shewa Zone by 2007. The activities were to strengthen ABECs, to assist financially formal schools to strengthen their development capacity at school level, and to build management capacity at woreda and zone levels by implementing the ABEC project. Save the Children USA implemented the SCOPE Project funded by USAID. There were three major objectives for the project. The objectives were capacity building at region, zone, and woreda office, empowerment of the community, and strengthening of the PTAs.

Italian support to the education sector was provided through a bi-lateral programme entitled "Italian Contribution to the ESDP" for the period from 2002 to 2005 with three projects. The main purpose of the Italian support was to improve the education status of the Ethiopian population through support for the ESDP at the federal level, the MoE and regional levels for the four regional states of Afar, Oromia, Somali and Tigray regions.

The two projects, which were most related to the SMAPP Project, are outlined as below:

(1) ManaBU Project assisted by JICA

The implementation of the "Community-Based Basic Education Improvement Project (ManaBU Project)" was launched in November 2003. This is a four-year project to channel JICA technical assistance with a primary purpose to develop a model for community-based schools in six selected woredas in the Oromia Region. The six woredas are from Arsi Zone, West Harerge Zone and North Shewa Zone, which are included in the SMAPP pilot zones.

The expected outputs of the ManaBU Project are: i) strengthened capacity of the WEO in the planning and management of basic education in the six selected woredas; ii) direct benefits through construction and furnishing the community-based schools in the six selected woredas; iii) development of three guidelines for planning, construction, and management of community-based schools; and iv) teaching staff trained in community-based school management in the six selected woredas.

To attain these expected outputs, the ManaBU Project has developed field guidelines to be used as reference materials for woreda level education officers in order to ensure woreda capacity to duplicate the established community-based school model. The guidelines were developed in the context of local planning in decentralization policy.

(2) BESO I and Project Assisted by USAID

The BESO I Project, funded by USAID, started in 1995. BESO I was implemented in the two focus regions, Tigray Region and Southern Nations, Nationalities and People's Region (SNNPR), and in the MoE. In the area of planning, BESO I focused on strengthening the EMIS and developing a decentralized planning processes and tools, and designing management tools for personnel and materials management. .

BESO II started in September 2002. In the areas of planning and management, the main objective of BESO II was to implement, country-wide, the planning and management models developed and tested during the BESO I. Activities were implemented in all 11 regions and in the centre during BESO II. Oromia Region was one of the beneficiaries.

3.2 TEACHER TRAINING IN OROMIA REGION

Oromia Region government provides training for primary school teachers. In the 2004/05 academic year, the regional government used the Metu Teacher Training Institute to train 550 first cycle primary school teachers in regular programme and more than 1,000 teachers in the evening programme. The region used five TTCs to train second cycle primary school teachers. The five colleges were Adama, Asela, Jima, Nekemt and Robe TTC.

The government left most of the training of the first cycle primary school teachers to the private teacher training institutes/colleges and focused on the training of the second cycle primary school teachers beginning from the 2005/06 academic year. In 2004/05 academic year, among the first cycle primary school teachers, 96.8% of them met the proper qualification for the level, while only 43% of the second cycle primary school teachers met the proper qualification.

The government encouraged the private sectors' investment to be directed toward the development of human resources needed by the country and regions. Hence, the Oromia Region Government encouraged the establishment of private teacher training institutes and colleges. In 2004/05 academic year, there were 28 private teacher training institutes and colleges that trained about 23,000 primary school teachers in the Oromia Region. The involvement of the private sector helped the region to solve the shortage of trained teachers in primary schools. However, there were still shortages of qualified teachers in the market particularly for the second cycle primary and secondary schools.

(1) Pre-service Teacher Training Programmes

The pre-service teacher training programme refers to the completed training of teachers prior to entering any formal teaching service. The trainees were mostly secondary school graduates who met the criteria set for each of the levels of the training. They had no prior teacher training for the level of teaching they were going to work.

(2) In-service Teacher Training Programmes

Teachers already in the education system continued to develop their teaching skills and competence using different strategies that were provided by the national and regional policies and programmes. These included joining regular teacher training programmes, summer teacher training programmes, distance education programmes, and evening teacher training programmes. Teachers participating in in-service teacher training programmes at the same time performed their regular teaching duties in the schools while they studied. The summer programme took place when schools were on long summer vacation. The programmes ended towards the beginning of September, so they could resume their regular teaching work later in September when the schools re-opened.

The Oromia Region recognized that the capacity of the teacher training system needed to be expanded in order to provide the number of qualified teachers necessary to teach the greatly increased enrolments at all levels. It had also identified the need to improve the quality of the teaching force. In this regard, the region was improving its government capacity to provide oversight for the schools. The region encouraged the private sector to participate in teacher training, as well, providing more opportunities for training. The region used the variety of teacher training programmes mentioned above, such as regular, distance and, evening teacher training programmes.

(3) Major Problems Related to Teacher Training in Oromia Region

A lack of financial and human resources in the region caused problem for teacher training in the Oromia Region. The major problems observed were:

- a shortage of intake capacity for teacher training to either replace or upgrade teachers without proper qualifications;
- an absence of short term refresher training to let teachers cope up with new knowledge and innovations;
- a lack of incentives to motivate committed teachers to keep up the good work and to encourage others to work hard for recognition;
- a lack of the OEB capacity to monitor the quality of teacher training in the TTCs and institutes particularly in the private TTCs and institutes; and
- an absence of experienced teachers due to resistance on the part of those hiring teachers to employ long-standing teachers who could demand higher salaries

3.3 APPROACHES IN SCHOOL AND CLASSROOM CONSTRUCTION

One of the key policies of the OEB was to increase access to primary education as fast as possible to reach the goals of UPE. This required the rapid construction of both formal school classrooms and ABECs in the Oromia Region. Among major international partners, International Development Assistance (IDA) and African Development Fund (ADF) supported school block construction directly. UNICEF was one of the major international partners supporting construction of ABECs through the provision of construction materials and other financial assistance to cover the cost of skilled labour and cement.

Although some of the Ethiopian and international NGOs directly supported the construction of school blocks, the number of schools constructed was still limited.

Most of the primary school construction projects were handled by the WEOs.

Yet any mid-term or long-term plan for classroom construction at the woreda level did not exist in May 2005 when the SMAPP Project was started. It was widely observed that local communities submitted their petitions for new school and classroom construction to the WEO in order to obtain government assistance for construction. The WEO compiled the petitions and then selected those community petitions only when budget was available. Although in the selection process, the WEO officers considered several aspects of educational needs at the woreda level, they often chose requests on the basis of community-expressed needs without sufficient scientific and objective criteria and evidence of need, as well as having a long-term planning perspective, resulting in less public accountability and transparency.

In this context, the MoE and the OEB introduced a low cost design standard (use of mud-walls) and included community participation at every stage of school block construction to minimize the costs. In addition, most of the school building followed the low cost design standard and furthermore were constructed with limited technical advice and supervision.

The main funding sources for each type of classroom block construction, both for formal schools and for ABECs, are shown in Table 4-3. Standard and low cost classrooms for the formal schools were funded by the government with some community contribution, while community classrooms for the formal schools and classrooms for ABECs were constructed by means of community contribution. The decision as to whether to select a standard or low-cost classroom construction process for the formal schools was principally determined by the extent of the expected amount of local community contribution.

Table 3-3: Category and Main Role of the School Block Construction

Type of Classroom Construction		Main Sources of Funds
For formal schools	Standard	・Government + Community Contribution ・Government ・NGOs
	Low-cost	・Government + Community Contribution ・Government ・NGOs
	Community	・Community Contribution
For ABECs*		・Community Contribution＋NGOs ・Community Contribution +donors (UNICEF)

Note: *Some ABECs which are planned to upgrade to formal school are constr ucted with same standard designs. (Source: Prepared by the SMAPP Project Team)

Although construction materials and the budget sizes were different, most of the primary schools had quite similar floor plans. A standard floor plan for a primary school included four classrooms, one pedagogical centre, one staff room, one library, and one set of pit latrines. It was observed, by the SMAPP Project Team, that there were some ABECs which did not have these basic facilities in the rural areas. Some ABECs had only one classroom without any other facilities. Apparently, these schools were not constructed based on the proper projections of enrolment or a systematic needs assessment, as to whether they might need additional classrooms in the near future.

Latrine-student ratio was estimated more than 1 to 100, based on the EMIS data of 1997 E.C. (2004/05); more than 100 students needed to share one latrine. It provided a critical influence on girls' enrolment and dropout rate. Small improvements, such as

introducing ventilation pipes, washing facilities, and better floor finishing, could make the current hygiene conditions much better. The good sanitary conditions at schools might, also, lead to a good sanitary environment in the community.

Some ABECs were built with lower specifications than the standard design. Classroom blocks with no stable foundation had a shorter life span. Not enough windows and unpainted walls darkened the classrooms. Poorly-made desks and chairs were extremely uncomfortable for children and could not keep them sitting in the classrooms. These conditions might be improved by small expenditures or considerations by introducing white paint to classroom walls, a suitable number of window frames, some iron sheets or translucent sheets for the roofs. At the same time, proper technical advice and supervision were required.

Classroom blocks with mud walls require frequent maintenance due to structural weaknesses compared to the classrooms built with other materials such as bricks or cement. The life span of the mud wall block is usually very short. On the other hand, mud wall block construction is more advantageous for the community as they can get materials easily. Also, the community can get skilled persons locally to construct mud wall classrooms. A maintenance and operation plan for the classrooms should be properly prepared for the post construction stage. Classrooms constructed with concrete hollow blocks have a longer life span and need less maintenance, if it is properly built. But, it is difficult and costly to get materials in rural areas. Proper technical supervision is crucial in this case, but usually not available.

Almost all classroom block construction used a community participation approach. The kinds of community activities varied from stage to stage and according to community conditions. Examples of community activities for each period for each construction stage, proposed by the ManaBU Project, are shown in Table 4-4.

Table 3-4: Type of Community Participation in Classroom Construction and Management

Stage	Activities	Period (Proposed by ManaBU)
Planning Stage	Sharing information, consensus of the project, planning of project, site identification, site planning, community participation planning	2 months
Pre-Construction Stage	Material preparation (stone, sand, straw, timber), cash contribution, tendering for local artisan,	3-4 months
Actual Construction Stage	Un-skilled labour work, monitoring of the project	4-6months
Preparation for Opening	Procurement of furniture, selection of facilitators etc.	6-8 months
Operation Stage	Operation of the school, hiring teachers, contribution to maintenance	-

(Source: Prepared by the SMAPP Project Team Based on the 1st Draft of the ManaBU Guidelines)

PART II:

PROJECT IMPLEMENTATION

CHAPTER 4:ENHANCEMENT OF EMIS

4.1 BACKGROUND

The Education and Information Team (hereinafter referred to as 'EMIS Team') of the Planning Research and Project Department (PRPD) of the OEB is responsible for collection, analysis, and dissemination of education data and statistics for planning and management for education administration in the Oromia Region. A comprehensive EMIS ideally should manage a variety of data covering different aspects of the education system: such as demography, access, quality, equity, finance, planning, and management. The EMIS should use appropriate tools to analyze and apply these data in the planning and management of the education system. Such coverage and required EMIS applications has influenced heavily the EMIS Team of the OEB to move EMIS in the direction of a more integrated and comprehensive approach.

The present scope of the data collected and analyzed by the EMIS Team is still limited with respect to taking into consideration the needs of educational planning and management. Initially, the primary data collected and analyzed by the EMIS Team was confined to the AEC. Preliminary analysis of this data by the EMIS Team involved the calculation of appropriate educational performance relating to access, enrolment coverage, internal efficiency, gender equity, and the quality of inputs. Results of this analysis were published in the form of an education statistics annual abstract.

The application of the data collected through the AEC and analyzed by the EMIS Team for planning and management was limited in the past. There were many reasons attributed to this limitation.

First, the accuracy and appropriateness of the AEC data and the EMIS did not meet the standards of reliability and validity for planning and management.

Secondly, there was a limitation of the AEC data because its availability was not timely for the planning and management processes. The results of the analysis of the AEC data was not available for an ongoing school year or for the start of the annual planning cycle for the upcoming financial year, making the utility of the data for planning too limited.

Finally, there was a limitation of AEC data to be linked with other categories of data relevant to education planning and management from other sources and databases. These categories of the data included financial information and human resources information.

4.2 OBJECTIVES AND APPROACHES

The initial objectives of and approaches to the EMIS enhancement, in the SMAPP Project, emanated from the above observations and are summarized in Table 4-1.

Table 4-1: Objectives and Approaches of the EMIS Enhancement in the SMAPP Project

Objectives	Activities
1. To improve data accuracy of the EMIS	1. Review of the EMIS database and the AEC questionnaire to identify the weakness and constraints 2. Clarification of definitions of key terminologies 3. Strengthening and distribution of school records 4. Monitoring of utilization of school records at the school level
2. To improve timeliness of the AEC data collection and analysis	1. Review of the AEC questionnaire to identify the weakness and constraints 2. Clarification of schedule, role and responsibility on conducting the AEC at various organizational levels 3. Physical support of computer peripherals for enhancement of data management
3. To validate and prepare for immediate use as the database for the OEdMap and micro-planning	1. Review of the EMIS database and the AEC questionnaire 2. Preparation of data sets for launching on the OEdMap 3. Preparation of data sets for launching on projection database closely related to education management 4. Preparation of data sheet for micro-planning
4. To recommend further activities for enhancement of EMIS	1. Identification of lessons learnt 2. Creation of recommendations for further enhancement of EMIS

(Source: prepared by the SMAPP Project Team)

The first objective of the EMIS enhancement was to improve the accuracy of the data collected. Many initiatives were undertaken by the SMAPP Project to achieve this objective. The first step was to make a list of terminologies used in the AEC questionnaire. Through the articulation of definitions and explanations of these terminologies during the SMAPP Training Workshops, further clarity was given the participants from the woredas and zones on relational understandings of the exact nature of the data provided in the AEC formats. As another major activity of the SMAPP Project, school records were improved and distributed to schools in Oromia Region with the purpose of improvement of data accuracy.

The second objective was to improve the timeliness of the AEC data collection and analysis. To improve the timeliness, functions and responsibilities at various organizational levels of the Oromia education system, a detailed timeline was created to understand these functions so as to complete the AEC process in a timely fashion. The timeline was clarified and started with the EMIS Team of the OEB down to the school level. These timeline, functions and responsibilities at each level were discussed at the 3rd SMAPP Training Workshop with the representatives of the woredas and zones, and modified appropriately in accordance with the group consensus of the participants. The final recommendations were made to the OEB for appropriate action.

In parallel with the above activities, the computer facilities of the EMIS Team were assessed and the necessary peripherals were provided by the SMAPP Project.

The third objective was to make the EMIS data ready for their application for the OEdMap and for micro-planning. The results from actual application cases of the EMIS data for the OEdMap as well as for the planning projection models in micro-planning at woreda levels are described in Chapters 5 and 6 of this Report.

The fourth objective was to prepare recommendations for further enhancement of the EMIS based on the review and lessons learnt from the OEB's performance and the

SMAPP Project experiences.

4.3 EXTERNAL CHANGE ON EMIS BY MOE AND UNESCO

A new AEC data collection format and new database software (UIS-EMIS) were introduced by the MoE with the support of the UIS in 2005.

In order to understand the major activities concerned with the UIS-EMIS utilization, an interview was conducted in February 2007 with a database engineer, who was in charge of capacity development in the UIS-EMIS utilization and was an advisor at the MoE. The objectives of this interview were to understand: 1) contents of their activities and 2) work schedule of UIS in Ethiopia. Their achievements and future plans are summarized in Table 4-2.

Table 4-2: Activities Concerned to EMIS Supported by the UIS

Time frame	Activities
1.Achievement as of Feb. 2007	1. Consensus building for introduction of UIS-EMIS 2. Development of database framework of UIS-EMIS 3. Support of development of new AEC questionnaire 4. Development of UIS-EMIS and the related manuals 5. Conducting of training on utilization of UIS-EMIS to person in charge in MoE and region education bureaux 6.Upgrading and modification of UIS-EMIS based on requests and claims from MoE and the bureau 7. Technical support based on the request from MoE and the bureaux
2.Current activities	1. Conducting of on-the-job training on utilization of UIS-EMIS to person in charge in MoE and region education bureaux 2. Upgrading and modification of UIS-EMIS based on requests and claims from MoE and the bureau 3. Technical support based on the request from MoE and the bureaux 4. Support of modification of AEC questionnaire to 1999 E.C. version of questionnaire 5. Support of distribution of 1999 E.C. version of UIS-EMIS
3.Future plans	1. Conducting of on-the-job training on utilization of UIS-EMIS to personnel in charge in MoE and the bureaux until the enough capacity developed 2. Upgrading and modification of UIS-EMIS based on requests and claims from MoE and the bureau until the database stabilized 3. Technical support based on the request from MoE and the bureaux until the enough capacity developed 4. Support of modification of AEC questionnaire until the questionnaire stabilized 5. Distribution of UIS-EMIS until the EMIS stabilized

(Source: Interview survey to UIS Engineer)

It was observed that the introduction of UIS-EMIS negatively influenced one of the OEB's regular tasks which was to publish annual education statistics abstract. More than two-year delay was resulted. Detailed cause-and-analysis through comparison between the UIS-EMIS and the previous EMIS was presented in the subsequent section 4.4.6.

4.4 IMPROVEMENTS BY SMAPP

4.4.1 2nd Training Workshop in Data Collection and Management

A two-day workshop was conducted in two batches on September 14 and 15, and September 20 and 21, 2005 in Adama. A total of 177 participants from 92 woredas participated in the workshops. All except two pilot woredas were present[6]. In addition, 14 participants from the seven pilot zones participated in the workshops.

The objective of the workshops was to develop the necessary conditions to enhance the EMIS at the OEB (at that time, OECBB). At the same time, the workshop aimed at stronger institutionalization and better management of the EMIS in the Oromia Region.

The workshop was designed to employ a participatory output-oriented approach: such as group work, consultation and discussion. Often, an introduction to the topic was accompanied by general discussions by the participants. Review of draft documents, such as school records and WEOs' functions and responsibilities, was accomplished through structured group discussions. Case study methodology was employed to obtain consensus and to clarify definitions of terminologies. Plenary sessions provided an opportunity to share experiences and findings prepared through the group work.

To achieve the objectives of the EMIS enhancement, several activities were incorporated into the workshops by coupling the development of the OEdMap with the preparations for micro-planning. These activities included: i) review of the objectives of the SMAPP Project; ii) preliminary exposition of school mapping techniques and micro-planning; iii) discussions about the role and importance of the EMIS in planning and management; iv) standardization of the definitions of the key terminologies used in the AEC format for improving the accuracy of the reporting; v) review of the draft school records related to collection and maintenance of student information to improve school management and information reporting; vi) review of the functions and responsibilities at various levels of governance to improve the management of the EMIS and to increase its sustainability; vii) refinement of the AEC data collection timetable; and viii) strategy to improve the timeliness of the data collection, analysis and dissemination.

The outputs of the workshops are summarized as follows;

(1) Clarification of definitions of key terminologies

The explanations of the definitions of the terminologies and the concrete case studies employed were effective to helping the participants understand the importance of standard definitions for all of the education system.

(2) EMIS and the responsibilities

The deliberations during the workshops produced a better understanding of the EMIS functions and responsibilities at the various governance levels. Many recommendations were made by the participants from the woredas.

(3) Strengthening of school records

Five types of school records were reviewed by the participants during the workshop. With recommendations about how to make the records more practical, the participants agreed to implement these improved school records at the school level.

[6] As of September 2005, the total number of the SMAPP target woredas was 94.

(4) Preparation of AEC implementation timetable

The woredas produced an implementation timetable using the model gant chart provided by the SMAPP Project. Along with this timetable, each woreda prepared specific strategies to improve the AEC activities at the school and woreda levels.

4.4.2 Strengthening of School Records

Proper management and utilization of information on key education indicators are very important for achieving the goal of UPE. Most of this key information is found in the schools. It was found by the SMAPP Project that many schools lacked knowledge and skills to keep and report the information as required by the upper educational management level in Oromia Region.

During the 1st SMAPP Training Workshop, absence of a standardized form for school records was pointed out as one of the critical deficiencies which caused poor data management at the school level. To assist in proper management of educational information, the OEB produced and delivered school records with the financial and technical assistance of the SMAPP Project. 79,000 copies of class registries and 8,000 copies of four sets of other school records forms were printed and distributed to all zones of the Oromia Region for the use of all first cycle (Grade 1-4) primary schools. The printed school records were given OEB for storage, using model 19 (an official Government document to record Government property). The OEB distributed the school records, using government procedures, to WEOs through ZEOs. Subsequently, the WEOs distributed them to the schools.

A monitoring survey of school records was conducted by the SMAPP Project Team in collaboration with the OEB in February 2007. The objectives of the survey were to: i) monitor distribution of school records to schools; ii) observe the use of the school records at the school level; and iii) collect comments to improve the school records. The summary of the survey result is summarized in Table 4-3.

Table 4-3: Summary of Monitoring Results on Utilization of School Records at the School Level

Target schools: 12 schools in 10 woredas - Arsi Zone: Hetosa, Lode Hetosa, Sire, Dodota, Diksis woredas - North Shewa Zone: D/Libanos, Degam, Jiddaa, Fiche, Wuchale woredas	
Question	**Answer**
Q1.Did your school receive the school record forms?	All schools received the school records forms.
Q2.Did your school receive instruction on how to use the school records from WEO?	- 11 out of 12 school directors received the instruction from WEOs. - Attendance of teachers in the instruction was limited.
Q3.Do you think the school records forms are useful?	All school directors said that the school records forms were useful (refer to Q5); some modifications were pointed out (refer to Q6).
Q4.How often do you use the school records forms?	- Class Register Sheet: Daily - Transfer In/Out Sheet: Per semester - Grade 1 Register: Beginning of the academic year - Dropout: Not clear (implying not utilized yet) - Certificate of Transfer In/Out: Per semester
Q5.Did you find any	Responses were stated by the school directors and teachers as

useful points in using the school records forms?	positive points for the permanent introduction of the school records forms. - Time saving for checking students' attendance - Monitoring Enhancement of information using same format all schools - Easier calculation of school statistics - Improvement in the accuracy of school data - Sharing the information on student academic history with other schools transferred in/out
Q6.Do you have any problem in using the school records forms?	Responses were stated by the school directors and teachers as necessary improvements to the school records forms. - The column for student name in the class register should be wider. - The number of rows in the class register should be more than 80 to cope with students' number. - The class register should be applicable for two-shift situations. - A blank sheet should be attached to the class register to add some information concerning students. - A column or space for the signature by the school director should be added to the certificate of transfer in/out.

(Source: prepared by the SMAPP Project Team)

4.4.3 Coordination with the OEdMap

The OEdMap was developed covering 117 SMAPP pilot woredas of the Oromia Region as explained in Chapter 5 of this report. The OEdMap included map data, school location data and school data, which was designed to be collected from the EMIS.

In the process to link the OEdMap with the UIS-EMIS, the SMAPP Project Team found technical difficulties in the area of the query or reporting system in the interface of the UIS-EMIS, which would be used for the linkage between the UIS-EMIS and the OEdMap.

Since the linkage could provide potentially a foundation to improve operations and management of both databases by the OEB, the SMAPP Project Team exchanged views with the UIS consultant to find any possibilities for making further improvement in the UIS software in order to develop more appropriate linkage between the OEdMap and the UIS-EMIS. The 1998 E.C. (2005/06) OEB EMIS data was eventually linked with the OEdMap.

4.4.4 Database Preparation for Micro-planning Projections

One of the main activities of the micro-planning workshops was to make school enrolment projections at the woreda level. To conduct projections of enrolment, estimation for determining the quantities of inputs, the estimation of costs, etc. required establishing the baseline data on a variety of performance variables and unit costs for the woreda education system. Some of the key performance variables and unit costs required for conducting woreda level micro-planning are: the:

- Apparent and net intake rates (AIR, NIR)
- Dropout and repetition rates
- Student-section and student-teacher ratios

- Unit costs for: classroom construction, teacher salary, administration costs, non-salary recurrent costs per student, etc.

The database for the school data necessary for the projection was prepared by the Task Force.

4.4.5 Comparison between the UIS-EMIS and the Previous EMIS

Through the introduction of the UIS-EMIS in 2005, the system of the EMIS and the process needed to conduct the AEC were drastically changed in the Oromia Region. The major changes observed are summarized in Table 4-4.

Table 4-4: Major Changes in the EMIS and the AEC Activities after the Introduction of the UIS-EMIS

Category	Activities
1.Questionnaire	- Separate questionnaire by sub-sector - Decreased pages - Facility information sheet by building/block added - Columns for staff name added
2.Database structure and data contents	- Change of primary key - Active introduction of encoding of information - Increasing of total number of tables in the database
3.Data summarization and analysis function	Enhancement of query and analysis function through introduction of On-Line Analytical Process (OLAP)
4.Tentative data updating system	MoE distributes the files of the new questionnaire and the database until the new system is settled.

(Source: prepared by the SMAPP Project Team)

(1) Questionnaire in 1998 E.C. (2005/06))

1) Separate questionnaire by sub-sector

The previous Oromia AEC questionnaire was an all in one concept, which contained questions on all of sub-sectors. New questionnaires were prepared for each of the sub-sectors, consisting of kindergarten, primary school, and secondary school. From 1999 E.C. (2006/07), the OEB planed to collect data for ABEC and adult education, TVET and skills training programmes.

2) Decreased pages

Separation of questionnaires by sub-sector minimized the pages for the AEC questionnaires. The new questionnaire for primary school that consisted of 12 pages decreased from the 34 pages from the previous questionnaire. It made the data collection process more efficient and reduced the cost of the questionnaire sheet production.

3) Facility information sheet by building/block added

The information on school building conditions and the number of classrooms had been collected on schools in the previous AECs. This school-based building information was not good enough to make it possible to understand the actual conditions of each building because one school might have several classroom buildings. In the 1970s, one school block might be built by cement element, while in the 1990s another block was built with the mud-wall method. In order to resolve the above issue, the new questionnaire provided forms for school facility information by building/block.

4) Columns for staff name added

The new questionnaires contained columns for the names for teachers and administrative staff. This was expected to make it possible to monitor the transfer in/out situation of staff working at schools.

(2) Database Structure and Data Contents

1) Change of primary key

The MoE decided to implement a new school IDs with the start-up of the UIS-EMIS because there were some duplications of school ID observed in the previous EMIS. The UIS-EMIS had built in auto-numbering system for assigning a school ID to avoid ID duplication.

2) Increased encoding of information

Most information in the UIS-EMIS was encoded, including such things as building conditions, the availability of facilities, grades, and students' age.

3) Total number of tables in the database

Due to encoding, the number of lookup tables was increased drastically in the UIS-EMIS compared with the previous EMIS. Additionally, the management table for report format was included in the database. As of February 2007, the total number of tables in the database was more than 150.

(3) Data Summarization and Analysis Function

Before the UIS-EMIS introduction, the OEB used reporting software named EdReport, which was linked to EdStat. EdReport was mainly utilized for preparation of summary tables of AEC results; especially used for the preparation of project proposals as well as for annual statistics abstracts.

The data analysis function of the UIS-EMIS was considered weak compared with the EdStat and EdReport. In this regard, the UIS planned to develop a new data query and analysis system, OLAP, to be attached to the UIS-EMIS. The OLAP would be a system for preparation of pivot tables. After completion of the development of the OLAP, data analysis and summary capacities in the education sector would be enhanced.

(4) Tentative Data Updating System

After the introduction of the UIS-EMIS, the updating system and process at the MoE level was changed. Following a request from the MoE and the region education bureau, the AEC and the EMIS would continue to be updated and modified with technical support of the UIS. The updated questionnaire and the EMIS database were to be distributed to the region bureaux by the MoE every year until the new system settled.

4.4.6 Impact of UIS-EMIS on EMIS and AEC

The introduction of the UIS-EMIS produced several impacts on the EMIS and the AEC system in the Oromia Region. The impacts were identified by the OEB task force and the SMAPP Project Team in March 2007. Findings were summarized as follows.

(1) Positive and Negative Impacts of User Friendly Front-end System and Manuals

The UIS-EMIS was equipped with a user friendly front-end system using an internet browser for search purposes (see Figure 4-1). The viewer screens at the front-end system were designed to make the data input into the EMIS easier, even for EMIS beginners. The User Manual for the UIS-EMIS was designed to make the UIS-EMIS simple enough to understand and how to use. It was expected that most regions and the MoE would experience a positive impact from the above user friendly modifications of the UIS-EMIS and it would provide a more efficient data entry and data search system than the older EMIS.

Figure 4-1: Interface of UIS-EMIS

It should be noted, however, that the previous EMIS developed and used by the OEB was a user friendly system, as well (see Figure 4-2). The reporting function was more efficient than the present situation of the UIS-EMIS. Without the OLAP development, the introduction of the UIS-EMIS might influence negatively in terms of reporting on the AEC for the Oromia Region.

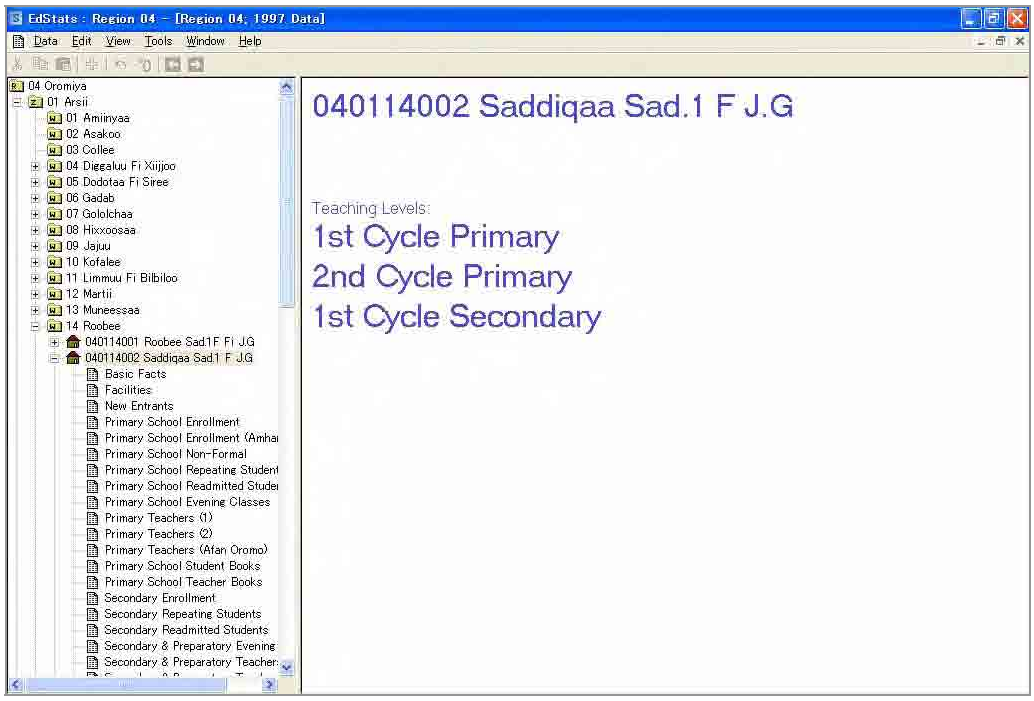


Figure 4-2: Interface of the Previous EMIS in Oromia Region

(2) Positive Impact of Minimization of Work Volume in AEC

The volume of questions in the new questionnaire was reduced by comparison with the previous questionnaire although most of the previous questionnaire items were covered. The new questionnaire had positive impacts: such as: i) reduced cost of copying and transportation of the questionnaire; ii) reduced time for completion of the questionnaire; and iii) reduced storage space for the questionnaires kept at all of the organizational levels.

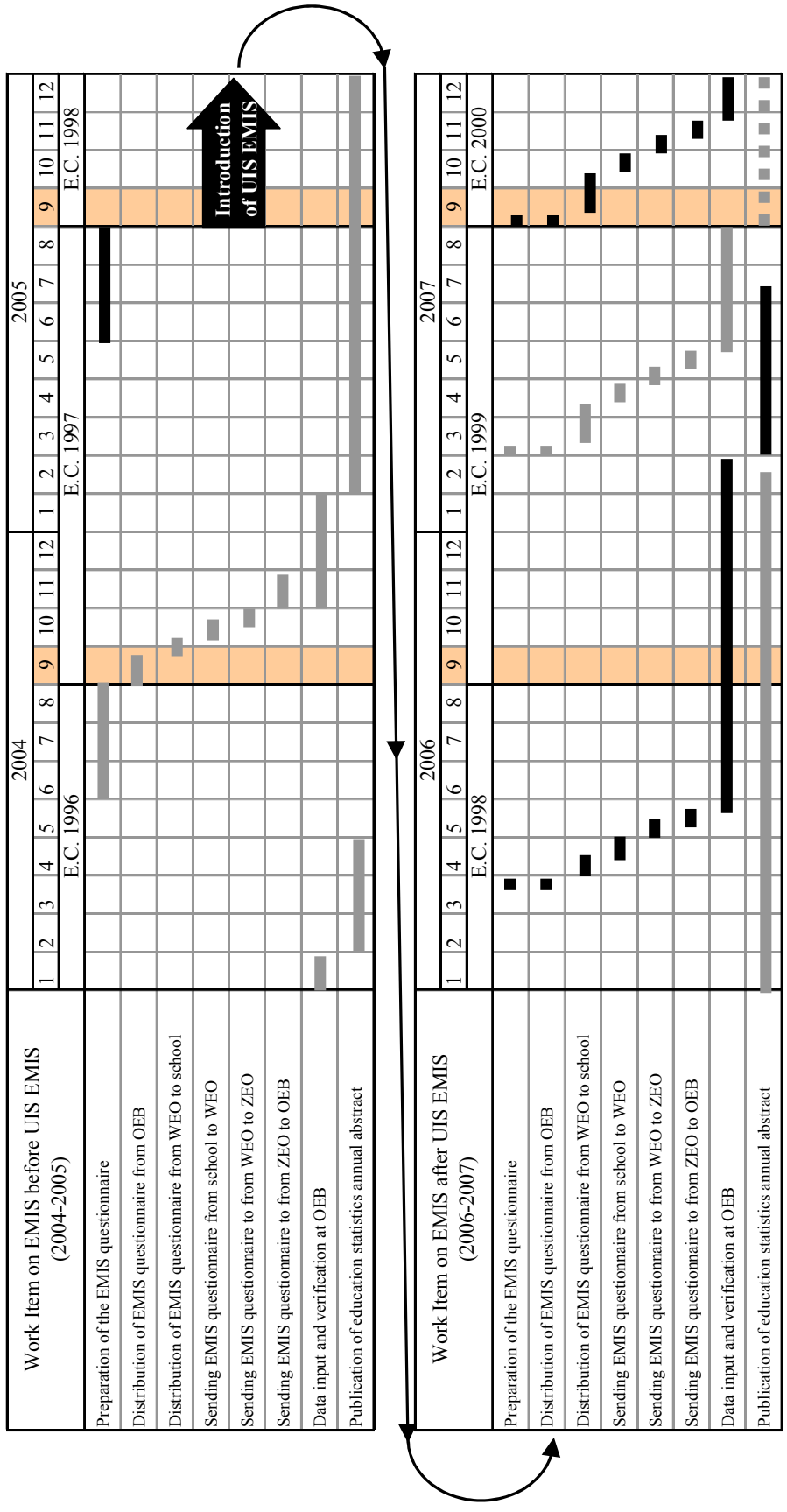
(3) Negative Impact in Filling up of New Questionnaire

Without proper trainings on how to complete the new questionnaire, school directors or persons in charge of the questionnaire completion were confused and unable to provide needed direction. The delay in donor funds delivery for the planned training for ZEOs, WEOs and schools negatively affected questionnaire results. In the process of integrating EMIS data into the OEdMap and cross-checking the questionnaires collected from schools, the SMAPP Project Team found that there was an increase in the data inaccuracies in the questionnaires from the previous year.

(4) Negative Impact in Change of Schedule of AEC

The annual schedule for the AEC was regularized before the introduction of the UIS-EMIS. The introduction of the UIS-EMIS was not the same as the annual schedule of the AEC, causing disruption. The schedule of the AEC in 1998 E.C. (2005/06) was delayed almost six months as shown in Figure 4-3. The main reason for the delay was that the OEB could not cope with the changes caused by the UIS-EMIS new questionnaire. Furthermore, the schedule of the AEC in 1999 E.C. (2006/07) was very tight because of the implementation of the periodic national census that took place from April 22 to June 10 2007, requiring the recruitment of census takers. All

school teachers were pressed into service as enumerators for the national census, eventually, so no school teachers were available for any other activities even for teaching at school. The 1999 E.C. (2006/07) AEC was to be completed at least before the date of April 21 2007 in order to adjust the 2000 E.C. (2007/08) AEC schedule. As a consequence, the OEB, as well as the MoE, had to exercise strong leadership to re-establish the regular implementation of the AEC for the year of 2000E.C. (2007/08).



(Source: Interview survey to staff in charge of EMIS in OEB

Figure 4-3: Change of Schedule of AEC in the Oromia Region during 2004 to 2007

(5) Negative Impact in Handling of the Previous School ID

The previous school ID (named "administrative school code" in the EdStat) was not entirely replaced by the newly introduced school ID (named 'code school' in the UIS-EMIS). From a computer engineering viewpoint, 'code school' controlled the database. Although there was a conversion the new "code school," the previous administrative code still existed as data in the database. As a result, more careful handling of data among code school, administrative code, and school name was required to keep consistency. The handling of these three school data seriously increased negative mismatching between school name and the previous school ID. There were several reasons for the inconsistency such as: i) time limitation for data entry and data checking; ii) employment of temporary persons unfamiliar with the EMIS for data entry; and iii) data system collapse caused by frequent blackout.

Before the introduction of the UIS-EMIS, the inconsistency mentioned above was occasionally observed as noted below (Table 4-5).

Table 4-5: Cases of Mistakes in School ID before Introduction of UIS-EMIS

Case 1: Same school name but different school ID			
1996 E.C.		1997 E.C.	
School ID	School Name	School ID	School Name
40812022	Lokkee Qacaa	*40812023*	Lokkee Qacaa
Case 2: Same school ID but different school name			
1996 E.C.		1997 E.C.	
School ID	School Name	School ID	School Name
40303038	*Kalaashaa Mur*	40303038	*Kallacha Hachee*

Case 3: Change of school ID after reformation of administrative boundaries					
1996 E.C.			1997 E.C.		
School ID	Woreda	School Name	School ID	Woreda	School Name
41301001	Alam Ganaa	Mulugeeta Gadluu	41311001	B/M/Addaa Sabataa	Mulugeeta Gadluu

(Source: prepared by the SMAPP Project Team)

4.4.6 Physical Improvement in Computer Facilities

The computer facilities were assessed in consultation with the UIS engineer as well as the OEB. Weaknesses in computer capacity were identified as follows:

- Capacity of Random-Access Memory (RAM) was insufficient for comfortable use of the UIS-EMIS;
- Data backup system was to be enhanced for better data management of the EMIS as well as the OEdMap; and,
- Electric supply was to be stabilized for data entry with the condition of using a server-client system, which enabled access to an EMIS-server computer from a number of client PCs for data entry through a LAN cable.

Based on the assessment, the SMAPP Project Team supported in installing i) three sets of additional 1,024 MB RAMs for three PCs and a server computer; ii) a 160GB external Hard Disk Drive (HDD) for data backup; iii) one UPS; and iv) three stabilizers for the only sake of sustain operation of the OEdMap linked with the UIS-EMIS.

4.5 LESSONS LEARNT

Many lessons were learnt through the above activities conducted by the SMAPP

Project, jointly operated by the OEB and the SMAPP Project Team. These lessons were useful for making further enhancements of the EMIS in the Oromia Region. The key points are summarized as follows:

(1) Accuracy of AEC

- School record keeping should contribute to the improvement of the day-to-day management of educational data and lead to the improvement in the data accuracy of the AEC. It is important that school directors take overall responsibility for data collection, management, and reporting, so they will be encouraged to make easy comparisons with their performance with other schools using the same form submitting common information.
- It was confirmed through a survey that the WEOs' understanding of key terminologies was enhanced through the continuous training conducted by the SMAPP Project. However, the improper entering of data continued to be a problem in 1998 E.C. (2005/06). Various reasons might include: i) distribution of a new format questionnaires; ii) lack of instruction to fill out the questionnaire; iii) high turnover rate of WEO officers; and iv) insufficient checking of the collected questionnaire at the woreda level.
- Reduction of the volume of the AEC work would minimize careless mistakes in data writing as well as calculations. More simplified work, including filling out and cross-checking in a systematic manner may improve data accuracy.

(2) Timeliness of AEC

- The importance of timeliness of the AEC was emphasized through the SMAPP Training Workshops. However, the AEC was seriously delayed by external factors in 2006, relating to the timeliness of donor funding. If sufficient preparatory training and instruction had been provided before the implementation of the UIS-EMIS, the situation might have been better. Careful preliminary coordination among the OEB, the SMAPP Team and donor agencies, including JICA and UNESCO, is needed critically when some changes are made in any of the main data formats and database, such as in the EMIS and the AEC.

(3) Management of the AEC and the EMIS Database by the OEB

- The OEB estimated the number of questionnaires and distributed them to each woreda without the attachment of the school-list stored in the EMIS. As a result, after the data entry was completed at the OEB level with insufficient cross-checking at the woreda or zone levels, the OEB found that some of the questionnaires from schools were never collected. It was too late and difficult for the OEB to collect the missing questionnaires from these schools. A systematic and simplified monitoring mechanism for data management should be established with a clear demarcation of roles, responsibilities, and functions among the OEB, the ZEO and the WEO.
- It was found that data mistakes by school directors were checked and identified by the OEB. It was not realistic, efficient or appropriate for the OEB to confirm the information of schools by themselves. This also requires the implementation of a systematic and simplified monitoring mechanism on data management.
- After the UIS-EMIS was adopted, the previous school ID was managed by only

one statistician in the OEB to prevent the duplication of school ID. The statistician supervised the cases of transfer of schools to the new woredas when the administrative boundary had been changed. Currently office work is handled by a limited number of officers on the EMIS Team. If a new mechanism is installed, the procedures are typically shared with other staff as routine work.

- There were some inconsistencies in school ID and school names. One of the reasons might be that the OEB had not paid close enough attention to annual trends and changes at the school level.

4) Data Analysis for Planning and Monitoring of Education Development

- The issue of needed improvements in school management is emphasized in ESDP III. To achieve the improvement goals, OEB's monitoring and supervision capability on school management needs to be enhanced. The EMIS Team had mandates not only to collect, enter, and summarize education data in a form for reports, but also to improve data for more analytical planning to meet regional needs.

CHAPTER 5:DEVELOPMENT OF SCHOOL MAPPING

5.1 INTRODUCTION

Despite decentralized planning and implementation of primary educational development, the EMIS remains as one of the main functions of the respective regional education bureaus under the guidance of the MoE. Such guidance is required in order to establish and maintain uniformity of data collection and management for monitoring of policy development as well as the progress of the ESDP. The present EMIS is, however, constructed for school-based information management. In other words, information on administrative units of the kebele is only included at those kebeles where primary schools exist. No information of kebele without schools is available within the present EMIS, although the OEB has proclaimed policy directives by which one formal primary school is encouraged to stand at each kebele. Furthermore, basic and obvious differences between kebeles with and without schools results in the out-of-school children population remaining unreported within EMIS, providing policy makers, planners and managers an incomplete picture of the national and local situation with respect to meeting national regional and local educational goals and objectives.

As an example of the impact of not reporting data for kebele without schools, one of the critical mandates of the government is to require fairness in resource allocations and in the distribution of education delivery services to the Region and assure that these provisions are sufficiently performed. In this context the spatial aspect of development planning and management is required as an integral part of the EMIS to help reduce the inequalities in the distribution and delivery of educational resources and services among the woreda. Thus, persistent efforts have been made to introduce a planning and monitoring instrument, school mapping, to assist in the identification of disparities in resources and services among the woredas. School mapping is widely recognized as a potent and relevant instrument for equalizing educational opportunities, because of its ability to graphically identify where resources are currently located in relation to the location of students, schools and teachers, showing where there are underserved populations due to a poor placement of resources and services.[7] Mapping can be done without sophisticated technology, but modern Geographic Information Systems (GIS), using satellite generated location data linked to EMIS databases is currently has been made available to SMAPP as noted below.

5.2 OBJECTIVES AND APPROACHES

5.2.1 Objectives

The SMAPP Project developed OEdMap, and the objectives of its development were as follows:

(1) At the region Level (including the zone level as an extension of the regional bureau) to:

[7] IIEP Visiting Trainees Programme - School Mapping and Micro Planning -, http://www.unesco.org/iiep/eng/training

a) provide school location maps and thematic maps, containing socio-economic and educational information for formulating education development strategy;

b) monitor and evaluate the micro-planning activities by WEO;

c) formulate objectives and goal-oriented education development strategies and resource allocation plans at the zone and region levels; and

d) mobilize techniques on utilization of GIS into education planning

(2) At the Woreda Level to:

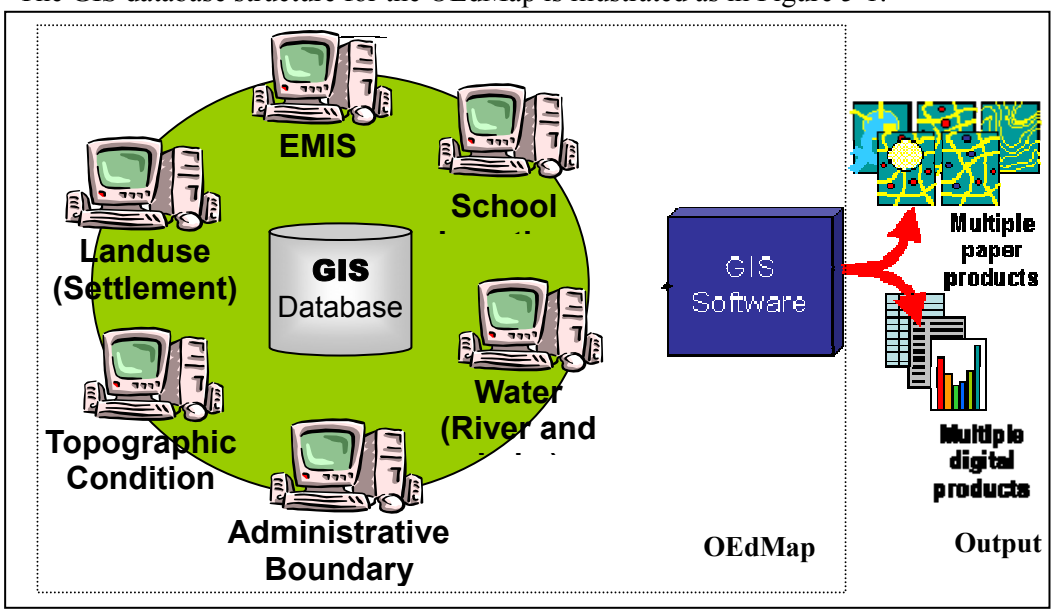
a) understand the current education development status of the woreda in reference to the regional sector development framework; and

b) formulate WPEDP through micro-planning using maps, including GIS generated maps as a tool provided from the OEB.

5.2.2 Approaches for School Mapping Development and Capacity Building

(1) Database for the OEdMap

The GIS database structure for the OEdMap is illustrated as in Figure 5-1.



(Source: prepared by the SMAPP Project Team)

Figure 5-1: GIS Database Structure for OEdMap

The GIS database for the OEdMap was comprised of various kinds of information, which was classified into two categories: i) tabulated data; and ii) spatial data. Tabulated data included the EMIS and socio-economic information, while spatial data included satellite images or digitized features, consisting of school location, road network and land use, administrative boundary, topography, and locations of infrastructure and facilities. GIS software integrated and linked tabulated data and the spatial data. These integrated data set was called the GIS database (Figure 5-1), which was used for the OEdMap in the SMAPP Project. After development of the GIS

database, GIS software supported to visualize, manipulate, and analyze the spatial data input into the OEdMap database. A simple and user friendly structure was required for sustainable use of the OEdMap. The OEdMap was developed as a specially customized database with considerable specifications mentioned above.

(2) Data Contents of the OEdMap

The OEdMap database was designed as a useful tool for micro-planning at the woreda level as well as for planning and monitoring of an education improvement strategy for the planners and decision makers at the region and zone levels. The following data and information was included in the database.

1) School location and information

School location information and school information were the key features in school mapping. The data as to the location of schools was collected through the survey with the help of the Global Positioning System (GPS) and linked to the GIS database as school features. The school features included not only the locations, but also school information imported from the EMIS. Some of school information from the EMIS was designed to be seen on the maps of the OEdMap to highlight the status of the schools; such as number of students and teachers, condition of facilities, etc. Such information was useful to prepare a plan to improve education quality and a resource allocation process designed to address disparities in resources and underserved student populations. The school information was presented on the maps depending upon the degree of articulation for graphic presentation, because in some cases tables were more efficient to show the features.

The EMIS-School Mapping Task Force selected and prioritized the necessary school information from the EMIS which were to be included in the OEdMap database to make the size of the database reasonable.

2) Administrative boundaries

Administrative boundaries were essential data for the school mapping database. With regard to education development policy in Ethiopia, identification of kebele without formal schools was important for planning to improve access to primary schools. The administrative boundaries were digitized as GIS features on the OEdMap.

The Central Statistics Authority (CSA) officially provided the administrative maps that had been used for the 1994 population census. The maps were not updated despite the changes in the kebele and woreda boundaries. Therefore, the administrative maps published by the CSA needed to be modified based on the information collected from the WEOs.

3) Topographic information

Topographic information, such as rivers, roads, and hills were necessary for the site selection for school construction and were acquired from the topographic maps published by the Ethiopian Map Authority (EMA). Those features did not have to be digitized for the OEdMap because only hardcopies of thematic school maps were to be used for micro-planning. After the topographic maps were digitalized by the scanners and geo-coordinated, the other GIS features were overlaid on the scanned images. The maps with scanned images overlaid and printed out and then distributed to each woreda for micro-planning.

4) Settlement pattern

Settlement patterns are also important information for planning and selecting school site locations. Settlement pattern maps were created from the GPS satellite images.

5.2.3 Lessons Learnt from Other Projects

In Ethiopia, there had already been three school mapping GIS projects implemented before SMAPP Project. These projects provided different experiences with respect to their objectives, size of the pilot areas, and information collected. A rapid and comparative analysis of these three projects is provided below. This analysis summarized valuable lessons learnt from each project. The three school mapping GIS projects, included in this review were: i) ManaBU Project assisted by JICA; ii) BESO I Project funded by USAID; and, iii) Arsi-Bale Rural Development Project funded by the Italian bilateral agency.

The comparative analysis of the three experiences with the development of the OEdMap provided valuable lessons specifically on two important areas namely: i) the technical aspect of database development; and, ii) the operation and maintenance database. The lessons learned with respect to these experiences in the two areas were:

(1) Technical Aspect of Database Management

1) Absence of topographic maps overlaid with administrative boundaries

Among the prerequisites for producing a geographical information system to development planning is the presence of topographic map with different levels of administrative boundaries. Under a framework for the OEB education sector policy directives, kebele boundaries are of significant importance in the development of a GIS database for school mapping, since every kebele is supposed to have at least one formal primary school and one ABEC within its boundary.

However, in Ethiopia, it was found that administrative boundaries were not overlaid upon any topographic maps published and distributed by the EMA. The first technical intervention for creating maps for planning was to combine administrative boundaries with overlaying topographic maps.

2) Frequent changes in administrative boundaries

Administrative units, such as woredas and kebeles, had undergone boundary changes during the past ten (10) years. In other words, boundaries for many kebeles and woredas were changed in relation to the administrative maps developed by the CSA for the 1994 population census. The CSA 1994 population census administrative maps were the only authorized maps available in Ethiopia. Consequently, these CSA 1994 administrative maps needed to be modified to develop a GIS database, since no other choices were available.

Under the situation where such changes in the administrative boundaries were not centrally reported and managed, it was necessary to depend on the woreda or kebele administration for the identification of the latest boundaries. However, the boundaries provided by the woreda or kebele offices did not correspond to global coordinates since those boundaries were made manually.

Modifications to the 1994 census boundaries were made to some extent by the Arsi-Bale Rural Development Project by incorporating the information and instructions given by woreda officers for inclusion in the GIS database. The SMAPP Project Team decided to employ the Arsi-Bale Rural Development Project method as a

frame of reference, in order to design the most feasible techniques to apply to the development of the GIS database for school mapping.

3) Unstable operational status of ABECs

Most of the ABEC were found to have limited operational stability. Results from the current efforts made by WEOs to register ABECs indicated that in many cases residential houses were in use for many of these centres had no continuity of operation. Those ABEC which were operated in one academic year were reported as closed during the following year.

The OEdMap, by its very nature, required periodic data updating. One of the prerequisites for this updating was a stable identification code. In the case of ABECs, stable operational status was a minimum requirement for the development of an OEdMap. In order to develop a more accurate OEdMap, a GPS receiver was used to measure precise global coordinates for each ABEC.

To tackle the issue of instability in the operation of ABECs, it was suggested that ABECs with stable operational status should be first identified in collaboration with WEOs through their registration records. Through a baseline survey by the SMAPP Project, it was found that most WEOs could identify and register a specific ABEC for upgrading to a formal primary school in a forthcoming academic and fiscal year. This information provided a basis for the inclusion of an ABEC into the OEdMap.

4) Difficulty of accessibility to remote rural areas

Past experiences in the development of a school mapping database with GIS indicated that four-wheel drive (4WD) vehicles were extensively used in order to conduct a GPS-location survey, which targeted social facilities such as schools, clinic, water supply, etc. The main reason behind the use of 4WD was efficiency. At the same time their use had cost implications.

These cost implications resulted in a limitation in data collection from some schools situated in very remote areas in the Oromia Region. Such instances occurred during data collection operations conducted by the ManaBU project. Those schools reported were reached on foot or on a back mule or horse.

A balanced approach to keep project outputs at a good quality level and within timeliness was necessary. In this regard, it was suggested through technical consultations with WEOs, that there were two types of schools which could not be measured by the GPS receiver, due to access difficulties. In the case of school locations that could not be determined by GIS, other procedures were used to incorporate those data into hardcopies for school maps to be produced for the micro-planning purpose. In order to do this, supportive information, such as administrative maps, satellite images, settlement pattern, roads, rivers, and the like were compiled for use.

(2) Operation and Maintenance Aspect

The BESO I Project supported by USAID suggested that the organization and systematic and continuous operation, and management of the GIS database were of vital importance to ensure sustained use of the GIS. The BESO I experience showed that the GIS database was not updated after the handover. The reasons for this lack of sustainability were identified as: i) a lack of sufficiently trained officers within the regional education bureau to maintain the database; ii) a lack of a clear organizational functions and responsibilities assigned at various levels of governance to

accommodate school mapping. iii) a high turnover of technical personnel; and iv) no training or understanding in the use of maps at the management level.

Periodic maintenance was one of the prerequisites for sustaining the GIS programme, which included a regular schedule for GPS measurement and reporting by the education officers concerned. Through the baseline survey, it was found that not only the OEB but also ZEO and WEO officers did not have experience with the GPS operation.

To overcome the above difficulties, it was recommended that in addition to the provision of training on GIS technical aspects, such as how to use the GIS database and GPS, attention should be paid to the development of the appropriate organizational mechanisms to operate and maintain the database. Furthermore, it was suggested that data users be involved in all the processes related to GIS database development, which consists of planning for the database design, data collection, preparation of the GIS training manual, GIS database construction and preparation of the database operational manual, and in the design of the organizational system to operate and maintain the database.

5.2.4 Preparation to Develop the OEdMap

In order to develop an OEdMap, there were two important steps to be taken: 1) an objective analysis for the sustainable use of the OEdMap and 2) the formation an EMIS School Mapping Task Force.

(1) Objective Analysis for Sustainable Use of the OEdMap

After studying the lessons learnt from the BESO 1 Project, five key issues were identified to ensure the sustainability of the operations and maintenance of the OEdMap. Periodical updating of data was found to be the most essential element. These five key elements included:

Key Issue 1: Providing training and guidelines on how to utilize the output of school mapping for education planning

Key Issue 2: Providing training and training materials on how to use, modify and update the OEdMap for the OEB officers,

Key Issue 3: Training in how to use GPS receivers in the ZEO and WEO officers,

Key Issue 4: Establishing an institutional structure to implement and maintain a system for initial data collection and updating, and

Key Issue 5: Providing facilities for data collection, input updating, and modification

(2) Formation of the EMIS School Mapping Task Force

The EMIS School Mapping Task Force was formulated by the OEB in order to prepare a framework, to design the database, to input the data, to maintain the facilities, to conduct training seminars, and to set up the system effectively and efficiently.

The member list of the Task Force is shown in Table 5-1.

Table 5-1: Member List of the EMIS School Mapping Task Force

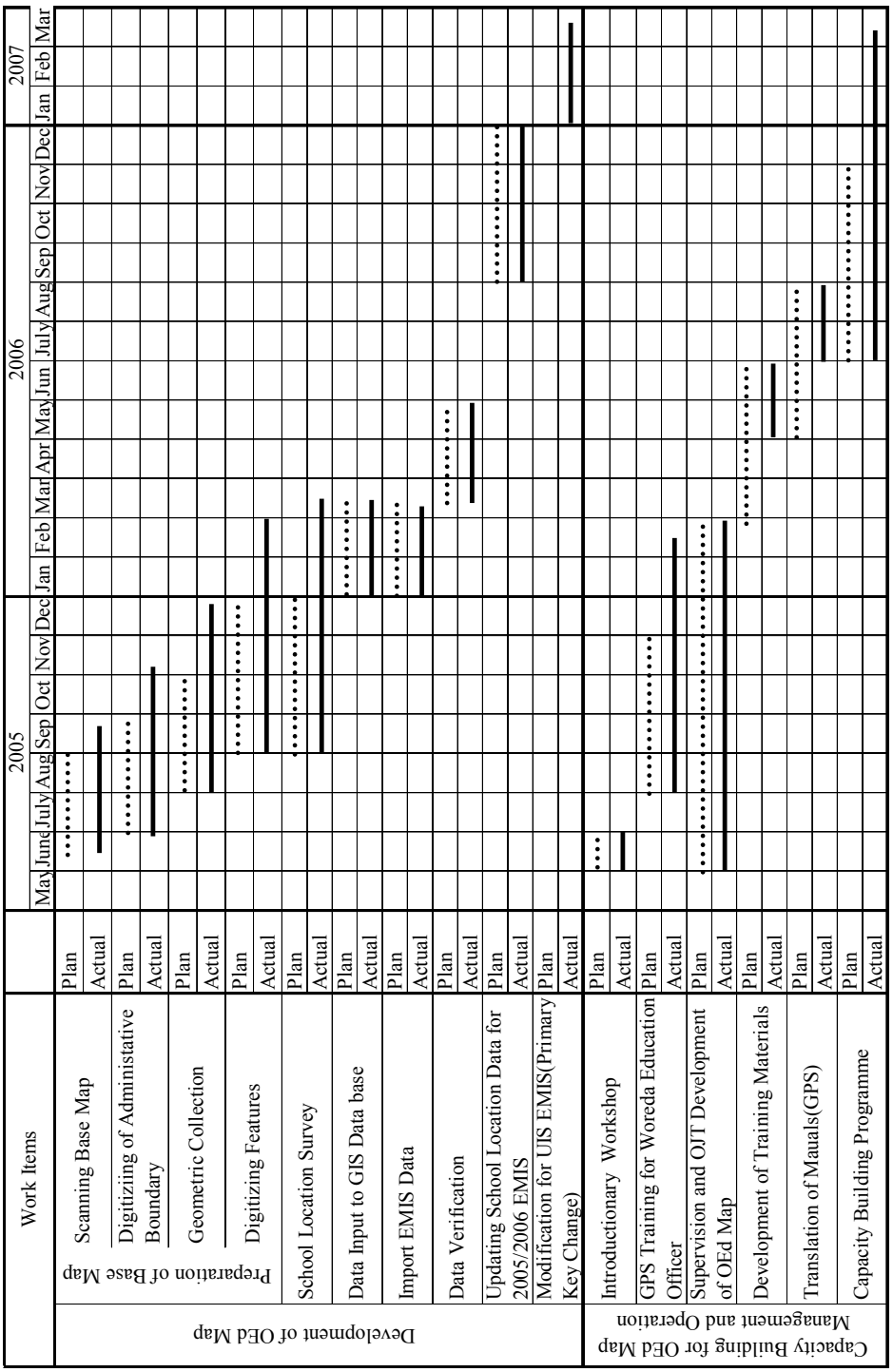
Name	Position in the OEB
Mr. Tashome Lemma	Deputy Head (Leader of task force)
Mr. Tasew Bekele	PRPD Head
Mr. Lissanu Lejissa	EMIS and Planning Team Leader
Mr. Gezu Urgessa	Project Preparation and Monitoring Expert
Mr. Hailu Tsige	PMIS Expert
Mr. Legesse Ayana	Planning Expert
Mr. Adugna Wondemu	Data Encoder

(Source: prepared by the SMAPP Project Team)

The Task Force was responsible for the operation, maintenance and development of the database and held regular meetings to monitor the progress.

5.2.5 Schedule of the OEdMap Development

Figure 5-2 shows the schedule and performance of the OEdMap development and capacity building. Although the capacity development activities were delayed as per the original schedule, almost all of the activities were completed at the end of March 2007.



(Source: prepared by the SMAPP Project Team)

Figure 5-2: Schedule and Performance of the OEdMap Development Activities

5.3 DEVELOPMENT OF THE OEDMAP DATABASE

5.3.1 Preparatory Works for GIS Design and Implementation

The SMAPP Team prepared an implementation plan to design the OEdMap database through the conduct of a verification exercise to create a sample school map. This exercise was conducted as one of the preparatory works with the following objectives: i) to assess the accuracy of existing topographic and administrative maps and the data available at WEO; ii) to define and verify data content for the OEdMap database; iii) to conduct rapid assessment on the capacity of WEO officers to undertake school mapping; iv) to identify with available recourses, the volume of work, including the possible number of schools to be surveyed in a day.

Lume Woreda in East Shewa Zone was selected as the sample woreda based on consultation with the OEB and WEO for two main reasons: i) easier accessibility from the SMAPP Project office to the woreda for frequent monitoring; and, ii) the presence of both urban and rural settings in one woreda. The sample school map for the Lume-woreda was prepared as the output for this preparatory work and presented at the 1st Steering Committee in June 2005 in order to share the progress and output image.

5.3.2 Designing of the OEdMap Database

The base map of the OEdMap database included the data items shown in Table 5-2.

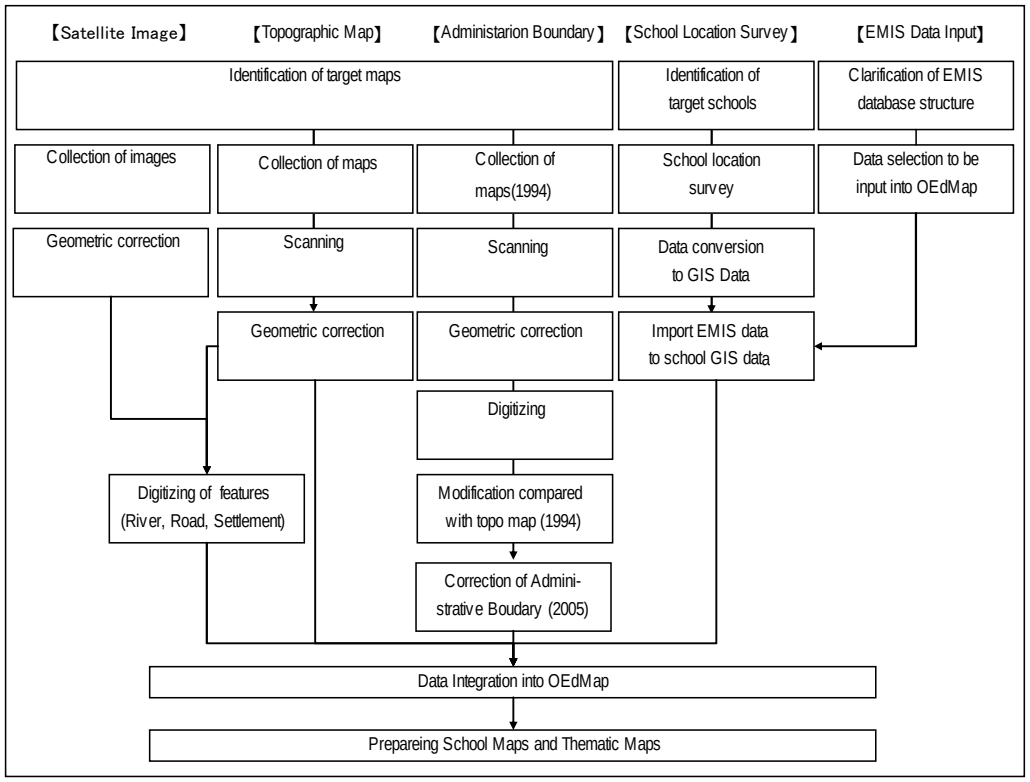
Table 5-2: Topographic Data Items of the OEdMap Database

Category	Item	Data Type	Data Source
Base map	Topographic map	Raster	1:50,000 maps published by EMA
Administrative Boundary	Zone	Polygon	1:50,000 maps published by CSA
	Woreda,		
	Kebele		1:50,000 maps published by CSA Hearing from woreda office
Transportation	Road	Line	1:50,000 maps published by EMA
	Foot path		
Lakes and Rivers	River and stream	Line	1:50,000 maps published by EMA
	Lakes	Polygon	
Land use	Settlement	Polygon	1:50,000 maps published by EMA LANDSAT images provided by GLCF
School	Formal primary schools including ABEC	Point	Surveyed by Contractor, updated by WEO, ZEO, and OEB
	Formal secondary		

(Source: prepared by the SMAPP Project Team)

Note GLCF: Global Land Coverage Facility

Figure 5-3 shows flow to develop the OEdMap database. The detailed explanation of each step is provided in the following sub-sections.



(Source: prepared by the SMAPP Project Team)

Figure 5-3: Flow of Development of the OEdMap

5.3.3 Base Map Preparation

The base map of the OEdMap was prepared based on the three types of datasets i) topographic map; ii) administrative map; and iii) satellite images. The specifications for each dataset are shown in Table 5-3.

Table 5-3: Map Data Used for Base Map Preparation

Name of Maps	Scale or Resolution	Publisher	Year
1) Topographic Map	1:50,000	EMA	1970's
2) Administrative Map	1:50,000	CSA	1994
3) Satellite Image (Landsat 7 ETM+)	15m	GLCF	2000's

(Source: prepared by the SMAPP Project Team)

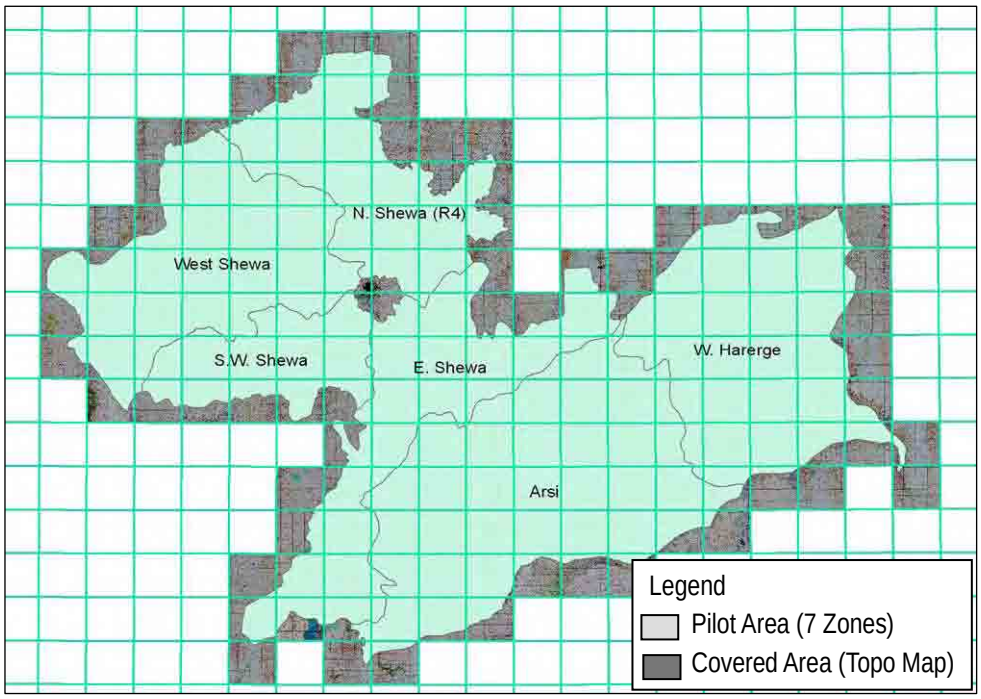
5.3.4 Processing of the Topographic Map for the Database

(1) Selection of Topographic Maps

The first task for the SMAPP Project was to choose topographic maps that covered the pilot areas of the SMAPP Project. This was necessary since the administrative boundaries were not available in any topographic maps published or distributed by the EMA. For this purpose, two maps were selected: "the Administrative regions and zones in Ethiopia map" issued by United Nations Development Programme (UNDP) and the maps provided by the OEB.

All the maps for the pilot areas, which accounted for 161 topographic maps in total,

were collected by the SMAPP Project and are shown in Figure 5-4.



(Source: prepared by the SMAPP Project Team)

Figure 5-4: Coverage of Topographic Maps

(2) Scanning

All of the 161 topographic maps collected were scanned by the EMA, which is the only institute in Ethiopia that had a scanner to scan the large size maps. The specifications of the scanning were as follows;

Resolution: 100 dpi
Colour Mode: RGB
File Type: TIFF

The scanned images were geo-rectified by the following method and parameters

Coordination: Inputting 4 corner latitude and longitude
Interpolation: Cubic Convolution
Projection: Transverse Mercator
Spheroid: Clarke 1880
Datum: Adindan
Coordination system: UTM-37

5.3.5 Processing of Administrative Boundaries for the Base map

(1) Confirmation of the Latest Administrative Units

The number of administrative units at the woreda and kebele has changed in the past ten years, since the latest national census in 1994. The number of woredas increased from 77 in 1994 to 117 in 2007 and the number of zones increased from 5 in 1994 to 7 in 2006 in the SMAPP Project pilot area. However, the number of kebeles decreased from 4,714 in 1994 to around 2,878 in February 2007. It was found that the changes in

the administrative units were not properly monitored by the OEB, which made the provision of timely information difficult.

(2) Input of 1994 Administrative Boundary (CSA) to the Database

The 1994 administrative boundary maps, which the CSA prepared for the 1994 national census, still remained as the latest authorized maps indicating kebele boundaries. The 1994 administrative boundary maps were updated reflecting the changes in administrative units. Scanning, geometric correction and digitizing of all of the former 77 woreda maps was completed.

Although the 1994 maps were considered as the most accurate ones in the country, various problems were found, when the maps were scanned and inputted into the database. Some topographical errors were found and some of the boundaries for the adjacent woredas were overlaid on the computer screen. In order to correct these errors (topology errors), the EMIS School Mapping Task Force with the SMAPP Project Team decided to modify the scanned boundaries by synchronizing them with the topographic conditions, such as rivers, roads and bridges, that were often used as administrative boundaries.

(3) Reflection of Administrative Boundary Changes

Initially, the SMAPP Project Team had planned to determine administrative boundary changes through the collection and verification of the 2005 boundary maps kept by each woreda; however, those maps were not accurate enough for scanning and digitizing. The SMAPP Project Team distributed questionnaires to all of the pilot WEOs to ask them to list their current kebeles. The questionnaire included: i) the names of kebeles within their woreda in 2005; ii) the names of the kebeles in 1994 corresponding to the kebeles in 2005; and iii) the classifications for the pattern of changes in the kebeles. A sample of the questionnaire is shown in Table 5-4.

Table 5-4: Form of New Kebele Code (Sample Form)

05 kebele Code	Name of kebele	94 kebele Code	Patterns of Change	Population
05-DB-01	Xxxxxxxxxx			
05-DB-02	Yyyyyyyyyy			
05-DB-03	Zzzzzzzzzz			

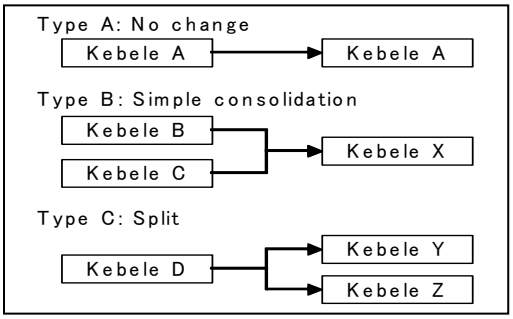


Figure 5-5: Three Patterns of the Kebele Boundary

The patterns of the change in the kebele administrative boundaries from 1994 to 2005 were reviewed by the SMAPP Project Team based on the questionnaire results. Accordingly, three patterns of change were identified: i) no change; ii) simple

consolidation, where several kebeles of 1994 were consolidated into one kebele in 2005; and iii) combination of split and consolidation, where one kebele was split into several parts and incorporated into the other kebeles. The three patterns are illustrated in Figure 5-5.

5.3.6 School Location Survey

School location data and school information were collected through the school location survey using GPS receivers, while most of the other school information was available from the EMIS. The Ethiopian consultants, who were working with the EMIS School Mapping Task Force and the SMAPP Project Team on a contract basis, conducted a school location survey from late August 2005 to the midst of February 2006.

(1) Target Schools

As agreed by the OEB, the SMAPP Project Team, and the Ethiopian consulting team, the following educational institutions were selected to be covered by the OEdMap:

- Formal primary schools (government and non-government)
- Formal secondary schools (government and non-government)
- ABECs only which were those planned to be upgraded to government schools in the following one or two years by WEO.

(2) Information to be Collected

The survey teams collected the following information:

- School information (school code, name, type)
- Location (east, north, elevation),
- Land cover and land use around the school
- Others (access road conditions, name of woreda and kebele, persons who accompanied the survey team)

School information was collected to confirm the information in the EMIS database. School locations were surveyed by GPS receivers. Information on land cover and land use was used for checking the topographic conditions and confirming the surveyors' visits to the schools.

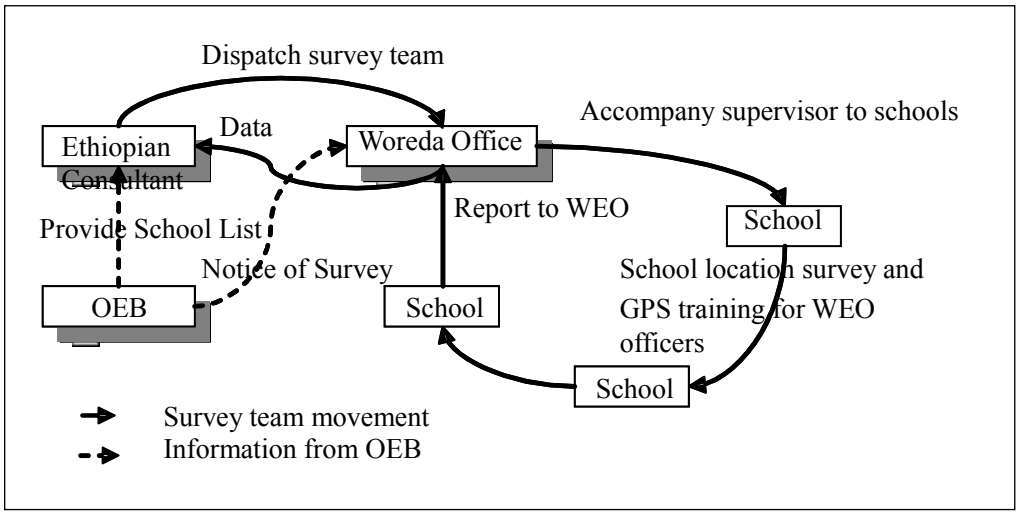
(3) Survey Plan

According to the latest data available from the EMIS, it was estimated that about 3,000 primary schools would be surveyed. Due to heavy rains in July and August 2005, even 4WD vehicles could not reach many rural schools. The Ethiopian consultants formed three teams consisting of one experienced researcher and one assistant. They were assigned to survey school locations during the rainy season. As soon as the assistant understood the survey method, the team was split and a new team was created. Eventually the number of survey teams increased from 3 to 13 by the end of the survey.

(4) Workflow of School Location Survey

Workflow for the school location survey is illustrated in the Figure 5-6. Prior to the dispatch of the survey team, the OEB provided each consultant with school

information from the EMIS database. The OEB also informed WEOs of the survey schedule, so that a proper supervisor from WEOs could accompany the survey team to schools. The survey teams visited WEOs and requested help from them to visit targeted schools based on the list. The survey team and the assigned WEO officers visited the schools and conducted the school location surveys. During visits, the survey teams trained the WEO officers in how to conduct a school location survey by using a GPS. After the field survey was completed, the survey team and the WEO officers returned to the WEO and reported their results, including geographic coordinates, road conditions, and accessibility to schools.



(Source: prepared by the SMAPP Project Team)

Figure 5-6: Flow of School Location Survey

(5) Monitoring

The SMAPP Team visited all of the pilot woredas, after the completion of the school location surveys had been conducted by the survey teams, in order to monitor and check the survey results, and to follow-up with the GPS training for the WEO officers. The SMAPP Project Team requested that a survey team re-survey schools where the school location data was not accurately surveyed.

The SMAPP Project Team also visited each WEO and provided training in using the GPS for WEO officers. As a part of the practical training, the officers surveyed the location of the WEOs under the supervision of the SMAPP Project Team.

5.3.7 Selection of the EMIS Data

Data stored in the EMIS database was selected and integrated into the OEdMap, considering two SMAPP guidelines as follows:

(1) The OEdMap should be continuously operated and managed by the OEB; and
(2) The OEdMap should be used for planning, including regional education development planning in general and micro-planning at the woreda level.

The following EMIS data under education development were integrated into the OEdMap.

- General: Name of school, school ID, covered grade

- Access: NIR, NER
- Quality: Student-section ratio, student-teacher ratio, student-textbook ratio
- Equity: Number of male/female teacher and student, school location
- Efficiency: Dropout rate, repetition rate

5.3.8 Verifying of the OEdMap Data

(1) Data Verification of the OEdMap (2004/2005)

At the end of February 2006, 243 kebeles, out of about 2,880 kebeles, needed data verification of their boundaries data. Field survey activities were continued in order to verify and update those data. Four (4) kebeles remained for verification as of 15 March 2007. The SMAPP Project Team and the OEB agreed a plan to conduct a verification of the remaining schools in the 1999 E.C. (2006/07)) school location survey the SMAPP Project was completed.

Table 5-5: Changes on the Number at Each Administration Level

Item	No on 1994 Census	No on February 2006 Survey	Remarks
Zone	5	7	West Harerge Zone, Adama Zone, West Arsi Zone were divided
Woreda	77	115	38 woredas were increased
Kebele	4,714	2,878	1,836 kebeles decreased
- Confirmed	4,714	2,874	61% decreased
- N.C.B.	-	4	Split kebele (Need Confirmation of Boundary)

(Source: prepared by the SMAPP Project Team)

The school location data were reviewed and sorted out as to its consistency with the EMIS database. Table 5-6 showed that 2,985 school data in the OEdMap were consistent with the EMIS data by school ID while 148 schools covered by the GPS survey were found to have no school ID. Those schools were assumed to be either ABECs to be upgraded in the near future or those which did not submit a completed AEC questionnaire.

On the other hand, 154 schools were categorized as not surveyed. Those might be newly constructed schools at the time of the latest AEC, judging from their school ID.

Table 5-6: Schools Covered by the SMAPP Pilot Area

Category	No. of schools	Remarks
Location surveyed schools by GPS receivers		
Primary school	3,133	
- School ID identified	2,985	Formal primary schools
- School ID not identified	148	Including ABECs and schools which did not submit the questionnaire
Secondary school	110	
Sub-Total	**3,243**	
Schools not surveyed by GPS receivers		
Primary school	128	Including newly opened schools from 1998E.C. and forgotten schools during survey
Secondary school	26	
Sub-Total	**154**	
Schools in SMAPP Pilot Area		
Primary school	3,261	
Secondary school	136	
Total	**3,397**	

(Source: prepared by the SMAPP Project Team)

Data verification was the task of EMIS/School Mapping Task Force of the OEB and needed to be performed continually to monitor the changes in administrative units and their boundaries in order to keep data accurate.

(2) Verification and the Import the EMIS Data (2005/2006)

The input of 1998 E.C. (2005/06) AEC data into the EMIS was delayed because of the introduction of the UIS-EMIS as mentioned in Chapter 4. After this data input, data verification was conducted by the OEB and the SMAPP Project Team for the use in the EMIS data and for the OEdMap for micro-planning exercise.

The OEB had many challenges in inputting and encoding the 1998 E.C. (2005/06) AEC data because the UIS-EMIS system made them use, perhaps prematurely, the new data encoding system. In addition, the schedule was too tight to prepare the data needed for micro-planning workshop.

Only after the SMAPP Project Team overcame those problems, it made it possible to verify, summarize, and import data into the OEdMap to produce maps and tables for conducting micro-planning exercises.

5.3.9 Preparation of Maps and Tables for the Micro-planning Workshops

Giving priority to higher needs for development, the SMAPP Project Team and the OEB selected the education indicators in the areas below (general, enrolment, section, classroom and repetition rate, teaching staff, coverage, and administrative and other, mostly topographic, indicators) to be supported by or reflected in the database to be imported into the OEdMap. The SMAPP Project Team and the OEB agreed to prepare three types of maps for each woreda for micro-planning exercises; namely: i) a school coverage map (A4 size), ii) a school information map (A4 size), and iii) a school map (A0 size), and a school information matrix as a summary table of the AEC 1998 E.C. (2005/06)) Table 5-7 indicates data covered by each map, while the samples of the maps prepared are shown in Appendix-7.

Table 5-7: Data Covered by the Maps and Tables for the Micro-planning

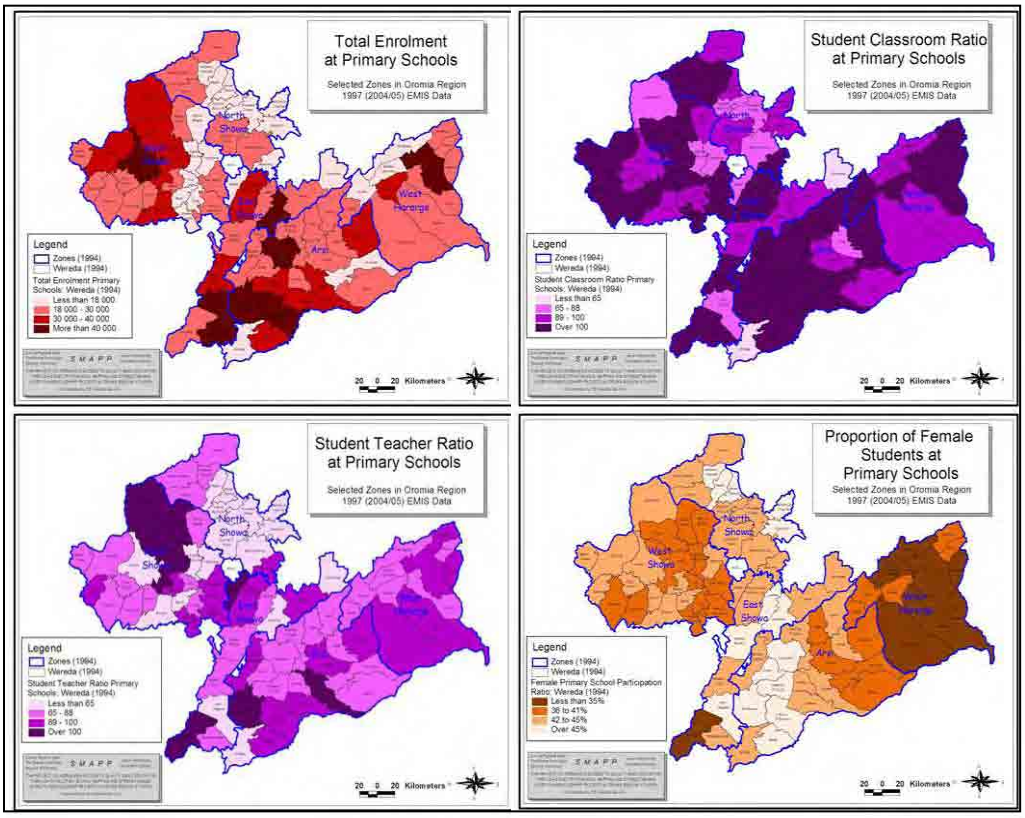
Category	Output from OEdMap			
	School Coverage Map (A4 size)	School Information Map (A4 size)	School Map (A0 size)	School Information Matrix
School Information				
S1) General				
- Full name			✓	✓
- School ID			✓	✓
- Code number (last 4 digit of school ID)	✓	✓		✓
- School location by cycle (1st cycle or complete)	✓	✓	✓	
- School location by type (primary, secondary, or NOT IN EMIS)	✓	✓	✓	
S2) Enrolment				
- By cycle, by sex				✓
- Total		✓	✓	✓
- Female/male (%) by cycle				✓
- Female/male (%) in total		✓	✓	✓
S3) Section				
- Number by cycle				✓
- Student-section ratio by cycle				✓
- Student-section ratio in total		✓	✓	✓

Category	Output from OEdMap			
	School Coverage Map (A4 size)	School Information Map (A4 size)	School Map (A0 size)	School Information Matrix
S4) Classroom				
- Number				✓
S5) Repetition rate				
- By cycle, by sex, in total				✓
S6) Teaching staff				
- Number by cycle, by sex, in total				✓
- Student-teacher ratio in total		✓	✓	✓
S7) School coverage area	✓		✓	
S8) Grade				
- Maximum Grade	✓		✓	✓
- Minimum Grade			✓	✓
Administrative Information				
A1) Woreda boundary	✓	✓	✓	
A2) Kebele boundary	✓	✓	✓	
A3) Woreda and kebele name	✓	✓	✓	✓
A4) Kebele without school	✓			
Others				
O1) Rivers, Lakes, Reservoirs	✓	✓	✓	
O2) Roads	✓	✓	✓	
O3) Settlement	✓		✓	
O4) WEO			✓	
O5) Contour line			✓	

(Source: prepared by the SMAPP Project Team)

5.3.10 Demonstration of Thematic Maps

Some thematic maps of education indicators were prepared and presented as another output from the OEdMap. These maps could graphically display the development level for each woreda with respect to access, quality, equity, and efficiency in primary education. These maps were helpful for analyzing planning, and decision making for resource allocations at the regional level. Figure 5-7 shows a sample of thematic maps.



(Source: prepared by the SMAPP Project Team)

Figure 5-7: Sample Thematic Maps Created by the OEdMap

5.3.11 Adjustment in the OEdMap for the UIS-EMIS

As noted earlier, the new UIS-EMIS introduced the classification of "Code_School" as a primary key for identifying schools and requested the OEdMap change its coding system, "Administrative_School_Code" as a primary key had heretofore been used by the EMIS. After OEB's decision to use "Code_School" as an official primary identifier key in February 2007, the SMAPP Project Team added a "Code_School" column and changed the primary key from "Administrative_School_Code" to "Code_School" to adjust to the new UIS-EMIS system.

5.4 CAPACITY DEVELOPMENT FOR SUSTAINABLE OPERATION AND MAINTENANCE

Capacity development in the OEB in the operation and management of the OEdMap was one of the key components and objectives of the SMAPP Project. The SMAPP Project Team conducted a capacity development programme under the EMIS Task Force as further described below.

5.4.1 Framework of Capacity Development Programme

For the effective operation of the OEdMap, various types of new skills and knowledge needed to be transferred by the training conducted by the EMIS Task Force. The framework, knowledge and skills for the capacity development programme was prepared and outlined below.

(1) Skills and Knowledge

1) Operations skills and knowledge
Technical skills and knowledge on Arc GIS software, GPS, computer. Scanners, and plotters, geography and cartography are needed in order to start and maintain a map system.

2) Updating skills and knowledge to keep the system and staff current
Updating school data regularly on a schedule requires skills and knowledge in planning and management as well as an understanding of institutional administrative arrangements. Updating training and activities involves many stakeholders. These activities should be well planned, conducted and monitored with proper instruction.

3) A sense of ownership
Through the development of the OEdMap and capacity development in micro-planning, a sense of ownership and leadership is needed and strengthened at the regional, zone, and woreda levels respectively.

(2) Types of Training

Two training approaches were are employed during the OEdMap training.

The first approach was **result (output)-oriented training.** Manuals were finalised based on comments from participants in each training course and the results from exercises at the end of each training course. Teaching to emphasize that the system must be "User-friendly" was another important concept in the training process and in the preparation of training manuals.

The second approach was **on-the-job training[8].** Daily computer used by trainees for hands on or A learn by doing experience related to their duties was a key instructional mode for skills development training. In order to have a common understanding among related staff, workshops were also conducted. Levels of understanding and the sharing of the lessons learnt from the on-the-job training. The workshops were evaluated by observing and assessing the outputs from the trainees' workshop progress and performance. Table 5-8 is an outline of the OEdMap training.

Table 5-8: Training Programme for the OEdMap Operations

No	Target Tasks as Course Title	Target Skills and knowledge	Expected trainee Outputs	Training Mode	Target group
1	Introductory training ON GIS	Understanding of GIS	Exercise passed, simple map	Lecture (manual)	OEB T/F
2	An intermediate GIS Utilization and School Mapping	Operational skills for USING Arc map software and understanding OEdMap	Exercise passed	Lecture (manual)	OEB T/F
3	Map preparation for micro-planning	Operation of Arc Map, query, summarization)	3 types of maps for each woreda	on-the-job training	OEB T/F
4	OEdMap operation, management and updating	Understanding of data flow and LEARNING update skills for OEdMap	Exercise passed	Lecture (manual)	OEB

[8] In this Final Report, the term 'on-the-job training'(OJT) covers both meanings of the OJT and hands-on training.

No	Target Tasks as Course Title	Target Skills and knowledge	Expected trainee Outputs	Training Mode	Target group
5	Using a GPS for school mapping	Data acquisition by GPS and operation skills on GPS	Exercise passed	Lecture (manual), workshop	OEB, ZEO, Pilot WEO
6	School location survey (Update)	Management of survey and GPS and knowledge, supervision	School survey data, record of GPS utilization	on-the-job-training	OEB, ZEO, Pilot WEO
7	Updating Kebele boundaries, other data	Arrangements with administrations	Updated woreda and kebele boundaries	Workshop on-the-job training	OEB T/F
8	Data integration with the OEdMap (EMIS Data, school location)etc.	Skills on EMIS and other data, collection, skills on EMIS data importing to OEdMap and other data	Updated OEdMap, school location maps,	Workshop on-the-job-training	OEB T/F
9	Set-up of operational structure for OEdMap	Comprehensive knowledge on OEdMap Operations, Institutional Arrangements among stakeholders	Roles and responsibilities decided	Workshop on-the-job-training	OEB T/F
10	Developing maps for the OEdMap for the additional areas in Southwest Shewa Zone	Comprehensive knowledge of OEdMap development, Presentation skills	OEdMap for additional area,	on-the-job-training	OEB T/F
11	Presentation on educational status by using the OEdMap	Comprehensive knowledge of OEdMap development, presentation skills	Thematic maps	on-the-job-training	OEB T/F

(Source: prepared by the SMAPP Project Team)

(3) Selection of Trainees

The training was started in June 2006 for six members of the Task Force, who were chosen mainly from the PRPD. For reference, the EMIS Team belonged to the PRPD.

(4) Training Schedule

The training schedule was prepared considering how best to have maximum effect for the training and for the continuation of the training. All the trainings were conducted on Saturdays and Sundays, because the Task Force members were engaged in their routine work as OEB officers on weekdays.

(5) Schedule and Record of Trainings

Figure 5-8 shows the training topics, schedule and the extent to which the schedule was maintained

No	Items or Topics		2006							2007					
			6	7	8	9	10	11	12	1	2	3	4	5	6
1	Introductory training of GIS	Plan													
		Actual													
2	An Intermediate GIS Utilization and School Mapping Course	Plan													
		Actual													
3	Map Preparation for Micro Planning	Plan													
		Actual													
4	OEdMap Operation, Management and Updating	Plan													
		Actual													
5	Using a GPS for School Mapping	Plan													
		Actual													
6	School Location Survey(Update)	Plan													
		Actual													
7	Updating Kebele Boundaries, other data	Plan													
		Actual													
8	Data integration to OEd Map (EMIS Data, Kebele boundaries, School Location Data etc)	Plan													
		Actual													
9	Operation Structure Establishment of OED Map	Plan													
		Actual													
10	Developing OEd Map in additional Areas at West Arsi Zone	Plan													
		Actual													
11	Presentation on Education Status by using the OEdMap	Plan													
		Actual													

(Source: prepared by the SMAPP Project Team)

Figure 5-8: Training Schedule for OEdMap Sustainable Use

5.4.2 Development of the OEdMap Manuals

In consultation with the Task Force, the SMAPP Project Team developed training manuals to cover the four technical OEdMap areas.

1) Manual 1: ArcGIS: An Introductory GIS and School Mapping Course for OEB
   Main Contents:
   i) ArcMap basics
   ii) Symbology, labelling & layout view
   iii) Working with spatial data
2) Manual 2: ArcGIS: An Intermediate GIS Utilization and School Mapping Course for OEB
   Main Contents:
   i) ArcMap recapitulation
   ii) Creating your own datasets
   iii) More operations with spatial and attribute data
   iv) Using GIS for situation analysis – additional challenges –
3) Manual 3: ArcGIS: OEdMap Operation, Management and Updating
   Main Contents:
   i) Introduction
   ii) Detailed procedure of OEdMap development
   iii) Data contents of OEdMap
4) Manual 4: GPS: Using a Global Positioning System for School Mapping
   Main Contents:
   i) What is GPS?
   ii) GPS usage in school mapping
   iii) Features and button functions
   iv) School location survey procedure

Manual 4 on GPS was translated into Afan-Oromo (Oromo language), so that WEO officers could easily understand the material. In addition to the above manuals, a handy booklet titled 'Quick Start Guide' was prepared. A supplemental manual was also developed for the OEB officers to acquire practical knowledge on how to handle the OEdMap data with the UIS-EMIS.

5.4.3 Training in OEdMap Operation and Maintenance

(1) Technical Training for the OEdMap

Table 5-9 shows the name, position, and the time to be spent for training by each trainee on each module of the OEdMap Manuals.

Table 5-9: GIS Training Results for the Task Force

Name	Position	Hours spent by each participant			
		Using a Global Positioning System for School Mapping(7hrs)	An Introductory GIS and School Mapping Course for OEB(14hrs)	An Intermediate GIS Utilization and School Mapping Course for OEB(21hrs)	OEdMap Operation, Management and Updating (35hrs)
Tasew Bekele	Planning, Research and Project Department Head	7 hrs	14hrs	17.5hrs	-
Lissanu Lejissa	EMIS and Planning Team Leader	7 hrs	14hrs	17.5hrs	-
Gezu Urgessa	Project Preparation and Monitoring Expert	7 hrs	14hrs	17.5hrs	-
Hailu Tsige	PMIS Expert	7 hrs	14hrs	21hrs	35hrs
Legesse Ayana	Planning Expert	7 hrs	6.5hrs	-	-
Adugna Wondemu	Data Encoder	7 hrs	14hrs	21hrs	35hrs-

(Source: prepared by the SMAPP Project Team)

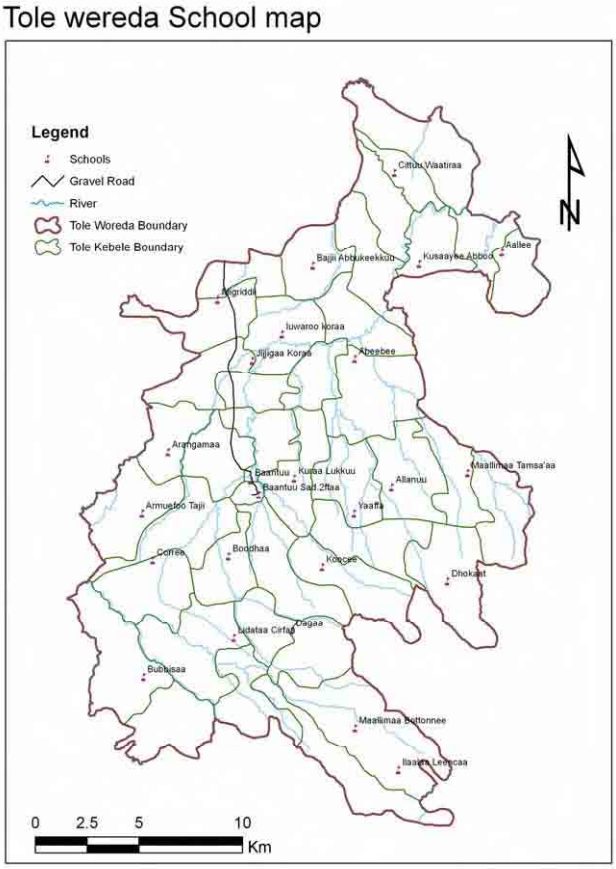
The following sub-section describes the outputs for each training component.

1) GPS Utilization Training

The GPS training was conducted for two days. The training helped the Task Force acquire basic concepts of the GPS system, how to make a compilation of GPS survey data and how to create a school location database. One GPS device was used by each trainee. Exercises on the GPS operation were conducted in the OEB office area. During the 4th SMAPP Training Workshop, one of The Task Force members effectively played the role of an instructor for the WEO staff in the GPS training.

2) Introductory training in GIS

The introductory GIS training was 7 hours long. Starting from the basic idea of the GIS with its focus on the characteristics of spatial data, the training provided the fundamental skills and knowledge required operating ArcGIS 9.0 software. As a result the trainees were able to handle and summarize existing GIS spatial data, and prepare simple school information maps. As an output from the introductory training, GIS, sample woreda school maps were prepared by the trainees. (See a sample in Figure 5-9).



(Source: prepared by the OEB)

Figure 5-9: Sample of the Maps Prepared by the Task Force Members

3) Intermediate Training in GIS

Intermediate GIS training was conducted focusing on the analysis of GIS information needed to generate the outputs that would be used as materials for the micro-planning exercise. These exercises were based on both spatial and tabulation data in the Microsoft Access and Microsoft Excel formats. The AEC data and actual criteria for planning and decision making were discussed during the training.

4) The OEdMap Operation, Management and Updating

This training was conducted through hands on training. Detailed contents of this training are described in the next sub-sections.

(2) On-the-Job Training

On-the-job training was conducted to teach how to update and develop the OEdMap data, using a school site location survey process.

1) School Location Survey

Annual update of the school location data required the training of the WEO officers in how to do a GPS operation. The training was conducted during 4th SMAPP Training Workshop. Trainees were two officers from each WEO. The GPS training was the first step for implementing the 1999 E.C. school location survey. After completion of the training, one GPS receiver was lent to each WEO. They were given instruction on how to conduct a survey using the GPS technology on new construction and on not previously surveyed schools. They were requested to submit the results of the survey

to ZEO together with the GPS receiver within fifteen days after the training. The training in GPS was conducted on October 15 for the 1st batch, October 31 for the 2nd batch, November 12 for the 3rd batch and November 26, 2006 for the 4th batch, respectively at the 4th SMAPP Training Workshop.

WEOs' performance is summarized in Table 5-10.

Table 5-10: Results of School Location Survey by WEOs

No	Zone	No of Woredas	No of New Schools	No of new schools needed to be Re-Surveyed	Total No of New Schools
1	East Arsi	26	73	1	74
2	East Shewa (incl Adama)	15	64	20	84
3	North Shewa	14	70	2	72
4	South West Shewa	8	29	10	39
5	West Arsi	8	38	2	40
6	West Harerge	14	43	2	45
7	West Shewa	19	81	4	85
Total	7 Zones	104	398	41	439

(Source: prepared by the SMAPP Project Team)

As summarized in Table 5-10, 439 schools were surveyed and the results were submitted to the SMAPP Project Team. It was found that one woreda could not produce correct results from the initial survey. Therefore Task Force and the SMAPP Project Team again conducted training for the WEO through the ZEO. In the data input stage to the OEdMap, 6 schools were found to have reported incorrect location data. Some WEO officers might have read the location data before GPS satellite confirmed it, too soon after the switch was turned on. The SMAPP Team proposed key improvement points as:

1) An Initial assessment shall be done by comparing north and east directional coordinates.
2) Information on north and east coordinates in the woredas shall be recorded on the survey sheet.
3) Cells for north and east coordinates shall be recorded on the survey sheet

There were 104 woredas where new schools were constructed. Therefore it was found that not all of the WEOs had been involved in a school location survey. The training in GPS should be provided every time before a school location survey is started, to make sure that every WEO has an opportunity to have the required practical learning in GPS to conduct a survey.

2) Preparation of the OEdMap for the additional woredas in West Arsi Zone

The other on-the-job-training involved field work training in the development of the OEdMap for the additional five woredas in West Arsi Zone. These woredas had been separated from the Bale Zone and in 2006 were now included in West Arsi Zone.

Based on what the Task Force members learnt during the workshop lecture training, the OEdMap was prepared and completed in collaboration with the SMAPP Project Team. The main tasks in the development of new woreda maps in the OEdMap were the:

1) Preparation of an administrative boundary;

2) Conduct of a school location survey and

3) Data entry for the OEdMap and establishment of linkages with the EMIS

1) Preparation of an administrative boundary

Administrative boundaries for the additional woredas were prepared by the Task Force members with the technical assistance from the SMAPP Project Team.

2) Conduct of a school location survey

For the WEO officers in additional five woredas, the GPS operation training for the development of the OEdMap was provided on December 11, 2006 and December 15, 2006. Four to six persons participated in the training. Two teams were formed by each woreda for the upcoming school location survey. From December 20 to 29, 2006, the GPS school location survey was conducted in each woreda by WEO officers with the supervision of the Task Force members and the SMAPP Project Team. The survey was conducted using vehicles in cases where the schools were accessible by them, otherwise on foot or horseback.

3) Data entry for the OEdMap and establishment of linkages with EMIS

The administrative boundaries and the school location data were inputted into the OEdMap by the Task Force members under the supervision of the SMAPP Project Team. As judged from digitized administrative boundaries and school location data, it was satisfying to see that all the surveyed schools were placed in their appropriate woredas and kebeles. It meant that the school location survey was conducted successfully attributed to the enhanced capacity of the OEB and WEO officers.

At the same time, data linkages between the OEdMap and 1998 EMIS data was also established successfully.

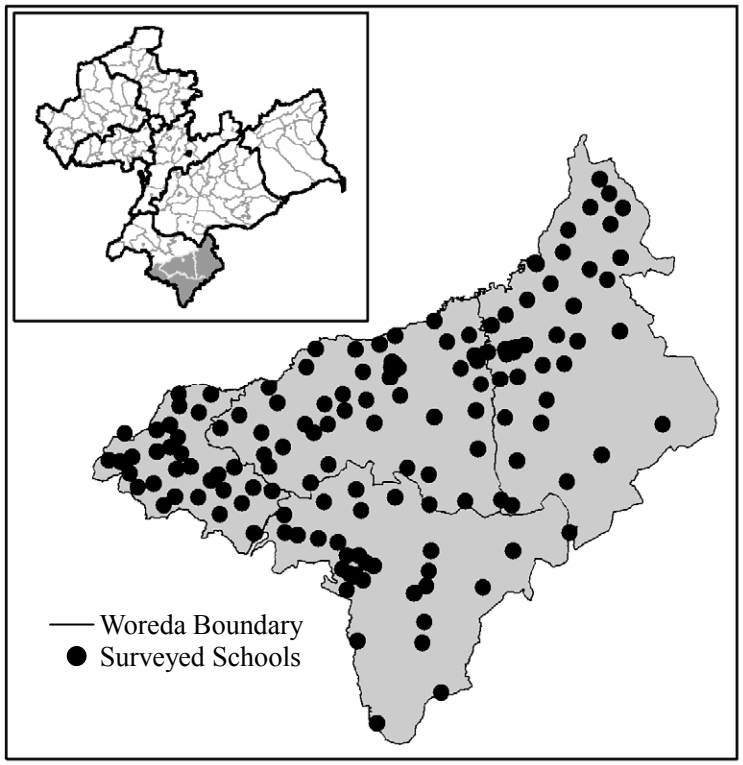
Main activities and achievements obtained through the development of OEdMap for the additional woredas are summarised in Table 5-11.

Table 5-11: Progress of Preparation of Maps on the OEdMap

Activities		Woreda				
		Adaba	**Dodola**	**Kokosa**	**Nansabo**	**Dodola Town**
Preparation of Topographic Map		14 Topographic maps (Source: EMA) that covered boundaries of all woreda was scanned and geo-referencing was finished				
Preparation of Administrative Boundary	CSA Woreda Map	Hard Copy of the CSA woreda maps were scanned and georeferenced using the Topographic maps				
	Woreda Boundary	Digitization of all woreda maps were finished				
	1994 Kebele Boundary	33 kebeles	39 kebeles	32 kebeles	24 kebeles	-
	2007 Kebele Boundary	24 kebeles (17 A, 7 B)*	29 kebeles (20 A, 9 B)	20 kebeles (11 A, 9 B)	20 kebeles (16 A, 4 B)	1 kebele
School Location Survey	Schools Accessible by Vehicle	32	33	23	10	8
	Schools Accessible by Horses	9	9	10	22	-
	Total school Surveyed in each Woreda	**41**	**42**	**33**	**32**	**8**
School Location GIS database		GIS school database was developed and the location of *three* schools needs confirmation				
Linkage between OEdMap and EMIS		EMIS ID entry into OEdMap data base was completed				

(* A – Unchanged, B – Formed from Merging of previous kebeles)

(Source: prepared by the SMAPP Project Team)



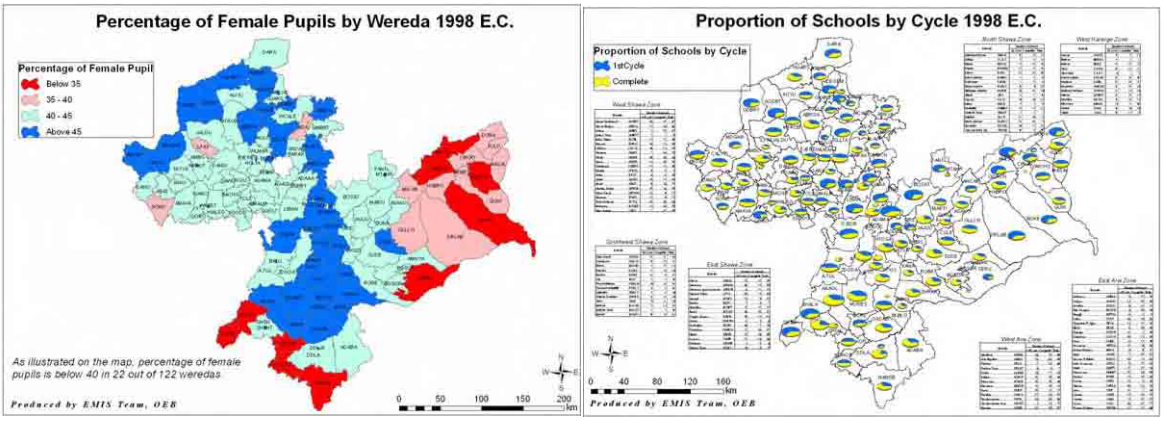
(Source: prepared by the OEB)

Figure 5-10: Area of Extended OEdMap

(3) Development of Presentation Skills by Using the OEdMap

As mentioned in the Section 5.3.10, thematic maps visualizing educational indicators are a useful product of the OEdMap for planning and indicator monitoring at all levels. In order to have maximum effects from the OEdMap development, the SMAPP Project Team conducted trainings for the EMIS Task Force members in the preparation of thematic maps by actually using the EMIS data. At the end of the training they prepared thematic maps on the proportional percentage of female pupils by school by cycle.

Sample of thematic maps are shown in Figure 5-11.



(Source: prepared by the OEB)

Figure 5-11 Sample Thematic Maps Prepared by the Task Force Members

Thematic maps for a region and the results an analysis was to be presented in an abstract in the AEC and in the Oromia ESDP, when the OEdMap covered the whole Oromia Region.

5.5 OPERATION AND MANAGEMENT OF THE OEDMAP

The Task Force, in consultation with the SMAPP Project Team, set up immediate objectives for of the operation of the OEdMap.

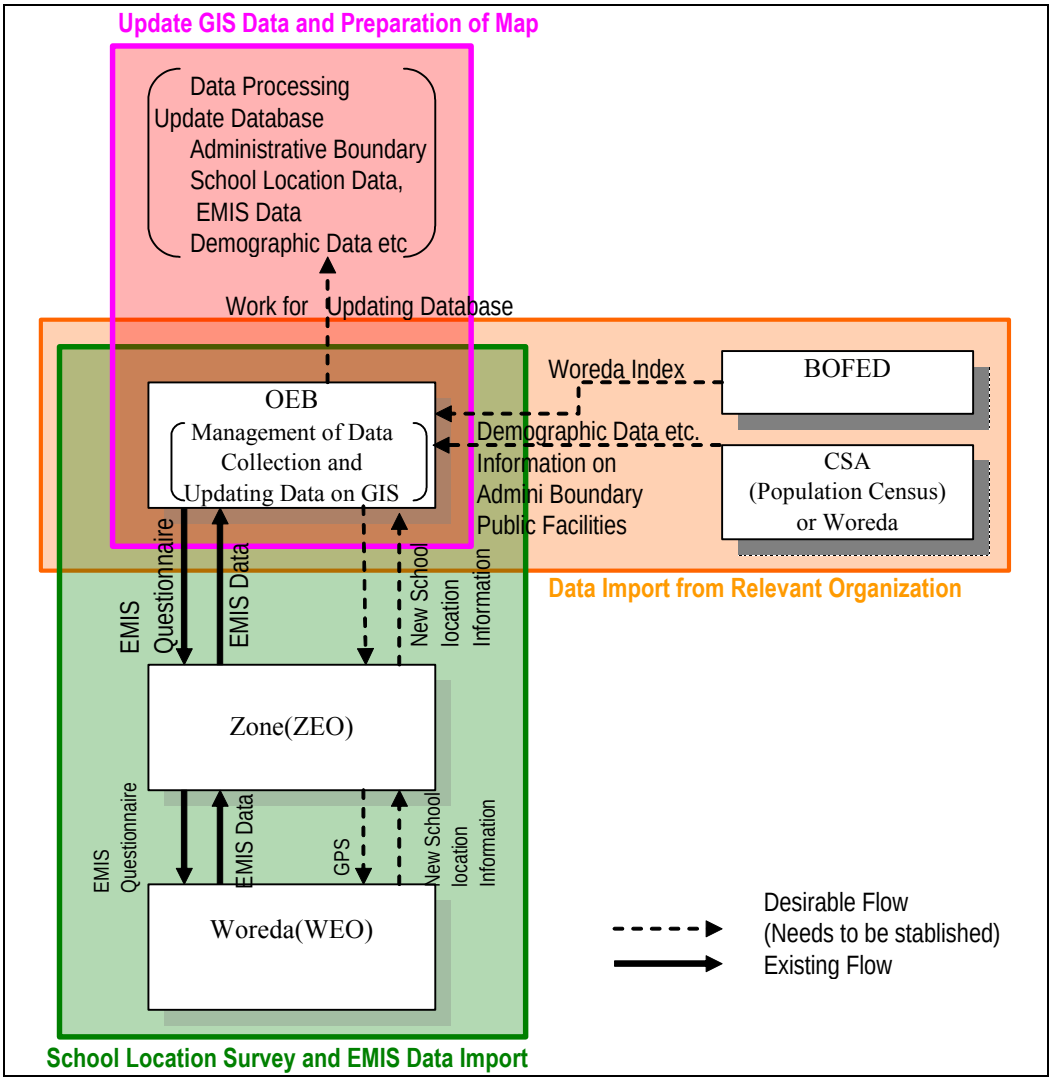
The Objectives were the:

1) Updating of the data on the OEdMap for planning and monitoring; and
2) Delivering maps and matrices for the WEOs for education planning and monitoring.

In addition, the thematic maps for the pilot areas, which were developed through the capacity development programme, could be used for consultations with and in coordination among donors and NGOs.

5.5.1 Data Updating for the OEdMap

Technical tasks for the updating of the OEdMap were classified into three categories according to main development process activities: namely: i) school location survey; ii) data provision and collection from relevant organizations; and iii) Updating GIS data for map preparation.



(Source: prepared by the SMAPP Project Team)

Figure 5-12: Structure on the OEdMap Operation

(1) School Location Survey

A school location survey with GPS receivers is a key component of the updating process for the OEdMap. The SMAPP Project Team proposed that WEO officers collect new school location data by a GPS receiver and submit survey data to the OEB through the ZEO officers. As described in section 5.4.3, this operation worked well; however, it was suggested that the OEB should pay attention to the following issues:

1) GPS Receiver Management

2) Data Management

3) Training for WEOs

1) *GPS receiver management*

GPS receivers were stored and managed properly by the OEB during the SMAPP Project. In the future, ZEOs planned to borrow GPS receivers from the OEB when conducting school location surveys. ZEOs will not be directly involved in the school location survey and WEOs will be the ones who are responsible for the conduct of the

school location survey. Under these circumstances, proper management of GPS is essential. Proper management is assured by clarifying responsibilities of the OEB, ZEOs and WEOs. The SMAPP Project Team, in consultation with the Task Force, prepared an agreement letter regarding the lending of GPS equipment among the OEB, ZEOs and WEOs. The agreement was also made for the purpose of GPS training as shown in Appendix-8.

A ledger for GPS receiver use and borrowing was prepared by the SMAPP Project Team in order to assist ZEO in facilitating the lending arrangement of GPS receivers. A sample of the ledger is shown in Figure 5-13.

Ledger for GPS Receiver

ZONE name East Arsi

Responsible person in ZEO ____________ **GPS Serial no** 79863100

Position ____________ **Storage place** ____________

DATE	WOREDA NAME	BORROWER	POSITION	DATE OF RETURN	CONFIRMED BY

(Source: prepared by the SMAPP Project Team)

Figure 5-13: Ledger of GPS Receiver (sample)

2) Data management

The results of GPS training showed that most of the WEOs could learn to operate GPS receivers properly for the school location survey and that they succeeded in making timely reports on the collected data to ZEOs using the school location data sheet.

It is believed that the importance of the school location data update should be understood by the OEB since they have one of the major roles to update the OEdMap data with new school location data through a verification process. Their role in the assembly and production of the AEC proved their potential to guarantee regular updating. The sample survey results, using the survey sheet, are presented in Figure 5-14.

Woreda Name Adaamaa Special Woreda

Date	Schho Name	School Location (UTM) Zone No.	Easting	Northing	Kebele Name	Location	Signature of Surveyor	Accessa Condition	School ID (Filled by OEB)
26-04-99	Nazareth Medhanealem	37P	0530517	0946469	04	SW-1619		Good Fair Bad	
"	Desingam	37P	0527890	0943665	05	SE-1625		Good Fair Bad	
"	KT School	37P	0528079	0943022	09	SW-1623		Good Fair Bad	
"	Excel Academy	37P	0530459	0943864	11	NW 1620		Good Fair Bad	
29-04-99	Nazreth Adventist	37P	0528703	0944005	08	N-1621		Good Fair Bad	
28-04-99	Unique KG	37P	0530313	0942897	11	N-1606		Good Fair Bad	
								Good Fair Bad	
								Good Fair Bad	
								Good Fair Bad	
								Good Fair Bad	
								Good Fair Bad	
								Good Fair Bad	
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								Good Fair Bad	
								Good Fair Bad	
								Good Fair Bad	

29-8-199

Guutaa Ibsaa Badhaanee

Dursaa Gare amoota

(Source: prepared by the SMAPP Project Team)

Figure 5-14: A Sample of School Location Survey Record

3) Training in School Location Survey for WEO Officers

As mentioned above, the SMAPP Team proposed that the OEB should conduct training in the school location survey to the WEO officers before conducting the survey, since proper data management is required. As a consequence, the SMAPP Project Team recommended that the training period for the survey would synchronize with the timing for the AEC training in order to reduce cost. A sample of the survey sheet and training contents are shown in the DVD Reference for the Final Report.

(2) Data Provision to and from Relevant Organizations

1) *Administrative boundary and related data*

Since administrative units were merged and split, the updating of boundary information was a crucial factor in making the OEdMap effective. In addition, demographic data and projections of enrolments are also important data for micro-planning. This information was not handled by the OEB; BoFED as woreda offices are responsible for the data; therefore, data sharing among the relevant organizations should be systematized. The CSA conducted a national census from May to June 2007. They collected not only demographic data but also GIS data, including administrative boundaries and the location of public facilities. The national census results should be incorporated into the OEdMap.

(3) Updating GIS Data for Preparation of the Map

In addition to the school location data and the administrative boundaries, updated EMIS data should be imported and linked with the OEdMap. It is recommended that the OEB hire data encoders on a part-time basis and those two experts from the EMIS Team supervise their work since two experts from the OEB would face time constraints to be able to involve themselves in encoding. Data encoding should be accompanied with careful data verification, because the SMAPP Project Team observed several cases where data correction was needed during the SMAPP Project.

5.5.2 The OEdMap for Education Planning and Monitoring

The Task Force and the SMAPP Project Team made a decision to deliver maps to WEOs and ZEOs annually. The types of maps to be produced after updating are shown in Table 5-12.

Table 5-12: Publication of Maps and Frequency

Name of Maps	Size	Information	Frequency	Distribution
School Map	A1	School Coverage and Several Index of Schools	Once in a year	WEO
School Coverage Map	A4	School Location and Coverage	Once in a year	WEO ZEO
School Information Map	A4	School Education Major Index	Once in a year	WEO ZEO
School Information Matrix	A4	Tables with school Information	Once in a year	WEO ZEO

(Source: prepared by the SMAPP Project Team)

In addition, thematic maps reflecting several education indexes for the pilot area are to be produced by the OEB in order to further monitor ESDP performance.

It is also suggested that the OEdMap be used for policy recommendations in the future.

The OEB, in consultation with the BoFED, set Minimum Service Delivery Standards (MSDS) as a policy directive for the education sector. The MSDS was established for the preparation of block grant formulae. The MSDS in the education sector includes: i) one first cycle of formal primary school and AEBC in one kebele; ii) one complete primary school in every four kebeles; iii) one secondary school and one skills training centre in one woreda; and one Technical and Vocational Education and Training (TVET) Centre and one preparatory school in every three woredas. These standard levels of education delivery service are not permanent and will change in the future. In order to make decisions on changes in government standard reliable evidence is needed to verify indicators. The OEdMap can serve as a monitoring tool for policy recommendations, since they display spatially the actual distribution of educational services.

5.5.3 Operation Plan

(1) Action Plan

During the SMAPP Project, a series of consultative discussions about the action plan were made by the Task Force and the SMAPP Project Team.

The tasks to operate and manage the OEdMap system should be incorporated into the routine work of the OEB. Detailed steps for all of the activities in the respective organizations, an identification of responsible sections, the resources required, expected outcomes, the methods used for monitoring and for quality controls are summarized in Table 5-13.

Table 5-13: Action Plan for OEdMap Operation

No	Activities	Implemented by	Responsible Section (OEB)	Resources needed	Expected output	Method of monitoring for quality control
1	Training for ZEOs and WEOs	OEB/	EMIS Team	Manuals Financial resources	WEOs and ZEOs trained	Questionnaire to confirm their understanding
2	Survey for Newly Opened School	ZEOs / OEB	EMIS Team	Information on newly opened school from WEOs	List for newly opened school	Monitoring by phone
3	Preparing Plan for School Location Survey	OEB	EMIS Team	Survey sheet with extent of northing and easting for each woreda	Survey plan (Time schedule, of delivery and returning GPS and survey sheet) formulated	Plan shall be checked from logistic, quality control and resource allocation
4	Notice to ZEOs for Preparation of School Location Survey	OEB	EMIS Team	Letters	Letters sent (survey plan), ZEOs	Monitoring by phone
5	Distribution of School Location Sheets with GPS to ZEOs	OEB / ZEOs	EMIS Team	Number of GPS with battery, Survey sheets for each woreda. Transport for Distribution	GPSs, ledger and survey sheets delivered	Monitoring by phone
6	Filling Woreda Name and Borrower's Information in GPS Ledger	ZEOs	EMIS Team		GPS and survey sheet delivered to WEOs	Monitoring by phone
7	Receiving GPS Receiver and Survey Sheet from ZEOs	ZEOs / WEOs	EMIS Team	Transport for Distribution	WEOs received GPS and survey sheets	Signing on ledger sheet
8	Surveying Location of New Schools	WEOs	EMIS Team	Cost for transport Cost for batteries	Filled survey sheet	Monitoring by phone
9	Returning GPS and Submitting the Survey Sheets to ZEO and Initial Assessment	WEOs / ZEOs	EMIS Team	Transport Ledger	Filled survey sheet (Proper northing and easting)	Initial screening or checking by ZEOs
10	Submission of Survey Sheet and GPS to OEB	ZEOs	EMIS Team	Transport	A certain number of survey sheet	Ledger, GPS and survey sheet
11	School Data Verification with AEC Data (confirming primary key)	OEB	EMIS Team	Personnel to verify data	Surveyed school list with primary key (code_school)	Comparison with the EMIS data
12	Data Entry of School Location Data into the OEdMap GIS Database	OEB	EMIS Team	Personnel to input data	Updated school coverage maps Updated school info maps Updated school info matrices	Confirming school location on the OEdMap
13	Data Collection on Changed Administrative Boundaries	OEB / WEOs	EMIS Team	Regular reporting	Map on changes on administrative boundaries	Regular monitoring
14	Data Collection from CSA (population data, public facilities, administrative boundary)	OEB / CSA	EMIS Team	Regular reporting	Data for OEdMap	Monitoring by phone
15	Data Updating on GIS	OEB	EMIS Team	Specialist of ArcGIS	Updated OEdMap	Checking by the Expert
16	Printing Map and Distribution	OEB	EMIS Team	Specialist of ArcGIS, Cost of printing Cost for delivery	School maps, school coverage maps, school information maps, school info matrices for each woreda	Monitoring by phone

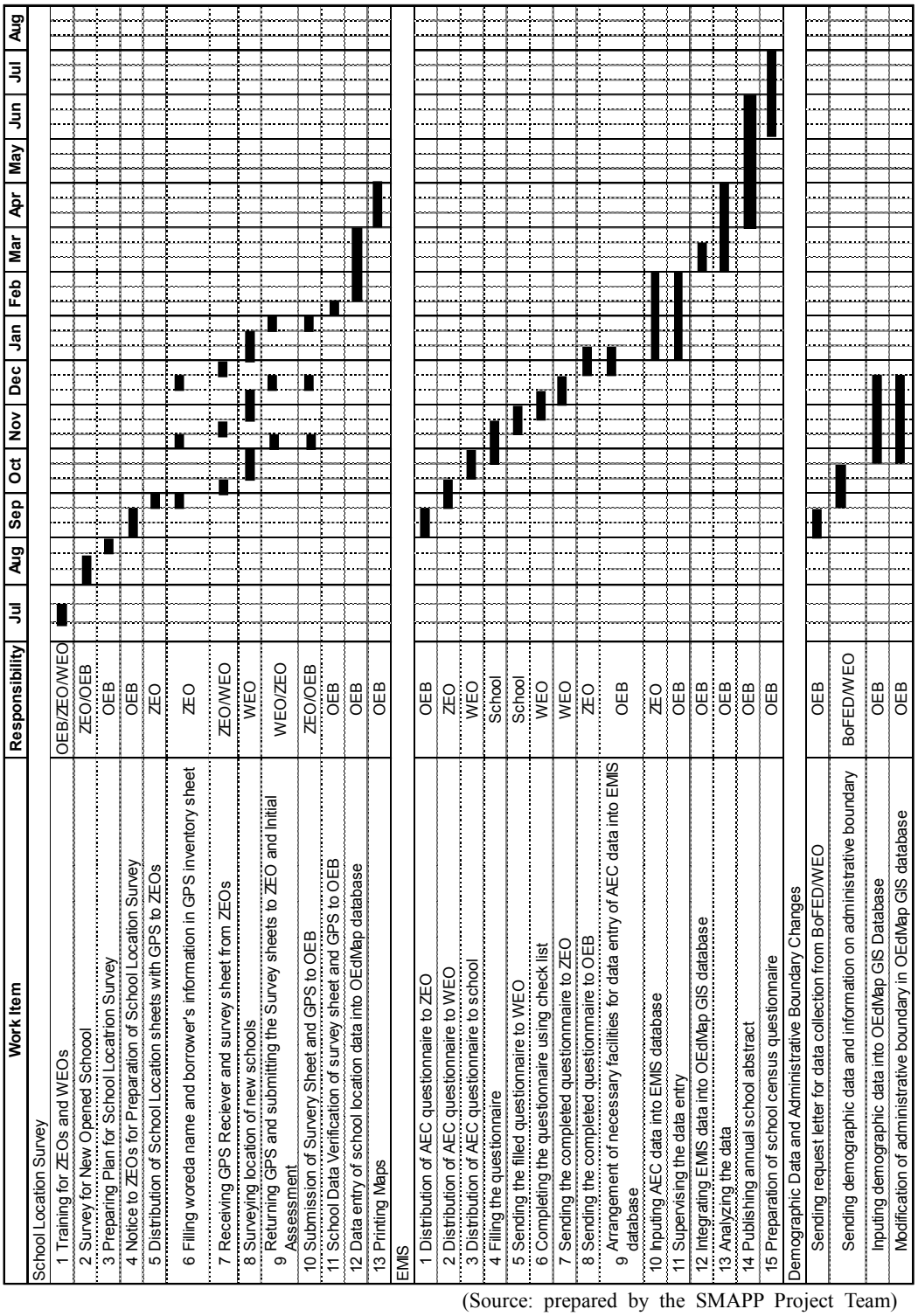
(Source: prepared by the SMAPP Project Team)

(2) Time Schedule

Based on the results of GPS training and the school location survey, the SMAPP Project Team in consultation with the Task Force formulated the annual schedule for the OEdMap operation. The schedule is shown in Figure 5-15.

This schedule was prepared by the SMAPP Project Team based on an agreement with the OEB which would mobilized its experiences in regular activity to integrate the AEC survey into OEdMap maintenance. Although the AEC was delayed by the introduction of UIS-EMIS in 2005, the OEB planned to continue to establish a regular calendar to conduct the AEC from the year of 2000 E.C. (2007/08).

The basic idea behind the regularized scheduling was to assure the OEdMap making and updating process was synchronized with the AEC. It was expected that the synchronization would reduce administrative work and the cost among stakeholders. It also would assist WEOs in the cross-checking of school location data with AEC data. The school location survey provides WEOs with an opportunity to instruct and supervise new school directors on how to properly and accurately complete the questionnaire for the AEC. Systematic linkage between the EMIS and the OEdMap should build a foundation for the improvement in data accuracy and improve all data management.



(Source: prepared by the SMAPP Project Team)

Figure 5-15: Proposed Annual Calendar on the OEdMap Updating and Operation

(2) Financial Plan

Through the discussion, OEdMap tasks for operation and management were itemized and the financial requirements were estimated. Those cost estimates for the OEdMap operation are shown in Table 5-15. Estimated costs were categorized into three types:

i) direct cost; ii) recurrent cost (Personnel); and iii) depreciation cost. Depreciation was estimated for the renewal of equipments and software. A concept of depreciation as private assets management was not considered by the OEB. Annual direct costs and the recurrent costs are estimated to be Birr 29,843 (USD 3,376) and Birr 63,000 (USD 7,127), respectively.

After making a determination of estimated costs, the OEB consulted with the BoFED, which agreed to secure a government budget line for the OEdMap operation. The OEB planned to use expected UNICEF and/or ADB funds for the implementation of the school location survey.

Table 5-15: Estimated Cost for the OEdMap Operation

Operation and Maintenance Cost for OEdMap 26-Jul-07

Unit Birr

1 Direct Cost						
Activity	Item	Unit Rate	Unit	Price	Remarks/Specification	Fund Source
School Location Survey						
	Paper	40	1	40	Survey Sheest,500Papers(A4)	OEB
	Fuel	6	1,170	7,020	10lit/Woreda(5schools)	OEB,Woreda
	Training Cost (Accomodation Cost)	70	250	17,500	70Birr*1days, 117*2Person+8Zone*2Person Conducted with EMIS Training	OEB
	Training Cost(ManualGPS)	2,000	1	2,000	Printing+Other Cost	
	Battery for GPS	10	57	570	1time per year per Machine	Zone
	Contingency			2,713	10%	
	SubTotal			29,843		
Updating School Information on OEd Map						
	No Direct Cost can be envisaged			0		
	SubTotal			0		
Preparation on School Map(Once in a year, Need to Link with Microplanning Workshop, when it is held)						
A0 Map	Roles	200	12	2,400	150m(1Map for 1Woreda 1 Woreda=	OEB
	Ink Sets	1630	4	6,520	Black430*1Set Color400*3Set	OEB
	Distribution		0	0	Synchronizing Distribution of Other I	OEB
A4Map	Cartridge	1,200	3	3,600	Printer 400*3Colors*3Times	
	Paper	40	5	200	A4Size, 5Ream, 1Woreda=7Paper	
	Distribution		0		Done at Meeting with Zone Le vel	
	Contingency			1,272	10%	
	SubTotal			13,992		
SubTotal				43,835		
2 Recurrent Cost						
	Item	Unit Rate	Unit	Price	Remarks/Specification	Fund Source
					TF Members salary is exclusive Salaries for Woreda, Zone Officials for School Location Survey is	Woreda,Zone
	GIS Specialist	3,500	12	42,000		OEB
	Assistant	3,500	6	21,000	3Month*2Person	OEB
SubTotal				63,000		
3 Depreciation						
	Item	Unit Rate	Unit	Price	Remarks/Specification	Fund Source
	Computer	5,000		0	5 Years 25,000/5Year	OEB
	Plotter	3,000		0	10 Years 30,000/10 Year	OEB
	ArcView	3,000		0	Upgrade Once in a three Year	OEB
	Printer（BW)	800		0	5Years 4,000/5Years	OEB
	Printer(Color)	1,500		0	5Years 7,500/5Years	OEB
	Stabilizer	1,000		0	1Year, 3Machine/Year	OEB
	UPS	750		0	2Year 1,500/2Year	OEB
	GPS	350		0	5Years(Average)	OEB
	Projecter	3,000		0	10Years 30,000/10Years	OEB
	VideoCamera	1,200		0	10Years 12,000/10Years	OEB
	MotorCycle	2,000		0	5years.78 Bikes	Woreda Budget
	Contingency			0	10%	
SubTotal				0		
Total				106,835		

*Micro Planning Operation Cost is not included

**Electricity Fee and Communication Cost are not included

(Source: prepared by the SMAPP Project Team)

(4) Institutional Plan

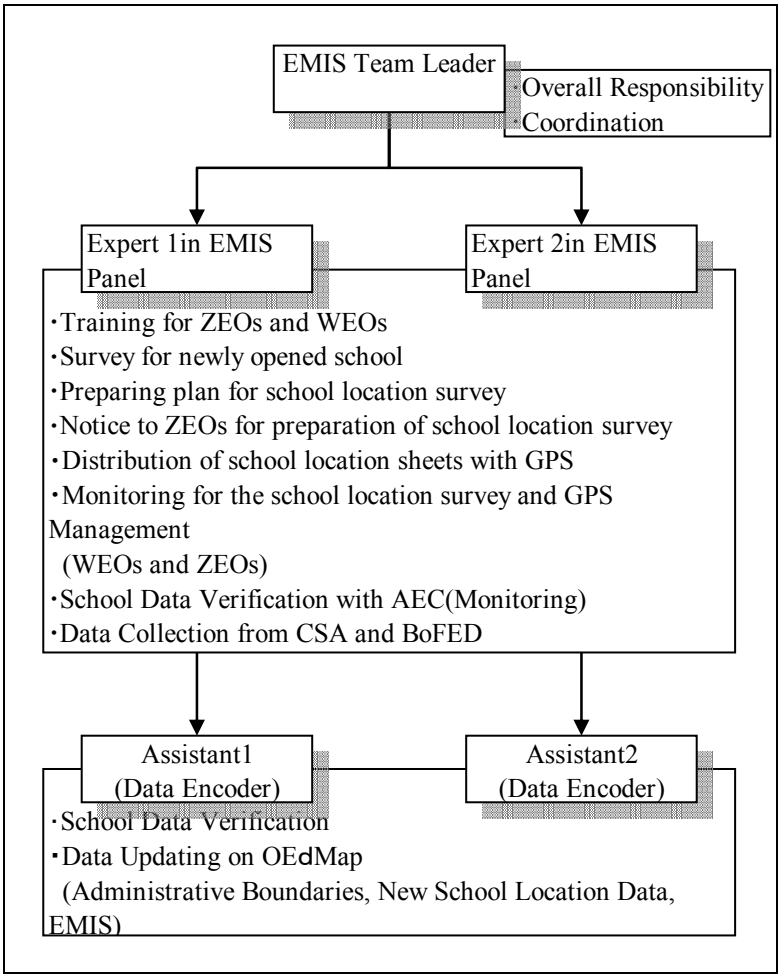
The OEB appointed the EMIS Team as the responsible organization for operation and management of the OEdMap system.

Considering the routine work load of each expert on the EMIS Team, the SMAPP Project team recommended that at least two experts be engaged in the OEdMap operation, so that the two could create a sense of security and encourage the sharing of

information. The SMAPP Project Team also proposed that the EMIS Team hired two assistants as data encoders to cope with the huge work volume.

The OEB officially assigned two experts to work on the OEdMap system. The assigned experts started working immediately with the SMAPP Project Team and involved themselves in the training for the operation, management and development of the OEdMap system.

Operational structure proposed by the SMAPP Project Team is shown in Figure 5-16.



(Source: prepared by the SMAPP Project Team)

Figure 5-16 The OEdMap Operation Structure

The OEB submitted a proposal to the Oromia Region Civil Service Commission, that had a mandate to officially open a post of governmental organization like the OEB, in order to establish a position for the OEdMap.

In addition to the above official assignment of the two experts for the OEdMap system, the OEB committed to further promote institutional arrangements among the OEB, ZEOs, and WEOs for sustained operation and management of the OEdMap.

5.6 EXPANSION OF THE OEDMAP TO THE NON-PILOT WOREDAS

There is a commitment to the expansion of the OEdMap making to cover the 170 non-pilot woredas in the remaining 10 zones in Oromia Region. With reference to the

experiences in 7 pilot zones during the SMAPP Project, the necessary activities to develop OEdMap for the expanded areas should be completed before the implementation of the micro-planning workshops.

Prior to the smooth expansion of the making of OEdMap, the following points will be taken into consideration:

(1) The school location survey will be scheduled soon after the dry season starts. The remaining tasks for map making should be based on the schedule for the school location survey.

(2) All the map production activities, except the school location survey, will be implemented by the OEB in cooperation with the local GIS experts to minimize expenditures.

(3) The OEB has already experienced the expansion of the OEdMap to five (5) woredas in West Arsi Zone, which were completed successfully under the supervision of the SMAPP Project Team. This experience shall be referenced and mobilized into the remaining 10 zones.

(3) It is not realistic to plan on having a full-time OEB officer on duty for the OEdMap making operation, as officer routine workloads are too heavy for such a commitment. Hence, the school location survey in non-pilot woredas is planned to be sublet to a local consultant firm.

(4) The non-pilot woredas will be broadly categorized into two groups, according to accessibility. The first group are those areas where by and large agriculture sedentary settlement is the pre-dominant pattern of settlement and where access is easier. The other group is those areas which have a pastoralist pattern of settlement. A feasibility study will be conducted first in selected woredas, so that work load and time required in order to do the work can be estimated, and critical issues for implementation can be predicted. Based on the results of the feasibility study, the costs for the work and an implementation schedule will be adjusted, if necessary.

(5) The supervision by an international consultant is vitally necessary for maintaining and managing the quality of the OEdMap. The expenditure for a consultant is, however, not included in the following cost estimation.

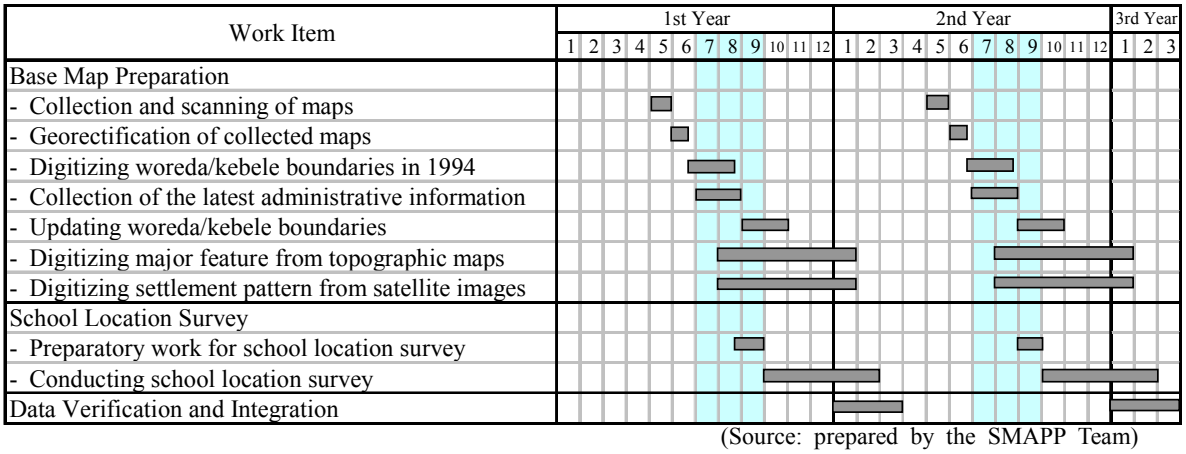
With reference to the above considerations, the cost for the expansion of the OEdMap to the non-pilot woredas is estimated to be a total of Birr 3,228,300 (approximately equivalent to USD 365,000). The breakdown of the costs is shown in Table 5-16, and the proposed implementation schedule for the expansion are presented in Figure 5-17.

Table 5-16: Cost Estimate for Expansion of the OEdMap to the Non-pilot Woredas

(Unit: Ethiopian Birr)

Item	Unit Cost	No.	Amount	Remarks
Quality Control of OEdMap in non-pilot woredas				
- Local GIS expert	8,000	46 person*months	368,000	2 experts * 23 months
Base Map Preparation				
- Purchase of topographic maps	15	400 sheets	6,000	
- Purchase of administrative maps	40	170 sheets	6,800	170 woredas remaining as of June, 2007
- Computer	15,000	2 units	30,000	
- Scanner	80,000	1 unit	80,000	The above maps are required to be scanned by OEB.
School Location Survey (OEB portion)				
- GPS receivers	2,500	57 units	142,500	1 GPS receive / 3 woredas
School Location Survey (Contractors portion)				
- 4WD car rent	1,000	1,700 car*days	1,700,000	170 woredas*10 days
- Per diem for WEOs' officer	70	1,700 person*days	119,000	170 woredas*10 days
- GPS survey manager	8,000	12 person*months	96,000	Quality control GPS survey during 12 months
- Surveyor	5,000	85 person*months	425,000	Survey team 1 surveyor + 1 assistant surveyor
- Assistant surveyor	3,000	85 person*months	255,000	
Total Cost			**Birr3,228,300**	**(USD365,192)**

(Source: prepared by the SMAPP Project Team)



(Source: prepared by the SMAPP Team)

Figure 5-17: Implementation Schedule for the Expansion Work of OEdMap to Non-Pilot Woredas

5.7 LESSONS LEARNT

5.7.1 Development of the OEdMap

(1) The GIS was relatively new technology for Ethiopia, and it was the first attempt for the OEB to introduce GIS technology to education planning and administration. Having considered this during the development of the OEdMap, The size of the data handling in the OEdMap was designed to be minimal, but sufficient enough for micro-planning to make the OEdMap functional and sustainable for the OEB. In part, this decision was verified through the map preparation and micro-planning activities of the OEB and the WEOs.

(2) The use of the maps for woreda education administration was not familiar. WEOs were not good at handling map data. The school location information that WEO officers had did not correspond to the actual geographic location. In the situation where access to schools and the equitable distribution of education services were prioritized, the school location survey using GPS was useful and effective in helping WEO officers to understand their roles in education development.

(3) The school coverage map had its limitation, when planning new school locations in the urban woredas, where the schools were available, but congested and the size or the quality of the schools were more serious problems than student access.

5.7.2 Operation and Management of the OEdMap

(1) The formation of the Task Force for the EMIS and the OEdMap facilitated active involvement of the OEB in the process of designing a database. This team work strengthened their sense of ownership. Eventually the OEB developed a needed organizational arrangement for operation and management of the OEdMap.

(2) High turnover rate of government officers in Ethiopia and the requirement of advanced technical skills for the GIS were two major problems when developing the four training manuals of the OEdMap. The work flow and activity steps were clarified by the figures in the manuals. The manuals were useful for the Task Force and WEO officers to deepen their understanding of the database and the results of the school location survey.

(3) Management of the OEdMap required updating of school location data. The task Force and the SMAPP Project Team decided that WEO officers were responsible for the conduct of the school location survey, using GPS. During the implementation of the SMAPP Project, trainings in GPS operation for WEO officers were conducted in two sets of trainings. The first training was conducted by the Ethiopian consultants, which resulted in a poor understanding of the technology by the WEOs. The reasons were; i) insufficient practice with the equipment due to time constraints; ii) the manuals were prepared only in English; and iii) there were insufficient consensus on instructional methods. Based on the examination of the previous results, the SMAPP Project Team planned to improve the contents and methods of training. The results from the second training in GPS indicated improved technical competence of the WEO officers by successfully achieving school location surveys for about 430 schools; out of which only six cases were found to be incorrect.

(4) Reliability of the EMIS data and how to accommodate frequent changes of administrative boundaries were also critical issues for maintenance of the OEdMap

operation and the management of mechanisms. The OEB needs to strengthen the new UIS-EMIS system and systematize the information collection of the changes in administrative boundaries

5.7.3 Potentials of the OEdMap

(1) The products of the OEdMap, that included visual geographic location information for schools with kebele boundaries, were considered to be effective and useful tools not only for the WEO officers but also for the WAO and the WoFED officers to formulate mid-term plans and long term perspectives for sector development. The OEdMap may contribute to consensus building among these officers with different mandates by sharing visualized map information.

(2) To make more effective use of the EMIS data, the OEdMap helped the OEB to capture and monitor actual on-the-ground situations with respect to the latest distribution of education services, and provide the WEO with needed advisory services. Additionally, with the use of the OEdMap, the OEB is able to make visual presentations of the EMIS data through a variety of maps, which make understanding development issues easier to understand and address. The potential values of the OEdMap should be recognized for micro-planning and for the enhancing the OEB capacity for data management, and planning and monitoring.

(3) Since the OEdMap function to visualize the EMIS data into the form of maps, the data found missing in the EMIS, which could not be easily identified in tabulated data forms, was revealed by the OEdMap. Inconsistency in the number of schools between the EMIS and the OEdMap was found, which resulted in further recognition by the OEB of the necessity for EMIS data verification and improvement. This recognition by the OEB can be considered as a major by-product of the OEdMap development.

(4) The priority for the educational development policy in the Oromia Region has shifted form access to quality. The OEdMap was designed not only for planning to improve access, but also to develop plans to improve quality. In addition, access and quality need not to be improved separately in primary education. It is expected that the OEB will manage to utilize the OEdMap for planning in order to challenge these important issues with technical flexibility.

CHAPTER 6: MICRO-PLANNING: DESIGN, DEVELOPMENT AND IMPLEMENTATION

6.1 INTRODUCTION

The ultimate objective of micro-planning at the woreda level in the SMAPP Project was to help the regional government and the woredas, technically and organizationally, in the two areas. The first was to develop a comprehensive four-year mid-term plan to cope with the ESDSP, as well as a fifteen-year perspective plan to achieve the strategic goal of the UPE. The second area was for the regional and woreda governments to identify and practice appropriate strategies to generate the necessary support and participation within the relevant government agencies, in the community and among the key stakeholders.

After nearly eighteen months of design and development work, in October-November 2006, the 4th SMAPP Training Workshop was conducted. Out of the 117 woredas within the project zones, all woredas participated in the micro-planning exercise. This final micro-planning workshop was conducted in four batches and each batch was six-days long. A total of 600 officers participated and the Woreda Planning Team (WPT), a unit to exercise micro-planning. The Team consisted of officers from a WEO, a WAO, and a WoFED.

A team of facilitators, consisting of senior planning officers from the ZEOs, provided organizational and technical support for the WPT for the micro-planning exercise, supported by the SMAPP Project Team. The facilitators received extensive training prior to the micro-planning workshop.

A comprehensive micro-planning training manual was developed by the SMAPP Project Team, for the use of the WPTs. The Training Manual was designed to guide the WPTs through every step of the micro-planning exercise to produce the outputs expected in the workshop.

The micro-planning exercise was designed to be output oriented. The final output of the exercise was a draft WPEDP with the strategic objective of achieving the UPE in the woreda. As an integral part of the WPEDPs, the WPTs developed strategies and modalities for the approval and implementation of the plan. These modalities included procedures for getting the plan approved, strategies for getting the necessary support for the plan from the key stake holders and NGOs, and strategies for financing of the plan.

A summary translation of all the WPEDPs into English summaries was undertaken. The translations would be useful in placing the strategic goals and the financial and programmatic needs of the woreda primary education system before a wider audience. This audience included potential donors, NGOs and other stakeholders who were committed to the development of the woreda primary education system.

The following sections provide more details of the development and implementation of the micro-planning exercise and recommendations.

6.2 THE DEVELOPMENT CONTEXT OF MICRO-PLANNING FOR WOREDA PRIMARY EDUCATION DEVELOPMENT

The design, development and implementation of the micro-planning for the woredas were influenced by the development and governance processes, which were still

evolving in the country and in the Oromia Region. These factors included the commitment of Ethiopia and the Oromia Region to the MDGs and goals of poverty reduction; the commitment to achieve the UPE with equity and quality; and the commitment to accomplish decentralization of governance to bring decision making closer to the people.

The philosophy that guided the development of the micro-planning, its structure, processes, techniques, and outputs was shaped by these factors.

6.2.1 MDGs and Poverty Eradication

The GoE and the Oromia Region Government are committed to the MDGs to achieve rapid economic and social development. More recently, Ethiopia and the region governments, including Oromia Region, developed the PASDEP to reach the MDGs. Provision of primary education to all eligible children is a strategic priority to achieve MDGs. Micro-planning recognizes and elaborates the multifaceted contribution that primary education is able to make to the economic and social well being of the individual and the society, and to the nation building process. Micro-planning sees education as a tool for the larger economic and social development of the woreda and integrates the strategies for the development of primary education with that of the other sectors.

6.2.2 UPE

Through its presence in Jomtien Conference in 1990, and by being a signatory to the Dakar Conference in 2000, the GoE is committed to the goal of bringing UPE. This objective is also stated clearly in the ETP promulgated in 1994. The GoE sees bringing primary education to all eligible children as one of the key strategies for achieving rapid reductions in poverty and to bring about socio-political development.

Micro-planning at the woreda level took this as its central theme and developed a road map for woredas, zones and the region to achieve the goal of UPE.

6.2.3 Decentralization of Governance and Participation

Ethiopia is a vast and diverse country. The structure of economic activities, the level of development, and opportunities and constraints differ from one part of the region to another.

In response to the diverse features of the country, the GoE pushed the decentralization of governance to the lowest governmental unit, the woreda, as a key strategy to accelerate the achievement of the development goals. Decentralization of governance brings decision-making closer to the people and places enormous responsibility on the woreda administration and the WEOs to deliver development through the provision of primary education with equity and quality to all the children.

In the decentralized governance process, participation by the citizens and the key stakeholders is given utmost priority. Planning for education to meet the local needs and to fit the local conditions of resources and capacities will require intimate knowledge of the woredas. Without the incorporation of local knowledge and support for the governance of the education system, the woreda administration and the education office cannot fulfil adequately its responsibility to deliver good quality education for all.

6.2.4 Capacity Development to Enhance Leadership of the Woreda

The decentralized governance system has two strategic responsibilities to assure that the woredas fulfil their obligations to the citizens. First, it is the responsibility of the leadership to identify priorities from competing demands from the citizens of the woreda and to make sure that the priorities selected are acceptable to a majority of the people. Second, it is the responsibility of the leadership to identify the resources required to implement the priorities and to direct the resources to these priorities in a transparent manner.

Successful accomplishment of both responsibilities requires, on the part of the leadership, intimate communication with the members of the community to assess its mood and feelings, as to needs and with funding agencies in order to assess types of interests in their assistance. It also requires a transparent and participatory process that gives sufficient opportunity to the members of the community to express their needs.

6.3 PURPOSE OF MICRO-PLANNING

The purpose of micro-planning in the SMAPP Project was, essentially, to help the woreda decision makers to implement a planning-budgeting process for the education system and to help the decision makers at the region level to understand and reflect the woredas' needs in their planning. The responsibility for final decision making rests with the woreda leadership, while the responsibility for guiding and assisting the woreda leaders rests with the regional leadership.

Under this overall guideline, the following purposes were identified for the micro-planning exercise of the SMAPP Project to:

1) Create greater awareness among the woreda leaders and officers about the education and development policies of the federal and region governments.
2) Strengthen the link among the federal, region, and woreda education policies.
3) Identify the key features of a participatory planning-budgeting process to build a teamwork style in planning/management of education among the WPTs.
4) Identify and strengthen the role of the community and the stakeholders in the planning of the education system.
5) Develop the necessary skills for conducting the annual planning and budgeting process among the woreda officers.
6) Develop appropriate modalities for generating the necessary support among the key stakeholders at the woreda, zone and region levels and the woreda government institutions for the successful implementation of the WPEDP.

6.4 BASIC PHILOSOPHY OF MICRO-PLANNING

In the SMAPP Project, the basic philosophy that guided the development of the structure, process and content of the micro-planning exercise emanated from many sources: i) the nature of decentralized governance and the role of planning and management in support of achieving the goals of decentralization; ii) the nature of the participants in the micro-planning workshops and their needs; iii) the nature of the woreda education system and its level of development; and iv) the nature of the infrastructure that existed in the woredas.

The major elements of the basic philosophy were summarized as follows:

1) **Realism and pragmatism:** The overarching philosophy that guided the

development of the methodology and process of the micro-planning exercise in the SMAPP Project was one of bringing realism and pragmatism to the WPEDPs. Attempts to bring realism and pragmatism ran throughout the micro-planning exercise. Situation analysis was intended to match the future targets with the past achievements. Future policies with regard to setting reductions in student-teacher ratio, student-section ratio, etc. were dependent on availability of resources in the future. Throughout the exercise, the WPTs deliberated alternative policies based on cost implications.

2) **Integration of national, region and woreda education policies:** Decentralization dispersed the responsibility for decision making among various levels of governance: federal, regional, and woreda levels. While decentralization was intended to give opportunity for each level to exercise its decision making powers to meet the needs at each governance level, decisions at each level needs to be guided by the strategic goals and policies at higher levels. The woreda leadership needed to be cognizant of the strategic goals and policies that guided the national and region education system. The micro-planning exercise of the SMAPP Project identified the national and region development policies for education and integrated them with that of the woreda policies and goals.

3) **Empowerment of the woredas to make decisions:** Decentralized governance required empowered the woredas to make critical decisions to set goals, develop operational plans, identify and allocate resources (budgeting), mobilize the communities to implement the plans, etc. The micro-planning exercise, through its content, processes and empowerment, provided techniques to develop the necessary skills to make appropriate decisions to bring the benefits of education to the respective communities.

4) **Need for congruence between decentralized governance process and micro-planning:** The micro-planning exercise was intended to show decentralized governance in action. Therefore, there were congruence between the decentralized governance process and the micro-planning training programme. Decentralization was intended to bring greater participation in governance at the woreda and community levels. The content and style of the micro-planning, as much as possible, reflected the style of decentralized governance. It emphasized the participatory nature of planning through the content as well as through the processes employed.

5) **Governance is not an exercise in theory:** Governance is a practical process. The citizens expect results from the governance process, such as better and more education, better and more health, and a better life for the individuals and the community. The officers need to deliver results in a transparent and accountable manner. Therefore, micro-planning cannot be an exercise in theory. It needs to be practical. With this in mind, the micro-planning exercise was designed to help the woreda officers set realistic goals, to develop strategies grounded in reality, to design programmes to address real causes for problems, and to establish the size of improvement programmes based on a realistic assessment of the resource capabilities of the woredas.

6) **The micro-planning exercise should be grounded in the realities of the education system in the woredas:** The training should not be general; but rather be specific. Micro-planning in the SMAPP Project used real and up-to-date data from each woreda, as much as possible, so that each woreda was able to develop woreda specific plans, strategies and programmes.

7) **Organizational, human and technical capacities of the woredas:** The micro-planning training exercise was based on the organizational, human, technical, and financial capabilities of the woredas. The technologies and tools used were designed to fit what was available in the woredas. This training programme was cognizant of the limited technologies and infrastructure that were available in the woredas for day-to-day management. Even when the participants in the micro-planning exercise used sophisticated technologies and techniques, such as computers and projection models, the process was designed to assure that the woredas could produce all the necessary outputs using these techniques and technologies during the workshop; although there would be little additional need for these technologies after the participants departed the workshop.

6.5 STRUCTURE OF THE MICRO-PLANNING EXERCISE

Given the purpose and objectives described above, the micro-planning exercise was designed, not merely as a regular training programme, but also as a way to introduce and operationalize a system to plan and implement educational improvement activities based on the local needs.

6.5.1 Participants in the Workshop

In order to identify and allocate resources to the priority objectives and programmes in a transparent manner, it was necessary to consider wide workshop participation from the WEO officers. In addition, successful implementation of the WPEDPs required the acceptance and understanding of the strategic goals of the WPEDPs by the woreda leadership.

In selecting the participants for the 4th SMAPP Training Workshop, the dual needs of decentralized planning and governance were considered. Therefore, at least three or four officers from each WEO, led by the woreda education head, were invited. Given the needs to identify and allocate of resources, a representative from the WoFED was invited as well. In addition, the heads of the WAO were encouraged to attend at least the last day of the workshop, so that they could be briefed on the major details of the WPEDP by the members of the WPTs.

Each WPT consisted of:

(1) Officers (three or four persons) from the WEO;
(2) An officer from the WoFED; and
(3) A head of the WAO.

6.5.2 Participatory and Consultative Process

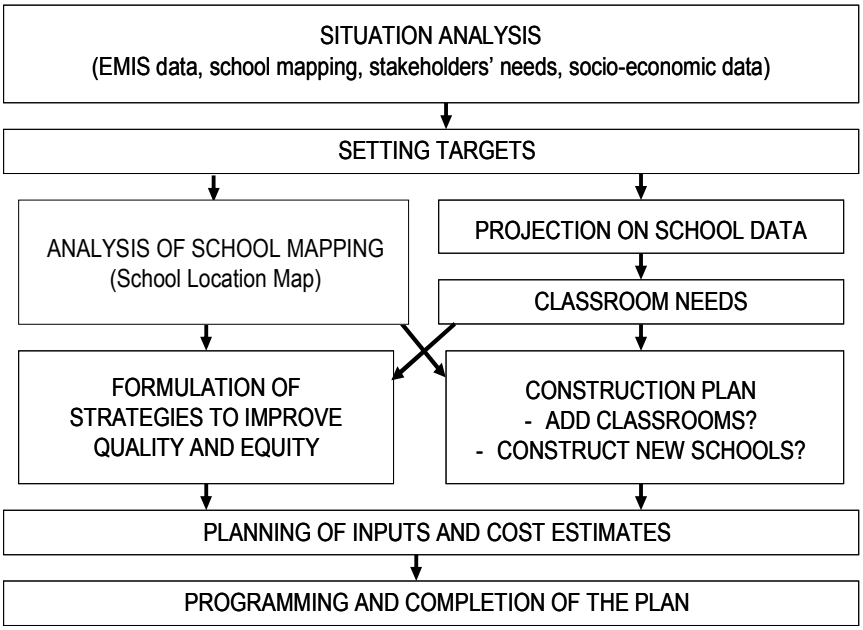
The design of the 4th SMAPP Training Workshop paid great, detailed attention to the participatory and consultative processes of decentralized planning and governance. The participatory and consultative processes were emphasized at the two different levels of planning, namely:

(1) Through participation by all professionals and the leadership at every stage of the planning process in a meaningful way to share their experience and knowledge of the education system; and
(2) By recognizing the need for incorporating the participation of the beneficiaries and the key stakeholders at appropriate stages of the planning process.

6.5.3 Techniques of Planning

The content of the micro-planning workshops was designed to develop the necessary skills in conducting planning. Various steps in planning; such as the situation analysis, target setting, enrolment projections, estimation of key inputs and their costs, development of a monitoring plan, etc. were designed to impart the necessary technical skills to the participants in conducting education planning.

The following figure presents the logical sequence of steps used during the micro-planning exercise to develop the necessary skills and to generate the expected outputs:



(Source: prepared by the SMAPP Project Team)

Figure 6-1: Steps to Prepare the WPEDPs

6.6 PRODUCTION OF THE MICRO-PLANNING TRAINING MANUAL

A comprehensive micro-planning training manual was developed, to transfer the techniques of micro-planning to the members of the WPTs, to identify and practice the use of the key features of the decentralized participatory planning processes, and to design and develop the outputs to be produced during the exercise.

The following sections describe the process that was followed in developing the micro-planning training manual and its structure and content.

6.6.1 Development of the Content Map of the Training Module

The first step in the design of the training module was the development of the training module content map. The content map was developed to reflect the objectives, the philosophy, the process, and the outputs for the micro-planning exercise. The content map outlined in detail the sequence of the modules in the training manual, the contents of each module, the objectives to be achieved at the end of each module, the outputs to be produced at the end of each module, the planning tools that were needed to accomplish the objectives contained in each module, and the planning processes that

were followed by the WPTs, the facilitators, and the presenters in achieving the objectives.

The content map was reviewed and discussed jointly by the members of the Micro-planning Task Force and the SMAPP Project Team. Based on the results of these discussions, the content map was modified as necessary.

The preparations of the 4th SMAPP Training Workshop coincided with the terminal evaluation of the SMAPP Project, which provided an opportunity to discuss the objectives and conceptual approaches to the workshop.

Based on the final version of the content map, it was agreed that the training manual would have 23 modules.

6.6.2 Structure of the Modules of the Training Manual

The structure and sequence of the modules in the training manual followed the logical sequence in the development of a WPEDP and the outputs required at each stage of the WPEDP development.

The modules were designed to be output oriented. Each module was designed to produce one or more outputs by the members of each WPT and these outputs together were designed to contribute jointly to the final output namely, WPEDP with the mid-term plan and the fifteen-year perspective plan.

The training manual includes:

Module 1:	An overview of the micro-planning workshop
Module 2:	The context of micro-planning in Oromia Region: micro-planning as governance of the woreda education system in action
Module 3:	Education and development in Ethiopia and Oromia Region: strategic goals, policies and programmes
Module 4:	Key educational indicators: definitions, calculations, and interpretations
Module 5;	UPE: an operational definition
Module 6;	Planning and management control: a brief overview
Module 7:	Outline of the woreda primary education development plan
Module 8:	Planning step 1: developing a mission statement for the WEO and the woreda primary education system
Module 9:	Planning step 2: development of the profile of your woreda
Module 10:	Planning step 3: situation analysis of the woreda primary education system
Module 11:	Planning step 4: target setting for conducting enrolment projection
Module 12:	Planning step 5: conducting enrolment projections
Module 13:	Planning step 6: estimation of key inputs required to meet the enrolment projections
Module 14:	Planning step 7: estimation of the cost of key inputs
Module 15:	Planning step 8: planning Step 8 – distribution of the four key inputs within the woreda primary education system: classrooms, teachers, textbooks, and student furniture
Module 16:	Planning step 9 – development of overall strategies to achieve the goals: access, coverage, equity, quality, organizational capacity, and financing of education
Module 17:	Planning step 10 – programming to achieve the goals and targets
Module 18:	Planning step 11 – estimation of the investment costs for the medium-term plan period 1999-2002 E.C.

Module 19: Planning step 12 – developing a monitoring plan
Module 20: Planning step 13 – implementation of modalities and follow-up actions by the WEO
Module 21: Planning step 14 – finalization of the woreda mission statement
Module 22: Compiling the draft woreda primary education development plan
Module 23: Presentation of the draft woreda primary education development plans in the plenary session.

The structure of the modules was standardized. At the beginning of each module, objectives to be achieved, the processes to be followed, the tools and resources to be used, and the outputs to be produced were identified. As far as possible the modules were designed to be used as a self instructional resource. Detailed guidance was given to the WPTs to accomplish the activities required to produce the outputs and to write the required chapters of the WPEDP.

Module 7 was constructed to support the members of the WPTs to design and draft the content of each chapter of the WPEDP. The outline of the content of each chapter and the plan document was provided in Module 7.

6.6.3 Developing the Training Manual and Other Training Materials

Given the organic nature of the training manual and the integration of the contents of the modules, it was agreed that one person should take the lead in the designing and drafting the details of the contents of the modules.

The first draft of each module was shared among other relevant technical personnel from the PRPD and the SMAPP Project Team. After further review, their suggestions for modifications or needs for including additional contents were incorporated into the modules. This approach assured consistency in philosophical approach and in the processes used for micro-planning while at the same time all necessary content areas were included.

In addition to the training manual, other training materials were also provided. Each WPT was provided with a set of working tables and matrices to enable the team members to set detailed targets, conduct situation analysis, or develop strategies and programmes, etc.

6.7 PREPARATIONS FOR THE MICRO-PLANNING EXERCISE

6.7.1 Preparation of Data and Tools

(1) Preparation of OEB EMIS data

In order to conduct the micro-planning exercise, completion of the analysis of the 1998 E.C. (2005/06) AEC data was an important pre-requisite. Intake, enrolment, and internal efficiency data obtained through the analysis of the 1998 E.C. (2005/06) AEC data formed the baseline data for making the planning projections for the fifteen-year planning period, 1999 E.C. to 2013 E.C. (2006-20). This baseline data for 1998 E.C. (2005/06) was required for every woreda participant in the micro-planning workshop.

As explained earlier in this report, two major events occurred that affected the collection and analysis of the 1998 E.C. AEC data. First, the format for collection of the AEC data for 1998 E.C. was revised by the MoE with the help of the UIS. Along with the revision of the format, the software for entering the AEC data was also changed. Introduction of these changes delayed the data collection process. Without

the provision of trainings for ZEO officers in the new data collection formats, the zones, which were responsible for setting up the annual AEC database, were unable to perform data collection functions within their resources for the 1998 E.C. AEC data.

In response to this, emergency measures were undertaken by the EMIS Team of the PRPD with the support of the SMAPP Project. The EMIS Team recruited and trained approximately ten data entry clerks to transfer data from the new formats to set up the database for micro-planning use, using the new software. Through this emergency measure, the EMIS Team was able to complete the setting up of the database for all the woredas within the project zones and to complete the preliminary analysis of the data, in time for conducting the micro-planning workshop. Without these efforts by the EMIS Team to provide up-to-date baseline data, the quality and the outputs for the micro-planning workshop would have suffered.

(2) School Age Population Projections

School age population projections by single ages covering the entire plan period was a pre-requisite for conducting planning projections and for calculations of appropriate educational indicators.

Changes in the woreda boundaries affected the population size of the woredas. The existing school age population projections for the woredas in the Oromia Region utilized the 1994 G.C census data. With the changes in the woreda boundaries, these population projections become invalid.

Therefore, it was decided that new population projections based on the new woreda boundaries be done. The OEB obtained the base-year total population estimate by gender for 1998 E.C (2005/06) for the new woreda boundaries from the BoFED. Management Informatics Africa PLC, one of the local consulting firms, provided the technical support for the population projections.

Through this collaborative effort, school age population projections for all the woredas were available for the 30-year period from 2001 to 2030.

These new population projections were incorporated into the OEdMap database, the EMIS database, and the micro-planning projection model.

(3) Trend Analysis Data

To assess the past performance of the woreda primary education system, a trend analysis of each woreda's performance on selected indicators was a necessity. This trend analysis formed part of the situation analysis. The indicators of the trend analysis included, AIR, NIR, GER, NER, dropout rate by grade, and repetition rate by grade.

Where the availability of data permitted, the trend analysis was conducted for a five-year period. The analysis was also disaggregated by gender so that the trend in gender disparity could be assessed by woredas on these key performance indicators for setting up targets to eliminate the gender disparity in the future.

(4) Quality of Educational Inputs Data

Wherever possible, current data were provided on the status of the four key educational inputs that were student-teacher, student-section, student-textbook, and student-furniture ratios. In addition, the WPTs were requested to bring the latest data on these indicators, if available.

(5) Unit Cost Data

Unit cost data were necessary for estimating the volume of investments required for

the planning period. The following unit costs were estimated and supplied to the WPTs:

- Unit cost of classroom construction using standard design
- Unit cost of classroom construction using low cost construction design
- Average annual teacher salary for first cycle
- Average annual teacher salary for second cycle
- Unit cost of administrative salary
- Unit cost of recurrent expenditure per student for the first and second cycles
- Unit costs of student furniture for first and second cycles
- Unit costs a set of textbooks for first and second cycles
- Unit cost of items of capital goods

(6) OEdMap Database

Using the OEdMap, several thematic maps and data matrices were produced and distributed to every woreda to perform a planning exercise to distribute classrooms based on the OEB's policy guidelines. Examples of maps and matrices developed and distributed included: i) a school coverage map; ii) a school information map; and iii) a woreda school information matrix. Data contained in these maps and matrix was described in Chapter 5 (see 5.3.9 Preparation of Maps and Tables for Micro-planning Workshop).

(7) Education Planning Projection Model

Education Planning Projection Model was a computerized application software which was capable of: i) conducting situation analysis of the performance of the woreda primary education system; ii) setting targets for projecting future enrolment; iii) conducting enrolment projections; iv) estimating the demand for four key inputs that are classrooms, teachers, textbooks, and student furniture; v) estimating the cost of these inputs and other costs such as administrative costs and student recurrent costs.

The computerized planning projection model was designed taking into consideration the needs of the decentralized nature of the micro-planning exercise, the participatory consultative process required for the exercise and the variability in the levels of development in the woreda education system, etc.

A total of 35 reports were generated for each woreda by the projection model to be integrated into the WPEDP document.

(8) Preparatory SMAPP Training Workshops

The SMAPP Project conducted three training workshops during the course of the implementation of the Project. Through these workshops, several concepts and tools for micro-planning were tested prior to their final development and use. The three-day long third workshop conducted in May-June 2006 was especially important in contributing to the design of the final micro-planning workshop.

(9) Training of Facilitators

A micro-planning workshop such as this, demanded: i) a participatory process, requiring team approach, involving extensive analysis, interpretation, and application of data; and ii) the use of technical systems such as a planning projection model, from the participants outputs at the end of every presentation, etc. This kind of training could not be implemented through an instructor who was just standing in front of the participants giving lectures. The instructors needed to know how to use a variety of instructional modes.

It was considered necessary to provide technical and organizational support to the WPTs in the conduct of the micro-planning exercise. The ZEO officers played important roles and functions in this regard.

During the 3rd SMAPP Training Workshop, the use of ZEO officers from the pilot zones as facilitators was begun but implemented in a minimal way. This experience was found to be very meaningful for conducting micro-planning training exercises. Their involvement and active participation in the provision of technical and organizational support was recognized to be useful and effective in order to; i) enhance the quality of the outputs by the woredas during the workshop; ii) enhance their capability to formulate and monitor WPEDP, iii) strengthen the planning and policy link between the OEB and the woredas; and iv) clarify professional roles and functions of the zone planning officers in supporting the woredas during the implementation process and in monitoring the performance of the plans.

Based on the above findings on positive roles and functions of the ZEO officers, Task Force members and the SMAPP Project Team agreed, through consultative discussions, that roles and functions of the ZEO officers as facilitators should be expanded in the following ways to: i) involve additional ZEO officers from non-pilot zones in micro-planning exercises in order to build up planning capacity in the Oromia Region; ii) include roles to provide the woredas with technical support in the analysis of information, during the planning exercise, including the setting of targets and conducting planning projections using the computerized planning projection model; iii) manage the time frame of the workshop; and iv) control the quality of the plan documents produced by every woreda at the end of the workshop.

With these functions in mind, a three-day ToT training workshop was organized for the zone planning officers to acquire the necessary training skills as facilitators. All zone planning officers were invited to attend. Planning officers from 17 zones attended.

During the ToT workshop, the zone planning officers were given a detailed overview of the content of the training manual, experience in the participatory nature of the planning process, training in the use of a computerized planning projection model, etc. In addition, through discussions with the OEB planning experts and the SMAPP Project members, the zone planning officers developed detailed functions and responsibilities for the facilitators during the micro-planning workshop.

6.8 IMPLEMENTATION OF THE MICRO-PLANNING EXERCISE

6.8.1 Activities

The 4th SMAPP Training Workshop was implemented during October-November 2006. The 117 woredas of the seven project zones participated in four batches. Each micro-planning workshop was six day long. After the end of the micro-planning workshop, the participants were given a one-day training in the use of GPS machines. There was a six-day gap between each session of the workshop. The activities for each day of the exercise are shown in Table 6-1 and the training programme schedule is shown in Appendix-9.

Table 6-1: Micro-planning Exercise Programme Activities

Day	Main activities	Daily outputs
Day 1	Module 1-5	Chapter 2
Day 2	Module 6-10	Chapter 1, 3-4
Day 3	Module 11-14	Chapter 5-8
Day 4	Module 15	Chapter 5-8, 9
Day 5	Module 16-19	Chapter 10-12
Day 6	Module 30-23	Chapter 13

(Source: prepared by the SMAPP Project Team)

The venue for the workshop was the auditorium of the Adama Teachers College. It provided ample space for accommodating approximately 150 participants in each workshop. In addition, the Teachers College provided the services of its computer room and typists to input the woreda plan documents produced by the WPTs.

All 117 woredas in the seven project zones participated in the workshop. A total of 600 participants represented these woredas.

A team of two facilitators supported approximately three WPTs during the workshop in various functions described in the section above.

Each woreda was provided with a computer projection model supported by its own baseline and other database. A total of six computers were available for each workshop. On the average, five woredas were assigned to a computer to conduct enrolment projections, estimation of the volume of the four key inputs based on the region's policy guidelines, and for preparing the mid-term plan and for projecting the investment costs for the long-term perspective plan period.

6.8.2 Outputs Produced during the Workshop

The outputs produced by the WPTs corresponded to the objectives of the workshop. The three major objectives were stated clearly in Module 1: an overview of the workshop. The three objectives included the:

- Development of a perspective plan for the woreda primary education development with the strategic goal of achieving the UPE.
- Development of a more detailed medium-term plan for the woreda primary education system
- Identification of the key features of the decentralized governance of the woreda primary education system and to strengthen these features.

(1) Output 1: Fifteen-Year Perspective Plan to Achieve the Strategic Goal of Universal Primary Education

Every WPT was expected to produce a WPEDP and indeed each one produced it. All woredas followed the micro-planning training manual for developing the WPEDP. According to the manual, WPEDP in Afan Oromo (Oromo language) is to contain 14 chapters, a preface, and an executive summary. Within each chapter, the woredas had more freedom to shape the content to fit the present level of development of the woreda education system, the speed with which the woreda education system should move forward in the future with regard to key targets to achieve UPE, the volume of resources required to meet the policy guidelines of the OEB and the woreda administration, and the volume of resources required.

Detailed contents of the WPEDP in Afan Oromo (Oromo language) provide:

Chapter 1 a woreda education system's vision and mission with regard to the future development of the education system.

Chapter 2 analyses of the current development context of the woreda. Here the woredas primarily examine the larger development goals of Ethiopia and the Oromia Region and the goals of the woreda are linked to these goals at higher levels. One of the important topics considered by most woredas in this chapter is the impact of the decentralization of governance on woreda development.

Chapter 3 a profile of the woreda on key features such as socio-economic conditions, health status, infrastructure, etc. that may have significant influence on the development of the education system.

Chapter 4 an analyses of the present situation as far as the development of the woreda education system is concerned on 13 dimensions. These dimensions are stated below:

- School age population and potential demand for education
- Access to primary education
- Coverage of primary education
- Internal efficiency
- ABE programmes
- Equity: gender and geographical
- Teachers
- Textbooks
- Education infrastructure
- Community support and participation
- Role of NGOs and other key stakeholders
- Educational finance
- Organizational structure and capacity of the WEO

Chapter 5 details of the goals and targets for each woreda for the 15-year perspective plan period. Annual targets are set for the 15-year period for four key indicators: AIR, NIR, reductions in dropout rate for each grade, and reductions in repetition rate for each grade. The targets are set based on the ideal levels of annual achievement for each of these indicators to achieve the UPE.

Chapter 6 a description, supported by appropriate projection tables, key features of the enrolment by gender for each grade, of each cycle, and the whole primary school system for every year of the 15-year plan period. This enrolment projection forms the basis for estimating the demand for key inputs, costs, etc.

Chapter 7 an estimate of the volume of four key inputs required every year during the 15-year plan period to meet increases in enrolment. The four key inputs considered are: classrooms, teachers, textbooks, and student furniture. These estimations also take into consideration increases in demand for these inputs due to improvements in quality such as reductions in student teacher ratio and student section ratio.

Chapter 8 an estimate of the annual costs for providing the four key inputs described above during the plan period. A summary table describing the total annual cost for these inputs and the total cost for the entire plan period is also included.

(2) Output 2: Four-year Medium-Term Plan for the Woreda Primary Education System

The medium-term plan does not form a separate document. It is part of the WPEDP

document. Chapters 9, 10, 11, 12, 13, and 14 of WPEDP treat in detail the immediate needs for implementing the perspective plan up to the first four-years of the perspective plan. The detailed elements of the plan include the following:

Chapter 9 describes a detailed strategy for distributing the classrooms, teachers, textbooks, and students furniture for which annual demands were estimated in chapter 7.

Chapter 10 considers overall strategies to achieve major goals and develops detailed programming to achieve various objectives and targets: Some of these goals and targets include:
- Increasing access
- Reducing inequity
- Improving quality
- Improving internal efficiency
- Strengthening organizational capacity of the woreda education system
- Identification and generation of adequate resources

Chapter 11 elaborates the cost of implementing the medium-term plan for four years. In addition to the costs of the four inputs described in Chapter 8, the cost of the medium-term plan considers additional cost elements such as the administrative salary costs, student recurrent costs, and cost of capital goods, such as cyclostyling machines etc, for the woreda offices and schools. A four-year time frame was followed by most woredas in estimating these costs.

Chapter 12 describes a plan for monitoring the performance for implementing the medium-term plan.

Chapter 13 provides details of the modalities that the WEO and the woreda council should develop and implement to assure adequate support for the timely implementation of the plan. One of the key elements considered in this chapter is the strategies for strengthening the support of the stakeholders for the development of the woreda primary education system.

Chapter 14 provides concluding observations about the overall plan, its development and prospects for implementation.

(3) Output 3: Identification of the Key Features

This is a process reflecting expected outputs, but no tangible documents were expected to be produced by the WPTs. The characteristics of decentralization and their implications for planning decision making were treated as a practical exercise throughout the micro-planning exercise. The awareness created among the participants of the decentralized style of planning and governance should be visible in the quality of the plan document. This awareness and experience should have, also, some impacts on the governance and management behaviour of the participants once they return to their respective woredas.

6.9 RAPID ASSESSMENT OF THE WOREDA PRIMARY EDUCATION DEVELOPMENT PLAN

It was expected that the quality of the structure, content and presentation of the WPEDP document might vary considerably from woreda to woreda. Not all WPTs brought the same level of experience and expertise in planning, as well, influencing the appearance and character of the final product.

Some of the woredas were created only recently and many of them were not fully staffed at the time of the micro-planning exercise. Even in woredas that existed for a

long time, there were considerable turnovers in officers. Using a rough estimate, only little more than 50% of the participants in the 4th Training Workshop had attended previous workshops conducted by the SMAPP Project. For these and other reasons it would be unrealistic to expect the plan document produced by the WPTs to be of uniform quality.

While the technical quality of the plan and details of the information varied in each plan the planning documents should play a significant role in the quality of the implementation of the plan. One immediate additional concern regarding finished woreda plans was their saleability in a planned marketing fair to be held after the workshops.

For these reasons, an immediate rapid assessment of the WPEDPs was instituted. The ZEO officers were assigned the responsibility for reviewing the WPEDPs during the six-day gap between each batch; the results of these assessments are provided in Chapter 10.

The facilitators used a list of criteria specifically developed for this purpose along with the details in Module 7, providing the content of the WPEDP. Based on this review, technical comments were developed for each WPEDP. These technical comments were shared with the WPTs after their return to the woredas. Wherever necessary, direct follow-up with the WPTs were held and necessary modifications were made to the WPEDP based on the technical comments of the rapid assessment.

6.10 SUMMARY ENGLISH TRANSLATION OF WPEDPS

The WPEDPs prepared during the micro-planning workshop had multiple purposes and tasks to fulfil prior to and during the implementation of the plan. First, the WPEDPs had to be presented to the woreda cabinets for approval. After their approval, these documents became official plans for implementation by the WEOs with annual adjustments. It was expected that the allocation of annual budgets to the woredas by MoFED would also be influenced by the investment scenario projected in the WPEDPs.

In addition to the above, the WEOs were expected to use the WPEDPs to generate sufficient financial and technical support for the implementation of the plans among the international donor communities, NGOs and other stakeholders.

The WPTs, during the workshop, drafted the WPEDPs in Afan Oromo (Oromo language). Although this should be adequate for all the official purposes and to communicate the details of the plan to all the key stakeholders within the respective woredas and the in the region, the language limits access to and recognition of the details of the plans to members of the international NGOs and donor community and to other relevant groups within Ethiopia. One of the important activities planned by the OEB and the SMAPP Project was to generate adequate financial and technical support for the implementation of the WPEDPs through the holding of a Marketing Fair. Woredas were expected to present the relevant details of their plans to both national and international organizations to generate the necessary interest in and support for the WPEDPs during this proposed Marketing Fair.

To meet these needs, the SMAPP Project, with the support of the members of the PRPD, made summary translations of all the WPEDPs into English. Copies of these translations were made available to the OEB, ZEOs, and to the WEOs.

6.11 GENERAL OBSERVATIONS OF MICRO-PLANNING EXERCISE IN OPERATION

The following observations concerning the strengths and weaknesses of the micro-planning exercise came from various sources. Personal observations of the participants and their actions during the micro-planning exercise were one of the sources for the conclusions reached below. Informal discussions with the WPTs during the workshops provided valuable insight into the needs and expectations of the WPTs from the micro-planning exercise. As the workshops progressed, many expected and unexpected gap areas in data and analytical needs were, also, identified.

6.11.1 Commitment and Participation

On the whole, members of the WPTs exhibited great commitment to the cause of providing education to the children in each woreda. They exhibited high levels of participation in the analyses of the woreda situations, in the finding of solutions to the educational problems facing the woredas, in the development of strategies to overcome those problems through the implementation of improvement programmes, using practical implementation modalities. These observations augur well for the future of decentralization and the development of the woreda primary education system.

6.11.2 Absence of Sufficiently High Level Leadership in Some WPTs

Planning as one of the central acts (if not the central act) of governance requires guidance from strong leadership in setting acceptable targets, estimating the volume of key inputs, developing of key strategies, estimating the level of resources required and identifying the resources that were likely to be available.

Unless the top decision makers were present during the planning exercise to lead the planning process in the training exercise, the plans would lack credibility and direction for implementation. They were needed to convey the details that went into the development of the plans and for the conversion of these details into decisions required, resulting in an additional effort and time allocation on the part of the members of the WPTs. Several WPTs were not lead by the top leadership in the WEOs which may have caused some constraints in making appropriate decisions during the micro-planning exercise.

6.11.3 The Length of the Micro-planning Workshop

The WPTs had to produce a draft WPEDP at the end of the six-day period. There had to be a transfer of the techniques of planning, utilizing a decentralized participatory process and by generating detailed strategies and programmes for solving complex problems facing the woreda education system. They had to draft a comprehensive planning document and completed many more tasks in order to finish the plans within a six-day timeframe.

For lack of time, often the members of the WPTs had to rush through some of the important and complex tasks; thus diminishing the quality of the outputs. Design of future micro-planning exercises should take this factor into consideration to come up with alternative strategies and processes to accomplish all the tasks, allowing for careful deliberation and an achievement of quality in the plans without adding much to the cost for conducting the micro-planning exercise.

6.11.4 Need for Adequate Financial Data

The woreda education system performance data for enrolment, dropout, quality of inputs, etc. provided by the EMIS Team was up-to-date and adequate for the immediate use by woredas during the micro-planning exercise. However, one area of the woreda based information that needed to be improved is the financial and budgetary information. The ongoing decentralization process and the pattern of the financial information flow, to some extent, affected the availability of this information.

Good historical information about the financing of education at the woreda level was a necessity to plan financial scenarios for the future. Some attempts were made during the micro-planning exercise to encourage the woredas themselves to collect and maintain budgetary information in the future rather than to depend entirely on other governmental sources. During the micro-planning exercise, model formats for recording budgetary information were provided to the woredas. Woredas should be encouraged to maintain these formats in the future for use by woredas for their planning and budgeting purposes.

6.11 5 Continuity of Personnel

On average, only about 50% of the participants had attended the previous preparatory workshop (3rd Training Workshop) conducted by the SMAPP Project. This percentage might have come down further if we considered in the calculation all of those who participated in the second and first training workshops. This meant that some of the planning and analytical techniques that were covered during the previous workshops had to be re-introduced for the benefit of the new comers. Continuity of attendance of the personnel in the micro-planning workshops would certainly improve the efficient utilization of time by the WPTs.

6.11.6 Development of a Core Group of Planning Professionals at the Zone Level

One of the unplanned, positive outcomes of the micro-planning workshop and the preparations that went into its development was the emergence of a strong core of planning professionals at the zone level. Through the ToT and the practical experience as facilitators, the zone planning officers acquired very critical technical, analytical, organizational, planning process and policy development knowledge and skills for promoting educational development.

This exercise also brought the woreda officers into closer professional contact with the zone planning officers and helped to forge a new professional relationship between the woreda professionals and the zone planning professionals. This professional relationship needs to continue beyond the micro-planning workshop throughout the annual planning and plan implementation cycles.

The OEB should reassess and expand the functions and responsibilities of the zone planning officers in their support of the woredas to develop and implement plans in the future based on the experience gained through these micro-planning workshops.

6.11.7 Output Oriented

Throughout the six-day workshop, the WPTs were given clear time bound outputs to be produced at the end of each module or session. This was one of the major strengths of the micro-planning workshops in the SMAPP Project. Production of outputs on a regular basis developed a sense of tangible accomplishment among the participants.

CHAPTER 7: WOREDA PRIMARY EDUCATION DEVELOPMENT PLAN

7.1 INTRODUCTION

This Chapter describes, in detail, the structure and content of the WPEDP that was the ultimate result of the micro-planning exercises. While there were variations within each woreda plan with regard to the details of the assessment of the present performance of the education system, the speed with which the woreda education system intended to develop in the future, strategies for achieving the overall goals of the UPE in the woreda, details of the programmes to be implemented in the woreda to achieve the goals, etc., had a consistency in the sequence of planning steps.

In order to provide a comprehensive picture of the structure of the WPEDPs, this Chapter presents a brief summary of the logical steps followed in the development of the WPEDPs. Brief descriptions of the planning tools are also presented in this Chapter.

7.2 STEPS IN THE DEVELOPMENT OF WPEDP

A WPEDP contained 12 chapters. The sequence of these 12 chapters followed the logical sequence of the outputs required for the development of the WPEDP. The sequence of the chapters was as follows:

Chapter 1:	Vision and Mission of the Woreda Primary Education System
Chapter 2:	Development Context of the Woreda
Chapter 3:	A Brief Overview of the Woreda
Chapter 4:	Situation Analysis of the Woreda Primary Education System
Chapter 5:	Goals and Targets for the Fifteen-Year Perspective Plan
Chapter 6:	Enrolment Projections
Chapter 7:	Estimation of the Demand for Four Key Inputs
Chapter 8:	Distribution Strategy for Schools and Classrooms for the Medium-Term Plan
Chapter 9:	Overall Strategies and Programmes for Achieving the Goals and Targets
Chapter 10:	Cost of Implementing the Plan
Chapter 11:	Monitoring Plan
Chapter 12:	Implementation Modalities

The sequence of the chapters was constructed in such a way that the outputs from one chapter laid the foundation for performing the work in the next chapter and to accomplish the results required in subsequent chapters.

7.3 TOOLS USED BY THE WPT FOR THE DEVELOPMENT OF THE WPEDP

Two major tools were used by the WPTs to develop the WPEDPs.

One planning tool was the education planning projection model. This model enabled the WPTs to input the targets and various policy assumptions, to project the enrolment, estimate the volume of demand for four key inputs, and calculate the cost of these inputs.

The second tool was the woreda school location maps produced through the OEdMap

supported by SMAPP. The EMIS data, collected through the AEC, provided the basic data for the operation of both of these two tools. These two tools are described in detail in Chapters 5 and 7 in this report.

In addition, various analytical tools were provided for producing the intended outputs within each chapter of the WPEDP. For example, for conducting a situation analysis, GAP analysis techniques and tools were provided in the training manual. These tools are described in the micro-planning training manual in adequate detail.

7.4 CONTENT AND OUTPUTS OF WPEDP

In preparation for the development of the WPEDP with the strategic objective of achieving UPE, the members of the WPTs jointly reviewed the Ethiopian national development goals, the MDGs, operational definition of the UPE for Ethiopia and the Oromia Region and the major elements of the poverty reduction strategy for Ethiopia. The purpose was to make the WEO officers aware of these goals and to link them to the WPEDPs.

7.4.1 Chapter 1: Vision and Mission

The first Chapter of the WPEDP starts with a serious examination of the vision and mission for the woreda primary education system by the members of the WPTs. This emanated from the strong belief that a vision of the future and a mission needed to be seen and understood were important: i) to guide development actions by the members of the woreda management; and ii) to strengthen the partnership with the community and other key stakeholders around a common understanding and determination to meet a common set of the education goals. Through the vision and mission statements, the woreda education system conveyed to the stakeholders the unique purpose for which it existed.

In order to develop the vision and mission statement, the WPTs examined the qualities of a good mission statement; its purposes and how to express societal education related goals and purposes to be taught and learnt in the schools and understood by the readers of the WPEDPs. Two matrices were provided to help the WPTs to develop the vision and mission statement. Based on various national and local policy document analyses, experience and group discussions, the WPTs developed a first draft of a vision and mission statement. The draft statements were refined and finalized towards the end of the 4th SMAPP Training Workshop to incorporate any additional thoughts that might have emerged during the development of the plan.

Box 7.1 below provides a sample of Vision and Mission Statements developed by the members of the Adama WPT.

Box 7. 1
Adama Woreda: Vision and Mission Statement

1. Vision

To see that all citizens in Adama woreda are provided with good quality primary education, to promote use of science and technology in the modern society to bring sustainable and fast development, and to promote participation in social and political issues to insure good governance.

2. Missions

- *Providing primary education to school aged children in line with the ETP and Strategic Plan developed by OEB*
- *Expanding and constructing primary schools*
- *Strengthening School income generation scheme*
- *Mobilizing community, Non-Governmental Organizations, Private sectors and other stakeholders in order to involved in supporting the provision of primary education and Adult Education.*
- *Promoting the prevention of HIV/AIDS among students and school communities*
- *Promoting democracy and good governance.*

3. Values

- *Adama Woreda education office staff will work for the provision of good quality education with responsibility*
- *Creating partnership with different stakeholders who are working on education*
- *Creating transparency in order to eradicate corruption*
- *Promote wise usage of scarce resources*

(Source: Adama Woreda WPEDP 2006/07)

7.4.2 Chapter 2: Development Context of the Woreda

As described at the beginning of section 7.4, the WPTs analyzed the present woreda development context based on background materials including decentralization, MDGs, the ESDP, the Oromia Region education policies, and the goals of the UPE. The purpose was to link the woreda development goals with those of the national and regional development goals and to identify any specific or unusual woreda situations that required special attention during the development of the WPEDP.

The Box 8.2 below presents excerpts from the Adami Tullu Jido Kombolcha WPEDP.

Box 7. 2
Development context of Adami Tullu Jido Kombolcha Woreda

The major development goal of Adami Tullu Jido Kombolcha woreda is to improve life of its population who face complex problems that causes poverty. Some of these problems that contribute to poverty are: lack of access to quality education, various communicable diseases including HIV/AIDS, low level of knowledge and skill in using available technology to improve productivity of agricultural, shortage of infrastructure such as road and absence of any industrial establishments. Expanding quality education, particularly primary education is considered as the basic solution to most of these problems. The decentralization of governance is a key strategy to realize these development goals.

As mentioned above, education has vital role to realize multi sector development agenda. As a result it is assumed that quick expansion of quality primary education to reach the goal of UPE will enable the woreda to improve natural resource management, family planning, agricultural productivity, work culture etc.

(Source: Adami Tullu Jido Kombolcha Woreda WPEDP 2006/07)

7.4.3 Chapter 3: Profile of the Woreda

The education system of a woreda does not exist in a vacuum. It is shaped by the geography and topography of the woreda that determines access to schools and its economy and those things that may influence the shape of the education system, the nature of health conditions, such as the prevalence of malaria or HIV/AIDS, population characteristics, etc. The WPTs were encouraged to develop a profile of the woreda identifying the key characteristics that could influence the performance of the woreda education system.

To help the WPTs, twelve woreda characteristics were identified. The WPTs had the freedom to add additional elements as they felt necessary. The twelve characteristics of the woreda identified for the development of the woreda profile included: i) geography and topography; ii) the history of the woreda; iii) climatic conditions; iv) population characteristics; v) languages spoken; vi) governance of the woreda; vii) the economy of the woreda; viii) health conditions; ix) social conditions, societal commitments and traditions affecting the education system; x) infrastructure; xi) social services; and xii) community and civil service organizations.

Below is a sample of a woreda profile developed by the WPTs, excerpted from Asela Town WPEDP presented in Box 7.3.

Box 7. 3

Brief Overview of Asela Town Administration

Location and Climate: *Asela town is located in Arsi Zone of Oromia National Region State. It is located at 175km away from the capital of Ethiopia, Addis Ababa. Asela town is the capital for Arsi Zone. The town is bordered (encircled) by Tiyo woreda in all direction. The climatic condition of Asela town consists of entirely highland. Due to its location on the western side (foot) of Chilalo Mountain, it has very cold climate.*

Population Characteristics: *In according to the data of 1998 E.C., the total population of Asela town is estimated at 80,000. The major ethnic tribes in the area are Oromo, Amhara, Guraghe, Tigrie and others.*

Major Economic Activities: A large portion of the population depends on small scale business. A few others involved in large scale businesses. Though the industry is not well developed, services such as banking, retailing, small and medium scale construction activities are additional source of income. The presence of these diversified economic activities resulted in the creation of employment opportunities for youths.

Languages: *Afan Oromo (Oromo language) serves as the medium of instruction and official working language in the town. Majority of Asela town residents use Afan Oromo as medium of communication.*

Health Condition: *The town has health facilities, such as one hospital, one health station, one higher clinic run by government and one privately owned hospital. Water borne and communicable diseases contribute to the dropout of students. As it is common in other areas, HIV and AIDS prevalence in the town is relatively high among other factors due to the presence of the high mobility of the population from outside the town. These all have their own negative impact on Asela town's effort to achieve UPE.*

Social conditions, commitment, affecting the education system: *High number of orphans and vulnerable children, high unemployment, lack of sufficient school facilities, overcrowded classrooms, low-income of families, poverty and poor health status of the communities are major factors affecting the education system.*

Availability of necessary infrastructure: *Asela town has got adequate supply of electricity, clean and safe water supply, and roads connecting kebeles, post office transportation and telecommunication.*

Social services: *With regard to the availability of education facilities, 12 primary schools have been established in 7 kebeles to offer quality education. Only very few kebeles get access to health services.*

(Source: Asela Town WPEDP, 2006/07)

7.4.4 Chapter 4; Situation Analysis

After the development of the profile of the woreda, the WPTs devoted their attention to a comprehensive situation analysis of past and present performance of the woreda's primary education system, using key educational indicators, such as access, coverage, internal efficiency etc. The following dimensions of the woreda education system were included in the situation analysis: i) school age population and potential demand for education; ii) access to primary education; iii) coverage of primary education; iv) internal efficiency; v) equity; vi) quality of teachers, textbooks and education infrastructure; vii) ABE; viii) community support and its participation ix) role of NGOs and other key stakeholders; x) educational finance; and xi) organizational structure and development capacity of the WEO.

The major purposes of the situation analysis were as follows to:

1) Compare the woreda performance on key educational indicators with that of the performance of the Oromia region education system and that of the UPE targets set.
2) Set targets for future development of the woreda primary education system based on the current status of the woreda education system.
3) Identify the bottlenecks affecting the development of the education system

The results of the situation analysis were of immediate importance to the WPTs in order to set annual targets for the apparent intake, net intake, and reductions in dropout and repetition rates for the fifteen-year perspective plan period.

Table 8-1 provides some examples of the conclusion drawn by the WPTs through the situation analysis of the woreda education system.

Table 7-1: Situation Analysis Summary Matrix

No.	Analysis Category	Finding	Remarks
1	Apparent intake rate in 1998 E.C.	81.6%	AIR is very low compared to the region target for achieving UPE
2	Net intake rate in 1998 E.C.	72.9%	Close to the needs of achieving UPE
3	GER 1-8 in 1998 E.C.	79.9%	Very low compared to the needs of UPE
4	Dropout rate	Drop out rate in Grade 1 is very high at 17.5%. In the second cycle dropout rate is highest for Grade 5 at 11.9%.	Reductions in dropout rates are required, especially in Grade 1 to achieve the goals of UPE
5	Repetition rate	Relatively low in the first cycle grades. In the second cycle repetition rate is high in Grade 7 with girls repeating at a higher rate than boys.	
6	Gender equity in apparent intake rate	18% in favour of boys.	Gender disparity in AIR needs to be reduced drastically as soon as possible to achieve the goals of UPE
7	Student teacher ratio in 1998 E.C.	40:1 in the first cycle and 65:1 in the second cycle	Much higher than the region policy.
8	Student-section ratio in 1998 E.C.	55: 1 for the first cycle and 60:1 for the second cycle	Reduction is required during the plan period to reach the region policy guidelines target of 50:1
9	Community support for education	Community support is confined to maintenance of schools and construction of classrooms	More support and awareness is required.
10	NGO support for education	No NGO support. Nut, the involvement of private sectors is appreciable	
11	Capacity of the Asela town education system	All professional positions are filled. However, essential posts are not available in the structure. Not sufficient office space. No transportation.	Capacity of Asela town education office needs to be strengthened to achieve the goals of the 15-year perspective plan.

(Source: Asela Town Woreda WPEDP, 2006/07)

7.4.5 Chapter 5: Goals and Targets for the Fifteen-Year Perspective Plan Period

The results of the situation analysis provided the necessary information to the WPTs to set targets for conducting enrolment projections. Comparison of the performance of the woreda primary education system with that of the UPE targets and the performance of region education system, provided clear indications to the WPTs as tot the pace at which a given woreda should move forward in the future to achieve the UPE by year 2015 or soon thereafter.

While setting targets for the future, the WPTs considered not only the quantitative aspects of future targets for key indicators, but also the woreda organizational capacity, the commitment of the community and parents to the primary education system, the

availability of resources etc., in setting the targets.

Box 8.4 provides an illustration of the summary of targets set by Batu Woreda in its perspective plan for the fifteen-year period.

Box 7.4
Targets for the 15-year Perspective Plan

The strategic goal of this perspective plan for Batu Towns to achieve UPE with equity and quality. To achieve this important goal for national, region and woreda development goals choosing the "right" means of attaining those goals are is an important aspect of this plan. Setting goals are important for at least four reasons. It provides a sense of direction, focus our effort, guide our plans and decisions, and help us to evaluate our progress. In this WPEDP annual targets are set for the following indicators which will enable to direct implementation of long-term and medium-term plans.

- *Annual targets for apparent intake rate to achieve UPE by 2010 or soon thereafter. .*
- *Increase Net Intake rate to enrol as many of the school entry age children as possible to reduce the over aged children entering school in the future.*
- *To achieve, gender and geographical equity.*
- *Increase internal efficiency by reducing dropout and repetition rate.*

The following are major targets set by Batu Town WPEDP:

Apparent intake rate (AIR): *Table 1 in Annex presents annual targets for apparent intake rate for the woreda during the 15-year plan period. Apparent intake rate will increase from 110.41% in the base year 1998 E.C. to a high of 172.4% in 2001 E.C. Thereafter, AIR will gradually decline to reach III % by 2013 E.C. The gender gap will be closed in AIR by the year 2000 E.C., when AIR for both boys and girls will reach 120 %.*

Net intake rate (NIR): *Table 2 in Annex presents details of the annual targets for NIR. The current net intake rate for the woreda is low at 46.98%. This indicates that there are likely to be a very large number of over age children out school in woreda. One of the strategies the woreda wants to implement to achieve rapid reduction in over aged out of school children is to increase very rapidly the NIR to bring as many of the 7 year old children as possible to Grade I. The woredas target is to reach 91.4% NIR by 2004 E.C. Thereafter, the NIR will increase at slightly slower rate to reach 100% by 2013. Gender parity in IR will be reached by year 2006.*

Dropout rate: *Tables 3 and 4 in Annex Presents targets for repetition rates. In the coming fifteen years of the plan period primary first cycle drop out rate will decrease, on the average at an annual compounded rate of 10% per annum in the first cycle grades. However, given the very high dropout rate of 25% in Grade l, Grade 1 dropout rate will be reduced at an annual compounded rate of 20% per annum. In the second cycle grades, average annual reduction in dropout rate will be approximately 5%.*

Using these targets, it is expected that by year 2006 E.C. the dropout rate for all grades will brought down below 5%. This is the target set by the OEB for achieving UPE.

Repetition rate: *Reduction of repetition rate on annual basis by grade and gender enables the woreda to reach UPE target. Because of automatic promotion, the repetition rates in the first cycle primary are close to zero. Repetition rates are higher in second cycle with Grade 7 repetition rate highest at 7%. An annual average reduction of 5% is envisaged for the second cycle repetition rates for the second cycle.*

(Source: Batu Woreda WPEDP, 2006/07)

As annex part of Appendix-9 shows projections, that set targets separately for male and female students to assure that the gender disparity if any, that existed in the education system in enrolment could be corrected over the span of the plan to bring about gender equity within the woreda's education system.

Table 7-2: Apparent Intake Projections: Dawo Woreda

YEAR	Projected Apparent Intake Rate			Projected Apparent Intake		
	Male	Female	Total	Male	Female	Total
1998	123.20	114.49	118.88	1605	1470	3075
1999	125.00	120.00	122.52	1627	1538	3165
2000	130.00	125.00	127.52	1691	1599	3290
2001	135.00	130.00	132.52	1754	1660	3414
2002	140.00	135.00	137.52	1817	1720	3537
2003	140.00	137.00	138.51	1815	1742	3557
2004	145.00	140.00	142.53	1912	1809	3721
2005	140.00	135.00	137.53	1878	1774	3651
2006	135.00	132.00	133.52	1841	1763	3604
2007	130.00	130.00	130.00	1803	1765	3568
2008	125.00	125.00	125.00	1763	1725	3488
2009	120.00	120.00	120.00	1712	1674	3386
2010	115.00	115.00	115.00	1659	1622	3281
2011	113.00	113.00	113.00	1649	1611	3259
2012	112.00	112.00	112.00	1652	1614	3266
2013	110.00	110.00	110.00	1641	1602	3243

(Source: Dawo Woreda WPEDP, 2006/07)

7.4.6 Chapter 6: Enrolment Projections

The purpose of setting targets for the four indictors mentioned in the previous chapter was to project the annual student enrolment by gender and grade for the fifteen-year period, so that the WEO could estimate the size of the education system's student enrolment. The gross enrolment would drive the determination of the number of classrooms to be constructed, the number of teachers to be employed, number textbooks to be purchased, and the volume of student furniture to be required.

WPTs used the grade cohort method to project the enrolment. A computerized projection model was employed by the WPTs to project the future enrolment.

Box 7.5 Enrolment Projections

In Chapter 5 we set targets for three key indicators: apparent intake rate, and reductions in dropout and repetition rates. These targets are used to conduct enrolment projection by grade and gender using computerized flow model. In addition because of the importance of the net intake rate in our strategy for achieving UPE, projections of net intake are also undertaken.

Grade one apparent intake: *(Table 1) Total Apparent Intake was 6,697 (boys 3,365 and girls 3,332) in the base year 1998. This will increase to 8,481 (boys 4,342 and girls 4,139) at the end of fifteen years plan period in 2013 E.C. The apparent intake will reach its highest level of 10,464 (boys 5,345 and girls 5,119) in year 2003 E.C.*

Grade one net intake: *(Table 2) which was 2,151 (boys 967 and girls 1184) in the base year 1998 will increase to 7,068 (boys 3,618 and girls 3,449) at the end of fifteen years plan period 2013 E.C. This will be equal to an NIR of 100 % in 2013 E.C.*

Gross enrolment projection:

First Cycle (Tables 5 and 6 in Annex 1)

- *Total GE for the first cycle will increase from 24,097 in 1998 to 35,042 at the end of the 15 year plan period. The highest GE will be reached in year 2006 E.C. This will come to a total enrolment of 39,661 of which 20,914 will be boys and 18,747 will be girls.*
- *Achievement of above gross enrolments will result in a total gross enrolment rate of 126% % in year 2013.*

Second Cycle (Tables 4 and 5)

- *Total GE for the second cycle will increase from 9,855 in 1998 to 34,842 at the end of the 15 year plan period. The highest GE will be reached in year 2010. This will come to a total enrolment of 36,039 of which 19,092 will be boys and 16,947 will be girls.*
- *Achievement of above gross enrolments will result in a total gross enrolment rate of 132% in year 2013.*

Whole Primary

- *Total GE for complete primary e will increase from 33,952 in 1998 to 69,884 at the end of the 15 year plan period. The highest GE will be reached in year 2009. This will come to a total enrolment of 73,433 of which 38,646 will be boys and 1,634,787 will be girls.*

Achievement of above gross enrolments will result in a total gross enrolment rate of 129% in year 2013.

(Source: Adama Woreda WPEDP 2006/07)

Box 7.5 above presents a summary description of the enrolment projections presented in Adama Woreda WPEDP.

Table 7-3 below presents details of the annul projection of gross enrolment for the first and second cycle primary in Dawo woreda. Each WPEDP contained similar detailed annual projection tables for apparent intake and apparent intake rate, net intake and net intake rate, dropouts and dropout rate, repeaters and repetition rate.

Table 7-3: Gross Enrolment Projections: Dawo Woreda

YEAR	First Cycle (1 - 4)			Second Cycle (5 - 8)			Total (1 - 8)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1998	6,594	6,070	12,664	3,763	1,827	5,590	10,357	7,897	18,254
1999	6,633	6,168	12,801	4,038	2,283	6,322	10,672	8,451	19,123
2000	6,660	6,148	12,809	4,386	2,944	7,330	11,047	9,092	20,139
2001	6,072	5,449	11,521	5,303	4,325	9,628	11,375	9,774	21,149
2002	6,296	5,783	12,079	5,513	4,749	10,263	11,809	10,533	22,342
2003	6,552	6,111	12,663	5,788	5,163	10,951	12,340	11,274	23,614
2004	6,838	6,428	13,267	5,997	5,393	11,390	12,835	11,821	24,656
2005	7,019	6,632	13,651	5,620	4,956	10,576	12,640	11,588	24,227
2006	7,099	6,753	13,852	5,902	5,367	11,270	13,001	12,121	25,122
2007	7,135	6,841	13,976	6,229	5,783	12,012	13,363	12,624	25,988
2008	7,036	6,813	13,849	6,571	6,172	12,744	13,607	12,986	26,593
2009	6,912	6,758	13,670	6,807	6,440	13,247	13,719	13,198	26,917
2010	6,765	6,652	13,417	6,935	6,613	13,548	13,700	13,266	26,965
2011	6,640	6,528	13,168	7,009	6,740	13,749	13,649	13,268	26,917
2012	6,554	6,440	12,993	6,946	6,747	13,692	13,499	13,186	26,686
2013	6,502	6,385	12,887	6,847	6,715	13,563	13,350	13,100	26,450

(Source: Dawo Woreda WPEDP, 2006/07)

7.4.7 Chapter 7: Estimation of Demand for the Four Key Inputs

The demand for four inputs depended primarily on student enrolment. This relationship was shown and estimated in the previous Chapter. In addition, regional policy guidelines as to the quality of these inputs also related to their required volume.

Applying the above policy assumptions in the planning projection model, the WPTs derived the volume of inputs required annually for each of the four key inputs. Table 8-4 below presents the output for the number of classrooms required for the first cycle primary schools in the Dawo Woreda based on assumptions similar to the ones presented above.

Table 7-4: First Cycle Classroom Demand Projections: Dawo Woreda

Base Year Student Section Ratio:	65
Percentage Double Shift:	90

Student-section ratio for target year	50
Target Year:	2002

YEAR	Student Enrollment	Student Section Ratio	Single Shift Enrollment	Double Shift Enrollment	Single Shift Class Rooms	Double Shift Class Rooms	Total Class Rooms	Additional Class Rooms	Cummulative Class Rooms
1998	12,664	65					195		
1999	12,801	61	1,280	11,521	21	94	115	0	0
2000	12,809	57	1,281	11,528	22	101	123	8	8
2001	11,521	53	1,152	10,369	22	98	120	0	8
2002	12,079	50	1,208	10,871	24	109	133	13	21
2003	12,663	50	1,266	11,397	25	114	139	6	27
2004	13,267	50	1,327	11,940	27	119	146	7	34
2005	13,651	50	1,365	12,286	27	123	150	4	38
2006	13,852	50	1,385	12,467	28	125	153	3	41
2007	13,976	50	1,398	12,578	28	126	154	1	42
2008	13,849	50	1,385	12,464	28	125	153	0	42
2009	13,670	50	1,367	12,303	27	123	150	0	42
2010	13,417	50	1,342	12,075	27	121	148	0	42
2011	13,168	50	1,317	11,851	26	119	145	0	42
2012	12,993	50	1,299	11,694	26	117	143	0	42
2013	12,887	50	1,289	11,598	26	116	142	0	42

(Source: Dawo Woreda WPEDP, 2006/07)

7.4.8 Chapter 8: Distribution Strategy for Schools and Classrooms

Once the WPTs determined the future demand for the four key inputs for the woreda primary education system, the next task was to distribute these inputs within the woreda. A medium term strategy for the next four years was devised for the distribution of these key inputs, as a fifteen year period was considered too far into the future for developing detailed plans for the distribution of these inputs.

The WPTs primarily devoted their effort to developing a detailed plan for the distribution of the classrooms within the woredas, which included new schools in new locations, or expanding existing schools, or upgrading existing schools.

Several criteria were employed by the WPTs for allocating classrooms within woreda communities. These included: i) student-section ratio; ii) double shift or single shift; iii) distance from school to community (maximum three kilometres from community to school); iv) population size of the community (and the location of the settlements); v) school size; and vi) one school in every kebele as a minimum requirement.

To apply these criteria and to distribute the classrooms, the WPTs used three major tools: i) a woreda school coverage map; ii) a school information map; and iii) a woreda school information matrix. These tools were produced by the OEdMap database.

Table 7-5 below presents the summary of the school and classroom distribution strategy developed by the WPTs for Adami Tullu Woreda using the above criteria and the tools:

Table 7-5: School and Classroom Distribution Matrix: Adami Tullu Woreda

Year (in E.C)	School and Kebele name (In order of priority in each year)	Accessibility from the Nearest town (Poor, Fair, Good)	Type of Classroom (Low-cost or Standard)	Number of Classroom needed
1. Target first-cycle primary schools to upgrade to complete primary schools				
1999 E.C	Gaallo Hirape	Fair	Low-cost	2
2000 E.C	Naaka Maka	Fair	Standard	4
	Abure Dasta	Fair	Standard	4
	Abajata Habule	Good	Low-cost	4
2001 E.C	Ilka Challamo	Poor	Standard	4
	Odo Adda Anshore	Good	Low-cost	4
	Walin Bullo	Fair	Standard	4
2002 E.C	Hurufa	Fair	Low-cost	4
	Lole Chitu	Poor	Standard	4
	Geto	Poor	Low-cost	4
	Kartfa 2nd	Poor	Low-cost	4
	Waranse	Poor	Low-cost	4
	Galeti Galeyi	Poor	Low-cost	4
2. Target first cycle primary schools to add classrooms for expansion				
1999 E.C		Poor	Standard	4
2000 E.C	Kartfa 1 st	poor	Standard	4
	Wan Si.	poor	Standard	4
	Kartafa 2nd	poor	Standard	4
	Urgo Machfir	Poor	Standard	4
2001 E.C	Halaku Halku	Fair	Standard	4
	Araba	Fair	Standard	4
	Walda	Fair	Standard	4
2002 E.C	Mayibadi	Good	Standard	4
	Hara Kallo	Good	Standard	4
3. Target Complete primary schools to add classrooms for expansion				
1999 E.C	Machafara	Fair	Low-cost	8
	Waransa Andola	Fair	Standard	8
	Chabi	Fair	Standard	8
	Jela Korke Jele	Fair	Standard	8
	Aluto	Fair	Standard	8
	Abine Gowota	Fair	Standard	8
	A/Garman	Good	Standard	8
	Boramo Wafo	Good	Standard	8
	Oetu	Good	Standard	8
	Basuma	Good	Standard	8
	Bochessa	Good	Standard	8
	Bochessa	Fair	Low-cost	8
	Elellan	Fair	Standard	8
	Aboabu	Fair	Standard	8
4. Target Kebles for first cycle primary school construction				
1999 E.C	Nagaliign 01	Fair	Standard	4
	Ido Gajorlor 02	Fair	Standard	4
	IdoGojola	Fair	Standard	4
	Danbe 03	Fair	Standard	4
	Adansho	Fair	Standard	4
2000 E.C	Gojobo 04	Poor	Low-cost	4
	Gallotirape	Good	Standard	4
	Warja 05	Fair	Standard	4
	W/Warshgula	Fair	Low-cost	4
	Wilicho 06	Fair	Low-cost	4
2001 E.C	Chabi Andola 07	Fair	Low-cost	4
	Chabi	Good	Standard	4
	Arba Gannaf Arba 08	Poor	Standard	4
	Kudusa 09	Fair	Standard	4
2002 E.C	Abijata Wasta 10	Good	Standard	4
5. Target Kebele for complete rimary school construction				
2000 E.C	Haroresse oetu Basuma	Fair	Standard	8

(Source: Adami Tullu Woreda WPEDP, 2006/07)

7.4.9 Chapter 9: Overall Strategies and Programmes

This chapter dealt with development of detailed strategies and programmes to achieve goals and targets. The WPTs asked critical questions, such as: What overall strategies would the WEO follow to raise the necessary resources required for meeting the cost of implementation of the plan? What specific actions would the WEO and the community undertake to reduce the dropout rate? What programmatic actions would the WEO promote to bring as many seven year olds to school as possible?

The development of overall strategies and programmes were devoted mainly to the achievement of three goals: increasing access, improving quality, and achieving equity.

Two tools were used by the WPTs to develop the details for the strategies and programmes: a Strategy Development Working Matrix and a Programming Matrix.

Box 7.6
Strategies for Increasing Access in Adama Woreda

Increasing Access- Improving apparent and net intake rates. As compared to UPE target Adama woreda shows low level of net intake rate at 34.8%. This poses a challenge to bring NIR to levels needed to achieve UPE as close to 100% as possible within a reasonable period of time as shown in the targets. The AIR is relatively better for the woreda at 108%. However, it is necessary to increase the AIR as shown in the targets annually to eliminate the over aged out of school children phenomenon from the woreda.
In order to reverse challenging situation and then by increase the AIR and NIR Adama woreda will apply the following strategies:

- *Broad area based strategies that enable parent to send their children to school at appropriate age will be developed.*
- *Establishing primary schools in kebeles, which do not have primary school.*
- *Expanding the existing schools*
- *Raising community awareness and mobilize comprehensive support to the school.*
- *Strengthening KETB and PTA*

(Source: Adama Woreda WPEDP 2006/07)

A model programme summary of ideas generated by the WPTs as part of the perspective plan was provided in Table 7-6. This Programming Matrix was taken from Adami Tullu WPEDP. The programmes presented included actions for increasing access, reducing gender gap, and reducing dropout rate.

Table 7-6: Programming Matrix

Proposed Key Activities to Achieve the Objective	Major Resources Required to Implement the Activity	Implementation Timeframe	Measure of Successful Performance	Unit, Department or Individual Responsible for Taking Action
Make an effort to increase intake to grade one by: • Mobilize communities and other stakeholder (PTA, KETB, Kebele Administration etc...) • Register age 7 children by moving from house by mobilizing teachers. • Construct additional classrooms and schools • Furnish schools with student furniture.	• Experts • Finance	Every year two months before the new academic year begin (July & August)	Increment in new entrant enrolment to grade one.	• Woreda administration • WEO • Schools • Teachers • Supervisors
Reduce gender gap by • Involving community representative in girls education in the school including in girls advisory committee • Conducting special campaign to enrol all age girls by conducting awareness creation conference for the community during the school break.	• Experts • Finance	Every year two months before the new academic year begin (July & August	Gender parity index	• Woreda administration • WEO • Schools • PTA • KETB • Teachers • Supervisors
Making continuous effort to reduce drop out and repetition rate particularly at grade one by: • Improving the situation of basic school facilities that contribute to student drop out and repetition • Conducting discussion with community bi-annually on the problem of drop out and possible solution	• Experts • Finance	• July-August every year • During the school opening and semester break	Drop out an repletion rate data	• Woreda administration • WEO • Schools • PTA • KETB • Teachers • Supervisors

(Source: Adami Tullu Woreda WPEDP, 2006/07)

7.4.10 Chapter 10: Cost of Implementing the WPEDP

The WPTs considered six items in estimating the cost of implementing the fifteen-year perspective plan. The six cost items are: i) cost for classroom construction; ii) cost for teacher salaries iii) cost for the provision of textbooks; iv) cost for the provision of student furniture; v) cost for the provision of student services; and vi) cost for administrative salaries at all levels of the woreda education system.

Unit cost methodology was used for estimating the cost of these items.

For the construction of classrooms, the woredas had the freedom to decide whether to construct classrooms using low cost construction norms or standard construction norms. For low cost construction norms, it was left up to the woredas to decide the unit cost, as these costs varied from woreda to woreda, depending on the availability of construction materials locally. For all other items, standard unit costs were employed.

Given the variations in the unit costs for first cycle and second cycle primary, the cost of implementing the plan was estimated separately for the two cycles and then consolidated to obtain the cost for the total primary.

Table 8-7 below presents the matrix with details of the cost for implementing the plan for Dawo woreda for the fifteen-year perspective plan period**:**

Table 7-7: Total Primary: Cost of the Six Key Inputs-Dawo Woreda

YEAR	Cost of Classroom Construction	Cost of Teacher Salary	Cost of Textbooks	Cost of Student Furniture	Admin salary Cost	Recurrent Cost	TOTAL COST
1999	0	2,587,000	174,432	123,480	222,838	222,838	3,330,588
2000	1,160,000	2,921,000	1,040,120	151,980	238,036	238,036	5,749,172
2001	1,560,000	3,374,000	243,552	344,687	259,630	259,630	6,041,498
2002	1,420,000	3,744,000	206,496	151,017	274,731	274,731	6,070,975
2003	790,000	3,961,000	219,248	161,692	290,900	290,900	5,713,741
2004	570,000	4,135,000	210,568	126,134	303,514	303,514	5,648,730
2005	210,000	4,031,000	1,307,512	38,434	295,151	295,151	6,177,248
2006	600,000	4,189,000	216,104	124,133	307,565	307,565	5,744,366
2007	560,000	4,360,000	222,648	123,711	319,936	319,936	5,906,230
2008	540,000	4,489,000	217,936	109,759	329,645	329,645	6,015,984
2009	360,000	4,561,000	203,864	75,562	335,408	335,408	5,871,241
2010	240,000	4,586,000	188,952	45,092	337,394	337,394	5,734,831
2011	60,000	4,591,000	1,516,648	30,215	337,922	337,922	6,873,708
2012	0	4,560,000	166,896	0	335,321	335,321	5,397,537
2013	0	4,516,000	163,000	0	332,314	332,314	5,343,628
Total Cost	8,070,000	60,605,000	6,297,976	1,605,895	4,520,303	4,520,303	85,619,478

(Source: Dawo Woreda WPEDP, 2006/07)

7.4.11 Chapter 11: Monitoring Plan

The monitoring plan had five major purposes: i) revision of the programmes; ii) revision of the budget; iii) modification in the operation; iv) creating an information base for conducting evaluations; and v) modification of the strategic goals and medium-term and long-term plans.

In order to achieve these five purposes, the WPTs developed a monitoring plan that followed seven key steps. These steps are identified below:

Step 1 Identification of key inputs and outputs for monitoring
Step 2 Identification of financial information for monitoring
Step 3 Identification of data to be collected
Step 4 Development of formats for data collection
Step 5 Development of a data collection plan
Step 6 Participation in the monitoring
Step 7 Requirements of reporting the results of evaluation

Following the above steps the WPTs developed detailed monitoring plans to assure successful implementation of the woreda's prospective plan activities.

Box 7.7 below presents a summary of the monitoring plan taken from Adami Tullu WPEDP.

Box 7.7
Monitoring Plan

11.1 Monitoring the inputs

- *Monitoring additional classroom constructed and improvement in student section ratio against the planned target annually,*
- *Monitoring additional teachers to be supplied as targeted in this plan annually.*
- *Monitoring the textbook provision and student textbook ration as targeted in this plan annually,*
- *Implementation of proposed strategies will be monitored annually,*
- *Availability of financial resource and its execution will be monitored.*

11.2 Monitoring the outputs

- *Apparent and net intake rate*
- *Gross enrolment and its rate*
- *Drop out and repetition rate*
- *Improvement gender equity*

11.3 Basic data to be collected for monitoring

- *Enrolled student by age, sex and grade,*
- *Teachers by age, sex, level they taught and educational qualification, by school,*
- *Schools by level and location,*
- *Section by school and grade,*
- *Student repeating grade by age, sex, grade, school and location,*
- *Number of classroom by school,*
- *Textbook provided by school,*
- *Number of school age population by sex, age and kebele,*
- *Provision of textbook by school,*
- *Other facilities and educational materials by school*

11.4 Key financial information

- *Growth observed in school internal revenue and community financial support. Allocation and expenditure of capital and recurrent budget against the estimated cost,*
- *Financial resources received from the NGOs.*

11.5 Monitoring plan

- *Basic data for monitoring input and output for the plan will be collected periodically through designed format.*
- *Close school supervision will be undertaken by supervisors at woreda level*
- *Annual plan preparation will be undertaken through the involvement of stakeholders.*
- *All pertinent stakeholder will receive periodic report and evaluate performance*

(Source: Adami Tullu WPEDP 2006/07)

7.4.12 Chapter 12: Implementation Modalities

The WPEDP concluded with a chapter on implementation modalities. A plan no matter how good technically does not assure that the plan will be implemented successfully. In developing the implementation modalities, the WPTs recognized that woreda leaders would need to communicate to various stakeholders, such as governmental agencies, teachers, communities, supporters for identification, and sponsors, about the necessary resources for plan implementation.

It is not enough that these supports are generated when the plan is implemented, as support must be sustained throughout the lie of the plan. Without this sustained support, the implementation of the plan will falter. In addition, the WEO with the support of the woreda council, needs to design activities for assuring the timely implementation of the plan's key components and raise the necessary resources.

Actions proposed under implementation modalities by the WPTs included the following areas:

1) Actions in the plan were to be refined and formalized after the return of the WPTs to their respective woredas.
2) Development of the implementation modalities such as to: i) identify and generate the resources required for the implementation of the perspective plan; ii) conduct periodic review of the plan and the progress of its implementation; iii) coordinate the implementation of the education plan with that of the activities of the other sectors such as health, agriculture, etc; iv) review and communicate the results of the monitoring; and v) provide leadership in establishing and conducting communication with the key stakeholders.
3) Development of an action plan for stakeholder involvement in the support of the implementation of the plan.

Excerpts from Adami Tullu WPEDP describing the implementation modalities to be followed by the woreda are presented in Box 7.8 below:

Box 7.8
Implementation Modalities

12.1 Process for the plan getting approved

- *The draft plan will be discussed by WEO office, education and training board. Based on the outputs of discussion, necessary adjustments will be made to the plan. Adjusted plan will be presented to the woreda cabinet for approval. Further communication workshop will be conducted to disseminate approved plan to kebeles and schools for actual implementation and to other local level stakeholders.*
- *The approved plan will be distributed to all institutions participating in its implementation and monitoring*
- *The approved plan will also submit to the Oromia Region State Education Bureau.*

12.2 Implementation Modalities

The important step in the implementation modality is preparation of annual plan of operation based on the approved long-term and medium-term plan by involvement all important stakeholders. Annual plan preparation will be harmonized with annual plan preparation and counter checked by region education bureau and finance and economic development bureau with this approved plan. Further and permanent discussion will be held with potential stakeholder including woreda cabinet, woreda finance and economic development, local and international NGOs and donors to mobilize sufficient financial supports. WPT *will continue participating plan preparation not only the long-term and medium-term but also in annual plans. The plan depicts the need to strengthen the capacity of the woreda primary education system, raise community involvement and improve the coordination among stakeholders. To overcome shortage of resources required for the implementation of this plan, stakeholder involvement particularly community and NGOs will be strengthened.*

(Source: Adami Tullu WPEDP 2006/07)

7.5 LESSONS LEARNT

The design, development, and implementation of the micro-planning exercise during the SMAPP Project provided an opportunity to identify additional education improvement issues to be addressed in order to bring about greater benefits to the region and woreda education systems. These issues can be categorized under three broad concerns. The first, it is to institutionalize micro-planning at appropriate levels and agencies of the regional governments. The second, relates to the need for deepening the levels of micro-planning below the woreda level. The third relates to the expansion of the scope of micro-planning, bringing about concerns about the quality of inputs, the processes and outputs of the planning process. Several issues related to these concerns are identified below.

7.5.1 Strengthening the Institutionalization

Development of plans for the education sector at the woreda level is not a new phenomenon. Woredas have been doing it for several years. Many donors have supported the development of woreda plans. For instance, the woreda capacity building programme supported by BESO I, implemented in 2003-2004, helped the woredas in all the regions to develop a long-term plan. However, it is not known how many of these plans came to be officially recognized by the woreda authorities and were funded and implemented.

Past observations show that, often the woredas themselves take the initiative in preparing annual plans. Occasionally, some donors or NGOs have helped the woredas prepare education plans. In 1996 E.C., many of the regions directed the woredas to prepare strategic plans for the woreda education system.

Occasionally, the woredas ended up with multiple plans for the education sector. When that situation arose the question became which plan was to be funded, implemented, and monitored. Many observers believe that development of the ad hoc plans had become a mere exercise in itself without any requirement that a plan be funded and implemented.

This situation arises primarily from the fact that the development of a plan is not recognized as a central responsibility in the governance of the sector. Often the leadership was not involved in the development of plans in a meaningful way through the giving guidance in setting priorities and guiding the programme plan's development.

A meaningful planning calendar does not exist at the federal, regional, and woreda levels. Often the sector ministries prepared the budget without the existence of an annual plan.

The introduction of decentralization has further complicated the matter. Prior to the extension of the decentralization of governance to the woreda levels, the sector bureaus, in many of the regions, played a significant role in making sure that woredas had at least a semblance of a plan to base their budgets on. With the intensification of decentralization, this role, the sector bureau has become very tenuous.

Based on these observations, the SMAPP Project needs to ask a few questions; as to the status of the WPEDPs developed by the woredas. Would the woreda administration and the WEO consider these plans and the medium-term plans as the only officially recognized plan that will guide the development of the woreda education system? Or would they consider it as just another plan, one among many to be filed and forgotten? In other words, the question is how do we make sure that the WPEDPs become officially sanctioned and recognized document that will become the central tool guiding the governance and development of the woreda education system?

This objective, implementation of the WPEDP, cannot be achieved, unless two preconditions are met:

First, the Oromia Region Government and the woreda governments (woreda councils) should recognize the WPEDPs, as the official plan. Second, targets and the performance of the woredas in meeting planned targets should be considered based on the WPEDPs, when the BoFED decides on annual allocations of block grants to the woredas.

The implementation of the WPEDP will be more effective, if an annual planning

calendar is prepared, considering education activities at all the levels of governance.

To accomplish these two preconditions, the following actions are proposed:

1) The OEB should communicate with the Oromia Region President's Office, to give directives to the woredas and to other relevant government agencies, as to the status of the development of the WPEDPs and the need for official approval of these plans by the Region Government. It will be used as the tool by which the performance of the woreda education system will be monitored. The Region Government may need to further communicate with the woreda governments to accept and approve these plans, upon which the woreda education budget will be based. Pre-consultations with the BoFED and its involvement, at this stage, will enhance the success of this action. The OEB may be encouraged, with the technical assistance of SMAPP Project Team, to design these communications and meetings.

2) Based on the outcome of the above discussions, the BoFED may be required to provide the WoFED with advice, that the future performance of the woreda education system will be monitored, based on the targets set in the WPEDPs and that the future allocations of block grants will take into consideration the performance of the woreda education system, based on the details contained in the micro-plan.

The BoFED may request the woreda governments send to it a copy of its approved plan document. In addition, the OEB should provide the BoFED with a simple monitoring plan for each woreda, containing key targets, inputs, and programmes.

3) In addition to the above actions, the SMAPP Project should consider providing support to the Oromia Region Government through the OEB to develop an annual planning calendar at different levels of governance, so that timing of the various activities in the annual planning cycle can be synchronized.

In line with this, the quarterly review meeting that OEB would organize would be mobilized as annual planning cycle. Action plan for WPEDP is proposed in the Chapter 9.

7.5.2 Expanding the Coverage

The micro-planning and school mapping exercises of the SMAPP Project covered 117 woredas of the seven pilot zones, but ten zones remain outside of the SMAPP Project. This indicates that non-pilot woredas are at a disadvantage, as far as some of the performance indicators are concerned. Unless these woredas receive some technical support in planning and management, they may find it difficult to catch up with the rest of the woredas in the region on key educational indicators.

Micro-planning is not merely a technical exercise to improve the professional capacity of WEOs. Micro-planning is practiced as an integral part of the decentralized governance process of the woreda education sector. If micro-planning is practiced only by a limited number of woredas, as a part of the decentralized governance of the education system, it will remain only as a one off experiment and may loose its validity and importance eventually.

All these observations point to the need for expanding the micro-planning exercise to all the woredas in the Region, including the woredas in the ten zones.

7.5.3 Deepening the Governance Level

The concept of micro-planning of the SMAPP Project reached only up to the woreda

level. Bringing planning to the woreda level through decentralization had a political and management purpose, to bring decisions closer to the people and to make the governance more responsive to local needs. The same argument can be made to carry the micro-planning exercise to levels below the woredas.

As important as the planning at woreda level may be, actions to achieve the MDGs and the UPE cannot just remain at the woreda level. The goals such as increasing the net intake rate, reducing dropout rates, reducing gender inequity etc., cannot be achieved by actions at the woreda levels alone. Dropout takes place in the schools and in communities. Resistance to sending girls to school occurs in homes and communities. Actions to improve the quality of educational services need to occur in the classrooms and schools. Unless micro-planning penetrates below the woreda level to the community, home and school levels, rapid improvement in equity, quality and access cannot be achieved.

7.5.4 Expanding the Scope

It is not enough to deepen the levels of planning to lower than the woreda. It needs to enlarge the area. The focal issues of planning will be different at the school level. Deepening the levels and enlarging the scope in planning will require the development of new concepts and frameworks for micro-planning, which will need to be supported by appropriate methodologies and planning tools. These methodologies and tools do not exist, at the moment, in a usable form. These need to be developed and tested.

7.5.5 Additional Emphasis on Implementation and Monitoring

No matter how good is the WPEDP, it is not a good plan if not implemented, Therefore, in the next step of the SMAPP Project, it should be an emphasis on identifying the factors that inhibit proper implementation of the WPEDP and on the creation of the necessary conditions for consistent implementation. Monitoring the implementation of the plans should be another area of emphasis. Bringing these added emphases to the micro-planning exercise will have consequences for staffing within the Project as well as for the OEB.

7.5.6 Strengthen the AEC with School Records

The monitoring of the school records implementation provided encouraging results. Teachers and directors saw the benefits from its use for improving day-to-day management. Not only the introduction of improved school records, but there are also many other additional areas of school management that require adequate record keeping. School infrastructure, school finances, school furniture, etc. require adequate school records for improving-day-to-day management, for doing better planning at the woreda level and school level, and for making reports to higher levels easier.

7.5.7 Strengthening the Organizational Capacity

Institutionalization, described in the section 7.12.1, cannot succeed, unless the OEB takes the responsibility for providing organizational and technical leadership for designing, implementing and monitoring micro-planning.

The organization and implementation of the micro-planning exercise should become one of the primary responsibilities of the PRPD, with the support of the ZEO officers. Its functions and responsibilities need to be expanded and refined. Fulfilling the

existing and additional functions of planning and the EMIS may require strengthening the infrastructure and increasing access to information and communication technologies at the OEB, zone, and, on selective basis, at the woreda levels.

7.5.8 Role of WEO, WPEDP and the Woreda Council

The WEO need to sit with the woreda council and other relevant agencies, to determine the immediate annual priorities based on the likely amount of resources to be available, and, then, in sequence, develop a detailed annual plan and budget for the upcoming year.

Similarly, based on the results of the monitoring, availability of resources for implementation in the past years, and the progress achieved in reaching the key targets, the perspective plan will need to be revised. The WPEDP is not static, but a dynamic instrument for development that is influenced by both positive and negative situations that emerge during the development process.

CHAPTER 8:MARKETING OF WPEDP

8.1 FINANCING OF PUBLIC PRIMARY EDUCATION IN ETHIOPIA

Financing public primary education in Ethiopia has been, and still is, the major responsibility of the government. Even at the government level, in the past, the bulk of the financial support came from the federal government through financial transfers to the regional governments. Most of the donor support has also been either channelled through the budgetary support or provided directly for implementation of projects negotiated between the donors and the federal and regional governments. Details of the financing of education and the modalities for the flow of funds through different levels of the decentralized governance, are provided in Chapter 2 and therefore are not repeated here.

Decentralization brings greater opportunities and difficulties for the financing of primary education at the woreda level. Under the present level of decentralization the woreda governments receive a block grant from the regional government. It is the responsibility of the woreda governments to divide the resources received from the regional government through the block grant process, among the various sectors of various woredas, including education. Until recently, in the Oromia Region, the woredas did not have the discretion to allocate the resources raised directly by the woreda government through taxes and other means for meeting the needs of the woreda budget. Woredas were required to transfer this money to the regional government. This situation is changing. Woredas now have discretion in the allocation of these resources within the woreda and do not need to deliver them to the regional government. Due to this change, woredas are more and more encouraged to raise their own resources directly, in addition to the block grants that they receive, for their annual budgetary expenditures.

While the Oromia regional government has developed formulas for the allocation of block grants to the woredas, no formulas or models are available to the woredas to allocate the resources at their disposal to the various sectors. The amount of resources sectors will receive through annual budgets will depend on the discretion of the woreda council and the cabinet, and the weight of importance to programmes in each sector under the development strategy of the woreda. At the woreda level, the education sector will have to compete with other sectors to make a case for the education programmes to receive adequate resources.

8.2 DECENTRALIZATION AND COMPETITION FOR PUBLIC RESOURCES AT THE WOREDA LEVEL

Many WEOs in the country face several difficulties in making the necessary case for allocations of adequate funds from the woreda resources to education.

First, allocation of adequate resources to the education sector from the woreda budgetary sources requires a common agreement between the woreda decision makers and the WEO on the long-term goals of the woreda education system and the immediate programme priorities to achieve those goals.

Second, making a case for adequate financial resources for education requires an estimation of the long-term financial requirements of the woreda education system to

achieve its goals. In the absence of a long-term scenario for the financial needs of the woreda education system, it would be difficult to assess the adequacy of the funds allocated to the education system through the annual budgetary process.

Finally, raising funds from the community, individuals and organizations within the woreda to support education will require strong political support from within the woreda. Unless the decision makers within the woreda are convinced of its importance and the needs of the woreda education system for additional funds, this support will be difficult to come.

8.3 DIFFICULTIES IN MAKING AT THE WOREDA LEVEL

Through the micro-planning exercise conducted in October-November 2006, all the 117 pilot woredas within the SMAPP Project developed a 15-year perspective plan, WPEDP and four-year medium term plan to fit within the WPEDP and the region ESDP III.

WPEDP provides a long-term view of the financing needs of the woreda primary education system to achieve UPE. These financial needs are projected by annual requirements, broken down by six major cost items namely construction of classrooms, teacher salaries, student textbooks, student furniture, administrative salaries, and student services.

The long-term view of the resource needs of the woreda education system is equally important for the government agencies, donors, NGOs, private sector, local communities, and other stakeholders to plan they will support education and allocate their resources. Tying the support for woreda primary education system to long-term goals also helps the resource providers and the WEO to be mutually accountable to each other and to the woreda community at large.

In Ethiopia and the Oromia Region, many agencies are active in supporting primary education. However, not all sources with potential capability and interest to support education have been exhausted. For example, the local businesses and private sector organizations functioning in the communities have not yet been mobilized to their full potential to support education in the woredas.

Many reasons can be attributed to this. Ethiopia traditionally has depended on the federal government, through its annual budgetary allocations, for meeting the financial needs of the public education system. The bulk of donor funds in the past has also been either routed through the federal and regional governments or spent directly on the projects. Therefore, very limited opportunities and incentives existed for the woredas and local communities to identify and raise resources from other sources. In the past, the schools have employed several mechanisms such as school gardens and other income generating activities.

Decentralization of the management of the education system to the woreda level is a relatively new phenomenon. This brings additional responsibilities and opportunities to the WEOs to identify non-governmental sources to raise funds for the implementation of the woreda education programmes. The promotion of the WPEDP to raise additional funds will require applying new approaches. One of these approaches is marketing the WPEDP.

8.4 WPEDP

As the development process accelerates in Ethiopia, the competition for financial

resources by different sectors at the woreda level will increase. Education, health, water, and sanitation, etc. will compete for a bigger share of the scarce governmental resources. The same thing will also apply to non-governmental resources.

Education sector will have to compete not only with other sectors for resources, but even within the education sector, there will be competing demands for resources among various components.

To get a fair share of funds for the education sector from both governmental and non-governmental sources, the WEO will need to educate the key stakeholders to the potential contributions that the education sector makes to the national and economy development. Marketing, by definition, involves an exchange. Commercial marketing usually involves an exchange of money for goods or services. In the context of the marketing of the woreda education programmes as embodied in the WPEDP, we are not always exchanging goods or services for money. We are also asking our target audience being marketed to change their behaviour.

For example, a WEO may be trying to persuade an NGO to support gender equity programmes proposed in the WPEDP. This may require mobilizing community support for registering as many of the seven-year-old girls in Grade 1 as possible and providing the necessary educational and social support to retain the girls in school. But, the NGO under consideration may be focusing only on girls enrolled in upper grades through the provision of better services to them. Refocusing the NGOs programmes to the source of gender inequity problem, by bringing as many girls to start school as quickly as possible, will require changes in the outlook and behaviour of the organization through changes in its policies.

8.5 THE IMPORTANCE OF WPEDP FOR THE FINANCING

The OEB and the SMAPP Project jointly designed and implemented a Marketing Fair on June 18 and 19, 2007. The venue for the Marketing Fair was the facilities of the Ethiopian Management Institute.

The Marketing Fair was organized as a two-day event. The first day was devoted to sharing the concepts and strategies of the Marketing Fair with the participating woreda representatives and to let the WPTs undertake the necessary preparations to market their respective WPEDPs. The second day was devoted to activities directly related to marketing of the WPEDPs by the woredas to the NGOs and other donor agencies.

The marketing Fair was conceived and designed as one of the tools for marketing the WPEDP in order to raise funds, material, and technical support for the successful implementation of the WPEDP. Different marketing tools and approaches to fit the circumstances of these different groups of organizations will be required to market the WPEDP effectively, given the multiplicity of the target audiences, their roles, financing modus operandi, and different decision making styles, processes, and request procedures.

The approaches that may be effective in persuading the woreda council to allocate more budgetary resources to the WEO may not be appropriate in persuading an NGO to commit its support for a programme in the WPEDP either fully or in part. Therefore, the Marketing Fair was seen as only one of many tools for marketing the WPEDP.

8.5.1 Preparation of the Marketing Fair

The detailed planning for the Marketing Fair was the joint responsibility of the

members of the Micro-planning Task Force of the OEB and the SMAPP Project. The initial formal planning meeting of the Task Force took place in February 2007.

Extensive preparations went into the design and implementation of the Marketing Fair. Five copies each of the English Summary of the WPEDPs and the original WPEDP in Afan Oromo (Oromo language) prepared by the WPT were printed and distributed to every woreda during the Marketing Fair. These plans were already approved by the respective woredas councils.

The EMIS Team of the OEB with the technical support of the SMAPP Project developed and produced woreda school location maps, several regional and woreda thematic maps, a woreda school information matrix, etc using OEdMap. In addition, a CD-ROM called SMAPP CD Reference contained important maps produced using the OEdMap and all the English summaries of the 117 WPEDPs was also developed. These were seen as additional tools for marketing the WPEDPs and distributed for future use by the WEOs and the NGOs participating in the Marketing Fair.

8.5.2 Participants in the Marketing Fair

The participants in the Marketing Fair included the following groups:

1) Of the 117 woredas in the seven (7) pilot zones, 109 woredas attended the Marketing Fair. The WEOs were represented mostly by their respective planning and statistics specialist.
2) In addition to the zone planning officers from the seven (7) pilot zones, planning officers from six (6) non project zones attended the Marketing Fair.
3) MoFED, BoFED, and MoE sent one representative each to participate in the Marketing Fair.
4) Representatives of 14 local and international NGOs and donor organizations participated.

All the key members of the PRPD and EMIS Team along with the SMAPP Project team provided the technical support for the Marketing Fair.

A complete list of participants representing the NGOs, donor organizations, and the federal and regional government agencies is provided in Appendix-6 of the Main Report.

8.5.3 Marketing Fair: The First-day- Preparations by the Woredas

Two sets of preparatory activities were implemented during the first day. The first set of activities included several informative presentations by the members of the Micro-planning Task Force and the SMAPP Project Team to give the woredas some general concepts of marketing and the details of the processes that would be followed during the Marketing Fair. The second set of activities identified was that each woreda was to implement a Marketing Fair.

Presentations included:

1) Role of the WPEDP in woreda education development
2) Descriptions of a sample case of promotion and use of WPEDP by a woreda
3) What is marketing? (Descriptions of the concepts and strategies for marketing)

4) Guidance for group work by the woredas to prepare for the Marketing Fair

Based on these presentations, each woreda prepared a Marketing Card to project the educational problems facing the woreda, the documented causes for these problems and the actions the woreda proposed to take to alleviate the problems. The Marketing Cards were intended as a quick reference to help the communication media to promote the woreda's plans and to inform more easily and effectively the NGOs and donor agencies in the Marketing Fair.

8.5.4 Marketing Fair: The Second-day -Interaction between the Woredas and the Target Audience

The second day was designed to bring the NGOs, donor agencies, and the woreda representatives in direct contact with each other in order to initiate discussions for future support for the WEOs.

The process started with an opening address by the head of the OEB, Obbo Dereje Asfaw. In his address he emphasized the commitment of the Oromia Region to bringing education to all eligible children and the willingness of the OEB to work with all partners in the development of education in the region to achieve this goal. This was followed by a welcome speech by Mr. Katsuhiro Sasaki, head of JICA, Ethiopia. He emphasized JICA's appreciation for the commitment of the OEB to expand primary education and joined it with the commitment of JICA to support primary education to achieve the development goals of the Oromia Region.

Subsequently, three presentations were made to provide the NGOs and donor agencies with an overview of the SMAPP project and the processes and procedures that were to be followed during the Marketing Fair.

A total of four presentations were made:

1) Overall objective and outline of the Marketing Fair
2) Present status and future goals of the Oromia primary education system as planned during the five-year ESDP III period
3) How the OEdMap was developed and its outputs for use in planning woreda education?
4) A detailed chapter by chapter presentation on the details of the WPEDP as a guide to promote interaction between the woredas and the members of the target audience

8.5.5 Interaction during the Marketing Fair

Following the above presentations, the members of the target audience and the woreda representatives were given an opportunity for direct interaction with the NGOs and donor agencies on a one-to-one basis.

The woredas within a zone were grouped together and were provided with sufficient space around the conference area to set up their marketing space. The woredas exhibited the Marketing Card they had prepared the previous day with woreda school location maps, copies of the WPEDPs etc. Each zonal woreda marketing team was lead by the zone planning officer. In addition, another facilitator from the OEB or the SMAPP Project was assigned to each zone team to support the woredas in their marketing effort.

The representatives of the NGOs and donor agencies were requested to distribute themselves among the seven zonal woreda teams to find out each woreda's problems and needs.

The woredas were provided with Marketing Fair Summary Information Matrix, a tool to summarize their discussions with representatives of the NGOs, for future follow-up action.

The distribution of the woredas in zone clusters along the corridors created an atmosphere for intense interaction.

Following the market interaction, the NGOs, donor agencies, and woreda representatives assembled together to exchange views on their shared experience and to discuss future courses of action that can be initiated for carrying forward the contacts initiated during the Marketing Fair.

8.5.6 Outputs from the Marketing Fair

No tangible outputs were expected from the Marketing Fair. The Marketing Fair was intended as a venue for initiating interactions between the members of the target audience and the woredas. The Marketing Fair was designed as a first step in a series of activities to identify the potential needs of the woredas and to start a dialogue which could eventually lead to a more sustained relationship between the WEOs, the NGO and donor agencies. From the observations made by the representatives of the NGOs and donor agencies and the participants from the woredas, one can confidently conclude that this objective was achieved successfully.

8.6 NEED FOR BROADENING THE SOURCES FOR FINANCING THE WPEDP

Two distinct sets of follow-up activities are proposed to: i) carry forward the contacts and discussions started during the Marketing Fair to develop a sustainable relationship between the WEOs and the NGOs and donors; and ii) initiate actions to expand the scope of the Marketing Fair to other NGOS and donor organisations.

8.6.1 Actions to Carry forward the Contacts and Discussions Started during this Marketing Fair

This Marketing Fir was only a beginning. Both the WEOs and NGOs and donor agencies will need to sustain the initial contacts made with several systematic follow-up actions to convert the contacts into tangible support for education in the woreda. As the woreda's relationship with NGOs and donor agencies is not a one time event, it would be more practical to consider these follow-up actions as part of an annual cycle of actions to obtain and maintain support for education in a sustained manner. The following actions are proposed as a guideline for the WEOs. These actions could form a part of the annual planning and budgeting process of the WEO to:

(1) Prioritize woreda activities or needs for education based on the major goals of education identified in the WPEDP. This may come from the strategies and programmes proposed in the WPEDP.

(2) Identify activities or needs from the priority list that may not be financed through regular annual budgetary support from the woreda council.

(3) Match the activities identified in step 2 above with NGOs or other donor agencies that are likely to provide support to meet the needs of the woreda education system.

(4) Prepare a brief project proposal for presentation to potential supporting organization(s).

(5) Get clearance through the proper channels both within and outside the woreda government, as required.

(6) Present the proposal to the organization. Take follow-up action to meet the requirements of the development partner.

8.6.2 Actions by the WEO for Expanding the Scope of the Marketing Fair

This Marketing Fair considered targeting only a small group of potential NGOs and donor agencies for marketing the WPEDP. There are many other groups, such as private sector business, community organizations, wealthy individuals, etc. who live in each woreda. WEOs are encouraged to design and implement marketing fairs to reach these groups using the experience gained through this Marketing Fair.

8.7 OBSERVATIONS

8.7.1 Woreda Participants

Woreda participants showed enormous commitment to the development of the woreda education system during their participation in the micro-planning exercise to develop the WPEDPs. This Marketing Fair strengthened their commitment further by providing ideas and a venue for raising additional resources to realize the programmes and projects they developed in the WPEDP. Seeing the results of the plans developed through implementation of the programmes brought a sense of achievement and commitment. The Marketing Fair provided a new idea to make this happen.

8.7.2 The OEB and the ZEO

Sustaining the ideas and actions generated through the micro-planning exercise and the Marketing Fair requires continued organizational and professional support from the OEB. Without the OEB's support, sustaining the innovations initiated during the SMAPP Project will be difficult. The pronouncements by the leadership of the OEB, during the Marketing Fair, instilled confidence that organizational and professional support would be forthcoming. Equally important was the commitment and enthusiasm shown by the professionals from the OEB and the zone offices with respect to their individual commitment to the concept of marketing the WPEDP.

8.7.3 Regional and Federal Agencies

The MoFED and BoFED play key roles at the federal and regional levels for identifying and allocating resources to education development. The MoE, as the key federal agency for education, plays a significant role in negotiating resources and communicating the needs for education development with a wide group of agencies. Therefore, the presence of the representatives from these regional and federal agencies augurs well for the experiment that was started through the Marketing Fair.

8.7.4 Intensity of Participation

Overall, the Marketing Fair was characterized as intense with respect to participation. The interaction of participants from the woredas with the members of the NGOs and donor agencies during the preparations for the Marketing Fair and the Marketing Fair itself was characterized by an intensity of purpose.

8.7.5 NGO Representatives

On the whole, the response from the representatives of NGOs and donor agencies that attended the Marketing Fair was very positive. They put forward very valuable suggestions to carry the contacts initiated during the Marketing Fair to result in more tangible actions. They found the Marketing Fair and the documents and information provided during the occasion very useful in understanding the needs of the woredas.

8.7.6 Over Expectation

Perhaps one of the potential negative consequences could be over possibly too high expectations generated among the woredas through the Marketing Fair. This was the first experience for many of the woredas participating in the Marketing Fair to come in direct contact with NGOs and donor agencies. The process of potential-funding activities generally is a time consuming activity and could take a long time to produce any tangible results. Some of the woredas may get discouraged by a lack of quick results.

8.7.7 Need to Provide Follow-up Support to the Woredas

Marketing is a new concept for the WEOs. Planning and executing the follow-up actions proposed in Section 8.4 will require technical support for the woredas. Similarly, the woredas will require conceptual support to expand the scope of the marketing fair to other target audiences in the woreda. This support will have to come from the OEB.

CHAPTER 9:PROPOSED ACTION PLAN FOR WPEDP MANAGEMENT

9.1 INTRODUCTION

The WEOs are the key leaders in the development of primary education improvement at the woreda level. The main responsibilities of the WEOs, in educational administration and financial management for improving access and quality of primary education, are:

(1) Operation of the AEC exercises and data management at the woreda level;

(2) Nomination and record keeping of the primary schools and the ABECs;

(3) Technical guidance and supervision of Cluster Resource Centres (CRCs), primary schools and ABECs;

(4) Planning, resource mobilization, implementation and Monitoring and evaluation (M&E) of school and classroom constructions for the government primary schools;

(5) Planning and recruiting teachers and provision of in-service training for teachers of the government primary schools;

(6) Reporting of the needs of textbooks of the woreda to the OEB and distribution to the government primary schools;

(7) Planning and implementation of community awareness improvement and community mobilization projects;

(8) Preparation of the annual financial plan to cover the recurrent cost and the development expenses; and

(9) Preparation, updating, implementation, monitoring and evaluation of the WPEDP as mid-term plan.

The WEOs responsibilities (1) – (8) listed above were their original duties and responsibility (9) was added by the OEB during the SMAPP Project.

In addition to the annual financial plan, which the WEOs had prepared annually, the WEOs were requested to prepare and implement the WPEDP. The WPEDPs enabled the WEOs to have a wider scope of activities with respect to the improvement plan by more involvement in resource mobilization and distribution of the resources.

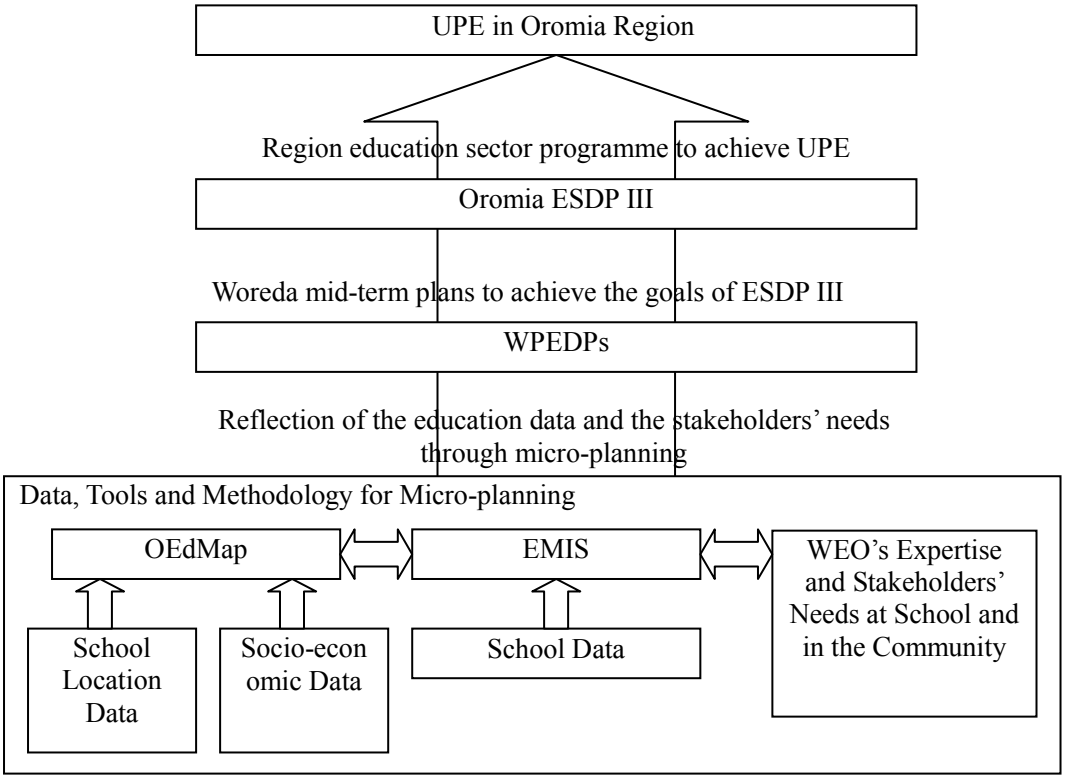
All of the responsibilities of (1) – (8) need to be planned and conducted following the WPEDPs, based on the achievements of the responsibilities (1) – (8) and the progress of the WPEDPs (9) shall be monitored and evaluated, as well.

117 drafts of the first version of the WPEDPs were produced through micro-planning by the pilot WEO officers during the SMAPP Project, as mentioned in the previous chapters of this report. The WPEDPs were the concrete products created through the combination of the micro-planning methodology, scientific data and tools, and various people's expertise and experience,

In other words, the WPEDPs became the first mid-term four-year education plan prepared by the WEOs in the Oromia Region to achieve ESDP III and UPE with regard to reflecting the stakeholders' needs and analyzing education data The first version of the WPEDPs expects to receive useful comments and advice from the

stakeholders for making improvements in the Plan.

The role and position of the WPEDPs in educational improvements in the Oromia Region is illustrated in Figure 9-1.



(Source: prepared by the SMAPP Project Team)

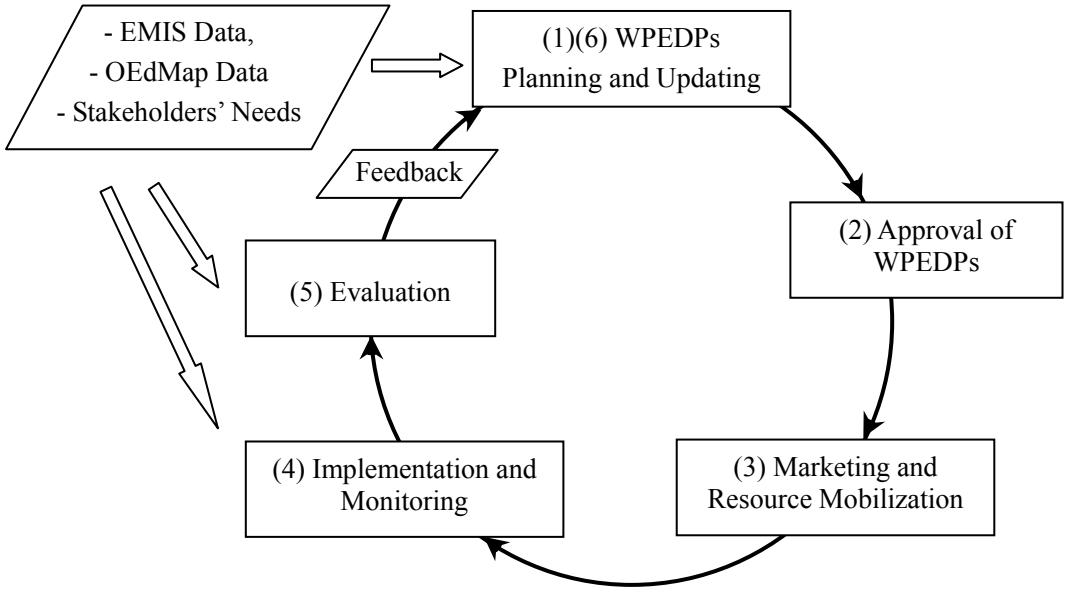
Figure 9-1: Position of the WPEDP in Education Improvement in Oromia Region

An action plan, prepared by the SMAPP Project Team, to update, implement, monitor and evaluate the WPEDPs is proposed in the following sub-sections of this chapter. It will need to be revised and equipped with detailed guidelines by the OEB in order to make the WPEDP operational with the EMIS and the OEdMap for primary education improvement in the Oromia Region.

9.2 WPEDP MANAGEMENT

The process to prepare, update, implement, monitor, and evaluate the WPEDPs is not a one-way. Based on feedback from the evaluation of the previous WPEDPs, and the data from the EMIS, the OEdMap and the stakeholders, the WPEDPs needs to be updated regularly.

The whole process of the WPEDPs management is in a cycle as shown in Figure 9-2.



(Source: prepared by the SMAPP Project Team)

Figure 9-2: WPEDPs Management Cycle

The steps included in the WPEDPs management cycle are:

(1) The WPEDPs are to be drafted by the WPT; which consists of WEO officers with technical support of the OEB and the ZEOs based on ESDP, education and socio-economic data from the EMIS and the OEdMap, and stakeholders needs;

(2) The WPEDPs drafts are to be approved by the woreda cabinets and the WEOs to report to the OEB soon after the Cabinets' approval;

(3) The WPEDPs are to be marketed by the WEOs for resource mobilization to implement strategies and activities included in the WPEDPs;

(4) Each WEO is to implement the WPEDPs and monitor its progress, which will be monitored by the OEB;

(5) The achievements, impacts and efficiencies of the WPEDPs are to be evaluated by the WEOs; and lessons learnt need to be fed back to the next stage for updating of the WPEDPs; and

(6) The WPEDPs are to be updated every five years as a mid-term education plan, following the ESDP updating, based on the achievements, lessons learnt from the previous WPEDPs and the data and tools from the updated EMIS and the OEdMap.

The proposed steps for updating, monitoring and evaluation of the WPEDPs are outlined in the following sub-sections, while the other steps for preparation and marketing are explained in Chapters 6, 7 and 8 of this report.

9.2.1 Monitoring and Evaluation of the WPEDP

The head of each WEO is responsible for M&E for the WPEDPs at the woreda level and for reporting the M&E results to the OEB.

The PRPD of the OEB is responsible for support and supervision of these WEO activities, while the EMIS Team of the OEB will assist the WEOs in M&E by providing an OEdMap package of M&E data and tools.

The OEdMap package of the M&E data and tools includes:

1) a school map (A1-size map);
2) a school coverage map (A4-size map);
3) a school information map (A4-size map); and
4) a school information matrix.

The OEdMap package will be prepared by the EMIS Team from the updated EMIS and OEdMap and will be provided for each WEO annually.

The M&E of the WPEDPs, at the woreda and the region levels, consists of i) regular monitoring, ii) a mid-term evaluation, and iii) a terminal evaluation, as shown in Table 9-1.

Table 9-1: Outline of the Monitoring and Evaluation of the WPEDPs

Type of M&E	Schedule	Activities
(1) Regular Monitoring	Daily basis	- Monitoring by the WEOs as routine work - Reporting at the Quarterly Review Meetings of the OEB - Wrap-up and technical guidance by the OEB
(2) Mid-term Evaluation	In the midst of the ESDP and the WPEDP implementation = about two years after the commencement of the new ESDP and the updated WPEDP	- Assessment of the progress and achievements of the WPEDPs by the WEOs - Reporting at the relevant Quarterly Review Meetings - Technical guidance by the OEBs and modification of the WPEDPs if necessary
(3) Terminal Evaluation	At the end of the ESDP and the WPEDP implementation period	- Assessment of the achievements and impacts of the WPEDPs by the WEOs - Reporting at the relevant Quarterly Review Meetings - Technical guidance by the OEBs and an identification of lessons learnt in the WPEDPs implementation

(Source: prepared by the SMAPP Project Team)

The progress and achievements of the strategies and projects of the WPEDP will be checked and assessed by the WEOs using the M&E data and tools package mentioned above. The findings of the M&E at the woreda level will be reported by the WEOs at the relevant Quarterly Review Meetings, which are held in Adama regularly by the

OEB with invitations to all of the WEOs to attend.

The PRPD of the OEB will provide technical advice for the WEOs in how to conduct the M&E, using the WPEDPs and the OEdMap package. Based on the M&E results prepared by the WEOs, the PRPD should grasp an overall view of the progress of the education improvements in the region, be able to review the resource allocation performance, and to compile the lessons learnt from the WPEDPs as feedback for the preparation of the next ESDP and for updating the WPEDPs.

9.2.2 Updating of WPEDP

The WPEDPs will be updated every five years, which corresponds to the updating cycle of the ESDP, a regional mid-term five-year education plan. Therefore, the first updating of the WPEDPs, prepared during the SMAPP Project, will be done in 2003 E.C. (2010/11).

A WPT for updating the WPEDP will be formed by each WEO. A WPT may include four members, including a WEO head as a leader of the WPT, a planner or a statistician, and primary education officers, similar to what was formed during the SMAPP Project.

A micro-planning and updating workshop to update the WPEDP will be held for five to six days in a zone capital by the ZEO, where all of the WTPs in the zone will be invited. Main players in the micro-planning and updating workshop will be the WPTs, who will be facilitated by the ZEO officers. The OEB will provide the technical and financial assistance for all of the workshops conducted at the zone level.

The latest version of the OEdMap package will be provided for the WPTs by the EMIS Team as data and tools for updating the WPEDPs.

The workshop will include the following planning activities:

(1) Review of the results and lessons learnt from the M&E reports;

(2) Revision of the vision and mission statement based on the new ESDP;

(3) Update of the education and socio-economic profiles of the woreda;

(4) Revision of the goals and targets;

(5) Re-calculation of the demand and cost estimates for the next five years;

(6) Revision of the distribution strategy of the mid-term plan; and

(7) Update of the implementation and monitoring plan

These activities will be guided by the SMAPP Micro-planning Training Manual prepared by the OEB and the SMAPP Project Team.

9.3 OPERATION STRUCTURE OF WPEDPS MANAGEMENT

The WEOs are to be the main players in the WPEDP's management, while the PRPD of the OEB is to be the key department which will guide and supervises the WEOs' planning and M&E activities. The key sections/agencies and their responsibilities for each step and task included in the WPEDPs management are proposed in Table 9-2.

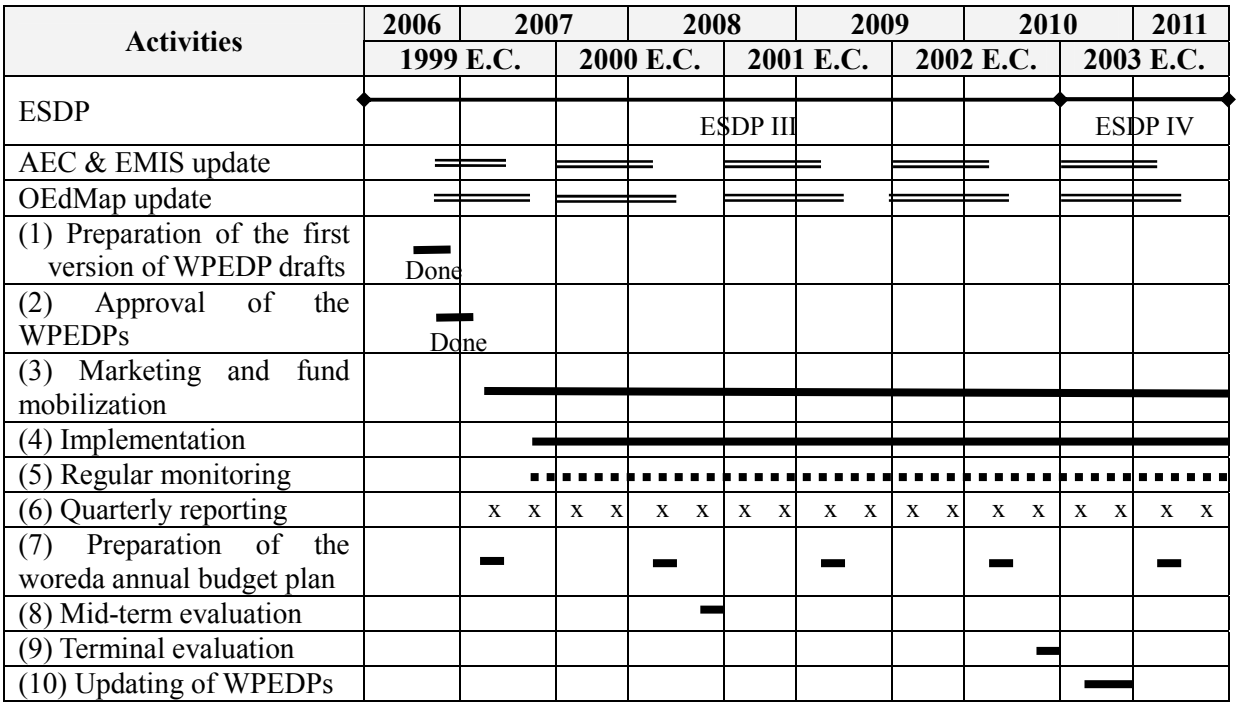
Table 9-2: Proposed Key Sections/Agencies and their Main Responsibilities in the WPEDPs Management

Steps	Sections/Agencies	Main Responsibilities
(1)(6) Planning and Updating	WEOs	Formulation of a WPT Planning and updating of the WPEDPs by the WPT in the micro-planning workshop
	ZEOs	Facilitation of the WPTs' preparation of the WPEDPs
	PRPD	Supervision of the WPT activities
	EMIS Team	Provision of the data and tools for updating
(2) Approval	WEOs	Submission and explanation of the WPEDP drafts to the woreda cabinet Reporting of the approval status to the OEB
	Woreda cabinet	Review and approval of the WPEDPs
	PRPD	Monitoring of the progress of the approvals
(3) Marketing and Resource Mobilization	WEOs	Marketing and resource mobilization
	ZEOs	Technical support for the WEOs
	PRPD	Supervision of the WEOs' activities
(4)(5) Implementation and M&E	WEOs	Implementation and M&E
	ZEOs	Technical support for the WEOs
	PRPD	Supervision of the WEOs' activities
	EMIS Team	Provision of the OEdMap package

(Source: prepared by the SMAPP Project Team)

9.4 IMPLEMENTATION SCHEDULE

The implementation schedule of M&E and updating of the WPEDPs is proposed in Figure 9-3.



(Source: prepared by the SMAPP Project Team)

Figure 9-3: Implementation Schedule

9.5 COST ESTIMATE FOR PREPARATION AND UPDATING OF WPEDPS

9.5.1 Updating of the 117 WPEDPs

The cost for updating of the 117 WPEDPs is estimated at Birr 485,710 (approximately USD 55,000), which will be necessary for conducting the micro-planning and updating workshop in 2003 E.C. (2010/11). The cost estimate for updating the WPEDPs by zone (including Adama Special Zone) is shown in Table 9-3.

Table 9-3: Cost Estimate for Updating of the 117 WPEDPs (1/2)

(Unit: Ethiopian Birr)

Item	Unit Cost	No.	Amount	Remarks
(1) East Arsi Zone (26 woredas)				
Workshop room	100	10 room-days	1,000	2 rooms x 5 days
Refreshment	50	540 person-days	27,000	4 persons x 26 woredas + 4 Zone officers
Transport	50	104 persons	5,200	Transport to the zone capital
Per diem	70	728 person-days	50,960	104 persons x 7 days (5 days training and 2 days transport)
Stationery	50	108 persons	5,400	Paper, markers, toner etc.
Computer/printer	200	25 set-days	5,000	Fee for renting, 5 sets x 5 days
Operator	5	2600 page-woredas	13,000	100 pages x 26 woredas
Sub-total	Birr 107,560			
(2) West Arsi Zone (8 woredas)				
Workshop room	100	5 room-days	500	1 room for 5 days
Refreshment	50	170 person-days	8,500	4 persons x 8 woredas + 2 zone officers
Transport	50	32 persons	1,600	Transport to the zone capital
Per diem	70	224 person-days	15,680	32 persons x 7 days (5 days training and 2 days transport)
Stationery	50	34 persons	1,700	Paper, markers, toner etc.
Computer/printer	200	10 set-days	2,000	Fee for renting, 2 sets x 5 days
Operator	5	800 page-woredas	4,000	100 pages x 8 woredas
Sub-total	Birr 33,980			
(3) West Harerge Zone (14 woredas)				
Workshop room	100	5 room-days	500	1 room for 5 days
Refreshment	50	290 person-days	14,500	4 persons x 14 woredas + 3 zone officers
Transport	50	56 persons	2,800	Transport to the zone capital
Per diem	70	392 person-days	27,440	56 persons x 7 days (5 days training and 2 days transport)
Stationery	50	58 persons	2,900	Paper, markers, toner etc.
Computer/printer	200	15 set-days	3,000	Fee for renting, 3 sets x 5 days
Operator	5	1400 page-woredas	7,000	100 pages x 16 woredas
Sub-total	Birr 58,140			
(4) East Shewa Zone (15 woredas)				
Workshop room	100	5 room-days	500	1 room for 5 days
Refreshment	50	315 person-days	15,750	4 persons x 15 woredas + 3 zone officers
Transport	50	60 persons	3,000	Transport to the zone capital
Per diem	70	420 person-days	29,400	60 persons x 7 days (5 days training and 2 days transport)
Stationery	50	63 persons	3,150	Paper, markers, toner etc.
Computer/printer	200	15 set-days	3,000	Fee for renting, 3 sets x 5 days
Operator	5	1500 page-woredas	7,500	100 pages x 15 woredas
Sub-total	Birr 62,300			

(Source: prepared by the SMAPP Project Team)

Table 9-3: Cost Estimate for Updating of the 117 WPEDPs (2/2)

(Unit: Ethiopian Birr)

Item	Unit Cost	No.	Amount	Remarks
(5) West Showa Zone (21 woredas)				
Workshop room	100	10 room-days	1,000	2 rooms x 5 days
Refreshment	50	440 person-days	22,000	4 persons x 21 woredas + 4 ZEO officers
Transport	50	84 persons	4,200	Transport to the zone capital
Per diem	70	588 person-days	41,160	84 persons x 7 days (5 days training and 2 days transport)
Stationery	50	88 persons	4,400	Paper, markers, toner etc.
Computer/printer	200	20 set-days	4,000	Fee for renting, 4 sets x 5 days
Operator	5	2100 page-woredas	10,500	100 pages x 21 woredas
Sub-total	Birr 87,260			
(6) North Shewa Zone (18 woredas)				
Workshop room	100	5 room-days	500	1 room for 5 days
Refreshment	50	375 person-days	18,750	4 persons x 18 woredas + 3 ZEO officers
Transport	50	72 persons	3,600	Transport to the zone capital
Per diem	70	504 person-days	35,280	72 persons x 7 days (5 days training and 2 days transport)
Stationery	50	72 persons	3,600	Paper, markers, toner etc.
Computer/printer	200	20 set-days	4,000	Fee for renting, 4 sets x 5 days
Operator	5	1800 page-woredas	9,000	100 pages x 18 woredas
Sub-total	Birr 74,730			
(7) South West Shewa Zone (14 woredas)				
Workshop room	100	5 room-days	500	1 room for 5 days
Refreshment	50	290 person-days	2,900	4 persons x 14 woredas + 3 zone officers
Transport	50	56 persons	14,500	Transport to the zone capital
Per diem	70	392 person-days	27,440	56 persons x 7 days (5 days training and 2 days transport)
Stationery	50	58 persons	2,900	Paper, markers, toner etc.
Computer/printer	200	15 set-days	3,000	Fee for renting, 3 sets x 5 days
Operator	5	1400 page-woredas	7,000	100 pages x 16 woredas
Sub-total	Birr 58,240			
(8) Adama Special Zone				
Workshop room	100	5 room-days	500	1 room for 5 days
Refreshment	50	25 person-days	1,250	4 persons x 1 woreda + 1 zone officer
Stationery	50	5 persons	250	Paper, markers, toner etc.
Computer/printer	200	5 set-days	1,000	Fee for renting, 1 set x 5 days
Operator	5	100 page-woredas	500	100 pages x 1 woreda
Sub-total	Birr 3,500			
Grand Total			**Birr 485,710**	**(Approximately USD 55,000)**

(Source: prepared by the SMAPP Project Team)

9.5.2 Preparation of the WPEDPs for the Non-pilot Woredas

For approximately 170 non-pilot woredas in the Oromia Region, five (5) batches of the micro-planning workshop to prepare the WPEDPs shall be proposed to be conducted for six (6) days in Adama, inviting the WPTs from the non-pilot woredas, after the OEdMap cover these woredas. These five (5) batches of workshops do not necessarily need to be conducted in the same year.

The cost for preparing the WPEDPs for the non-pilot woredas, for six (6) days in five

(5) batches in Adama, is estimated at Birr 1,057,500 (approximately USD 120,000). The details of the cost estimate for the preparation of the WPEDPs for the non-pilot woredas is shown in Table 9-4 for reference of the OEB's for future implementation.

In Table 9-4, the cost of the packages of the data and tools, for the non-pilot woredas prepared from the EMIS and the OEdMap, was not included; this information is shown in the cost estimates for the operation and management of the OEdMap in Chapter 5.

Table 9-4: Cost Estimate for Preparing WPEDPs for the Non-pilot Woredas (One Batch)

(Unit: Ethiopian Birr)

Item	Unit Cost	No.	Amount	Remarks
Cost for One (1) Batch: 30 woredas will join				
Workshop room	200	6 room-days	1,200	1 room x 6 days
Refreshment	50	864 person-days	43,200	4 persons x 34 woredas + 3 instructors + 5 facilitators
Fee for instructors	120	18 person-days	2,160	3 persons x 6 days
Fee for facilitators	70	30 person-days	2,100	5 persons x 6 days
Transport	150	144 persons	21,600	Transport to the zone capital
Per diem	70	1440 person-days	100,900	144 persons x 10 days (6 days training and 4 days transport)
Training manuals	70	42 copies	2,940	Afan Oromo version
Stationery	100	144 persons	14,400	Paper, markers, toner etc.
Computer/printer	200	30 set-days	6,000	Fee for renting, 6 sets x 5 days
Operator	5	3400 page-woredas	17,000	100 pages x 30 woredas
Sub-total			Birr 211,500	
Total Cost of the Five (5) Batches			**Birr 1,057,500**	**(Approximately USD 120,000)**

(Source: prepared by the SMAPP Project Team)

9.6 ISSUES TO BE CONSIDERED

The following points need to be considered and improved by the OEB for updating and preparation of the WPEDPs in the next steps.

(1) Improvement in the current version of the WPEDPs: to cover both the issues of access and quality improvement in primary education in the woreda;

(2) Giving more simple structure to a WPEDP and a reduction in the volume (the number of pages);

(3) Clarification of the OEB's role to supervise and monitor the process of updating and preparation;

(4) Enhancement of the ZEOs' capacity to facilitate the WEOs activities;

(5) Preparation of overall region and zone plans based on the WPEDPs to develop a wider view of educational improvement and to monitor the ESDP progress;

(6) Improvement in how to increase the stakeholders' involvement in needs identification and how to involve the community in the improvement planning in the micro-planning process;

(7) Strengthen the WEOs' and schools' understandings of the importance of data

management through the micro-planning process; and

(8) Provision feedback from the micro-planning process for the EMIS and the OEdMap to improve these systems.

CHAPTER 10: TERMINAL EVALUATION

10.1 OBJECTIVES

The SMAPP Project Team conducted three types of the evaluation surveys during the Project period: baseline survey, mid-term evaluation, and terminal evaluation, as shown in Table 10-1.

Table 10-1: Timeline and Objectives of the ME in the SMAPP Project

Type of ME	Period	Main Objectives
(1) Baseline Survey	May 2005	To collect the data to understand the baseline situation (before-the-project status) of the primary education administration in Oromia Region, before starting the main activities of the SMAPP Project
(2) Mid-term Evaluation	March 2006	To assess the progress and achievements of the SMAPP Project at the midst point of the project period and to update the implementation plan, if necessary, based on the findings and the lessons learnt from the mid-term evaluation
(3) Terminal Evaluation	April and June 2007	To assess the SMAPP Project process and achievements and to identify lessons learnt and recommendations

(Source: Prepared by the SMAPP Project Team)

The objectives of the terminal evaluation were, as shown in Table 10-1, to:

1) Assess the relevance, efficiency, achievements, impacts, and sustainability of the SMAPP Project;
2) Identify and collect the anecdotes and/cases which may indicate the impact among the education officers at the woreda, zone, and region levels;
3) Analyze the factors which promoted and/or inhibited the progress and achievements of the SMAPP Project;
4) Prepare lessons learnt from the terminal evaluation to improve the planning, implementation, monitoring and evaluation of the education improvement projects; and
5) Produce recommendations to strengthen the operation and maintenance system of the EMIS, the OEdMap and the WPEDPs, which were developed and strengthened by the SMAPP Project.

10.2 DESIGN OF TERMINAL EVALUATION

The terminal evaluation was designed based on the logical framework as shown in Table 10-2, which was prepared in February 2006 and shown in the Interim Report.

Table 10-2: Logical Framework of the OEB/JICA SMAPP Project

Responsible Agency: Oromia Education Bureau (OEB)
Target Area: 117 Woredas of the 7 Pilot Zones of Oromia Region

Project Summary	Indicators	Data Source of Indicators	Important Outer Conditions
Long-term Goal: - Achievement of the UPE in Oromia Region	- Enrolments and GER (NER) of primary education - Dropout rate - Gender disparity	- Annual education census - EMIS data - OEdMap data	- Federal/region governments' commitment to achieve UPE
Mid-term Goal: - Educational improvements in primary education are to be efficiently promoted following the WPEDPs in Oromia Region	- Level of recognition/use of the WPEDPs by the federal/region governments and by the woreda councils - Fund mobilization and project implementation based on the WPEDPs	- Site visit (office visit) - Interview and questionnaire surveys of the baseline, mid-term and post-project surveys - Checking of WPEDPs	- OEB, ZEOs and WEOs' strong sense of ownership of woreda education plans
SMAPP Project Purpose: - The capacity of the WEO officers is to be developed in data management, planning and marketing of the WPEDPs of the seven pilot zones of Oromia Region with the enhanced technical support of the OEB.	- Quality of the WPEDPs - WEO officers' capacity in: a. data management b. situation analysis/projection c. planning of strategies d. cost estimates e. compilation of the plan f. marketing g. facilitation - Technical support by OEB/ZEO: a. operation and maintenance of EMIS b. operation and maintenance of OEdMap c. supervision and technical guidance of micro-planning		- The ManaBU Project and other related projects are to be implemented as planned. - Decentralization policy is to be promoted as scheduled.
Activity Components: (1) To prepare the overview report of the primary education development (2) To enhance the AEC and the EMIS (3) To develop GIS-integrated school mapping system: the OEdMap (4) To assist in preparation of the WPEDPs through micro-planning (5) To provide training of education officers in data management and planning	**Input:** **a. Personnel Input:** - Steering Committee - Professionals of micro-planning task force - Professionals of EMIS and school mapping task force - Region, ZEO and WEO officers - JICA SMAPP Project Team **b. Physical Input:** - Project office - Computers, printers, plotter, GPS, related software - Materials and equipment for training workshop **c. Financial Resources:** - Cost for the project operation - Cost for the OEdMap development - Cost for the WPEDPs preparation **d. Counterpart Training in Japan and Malawi:**		- Ratio of the turnover of the ZEO and WEO education officers are to be minimized.

(Source: Prepared by the OEB/SMAPP Task Forces and the SMAPP Project Team)

The indicators were collected through the following methodologies from the data sources shown in Table 10-3.

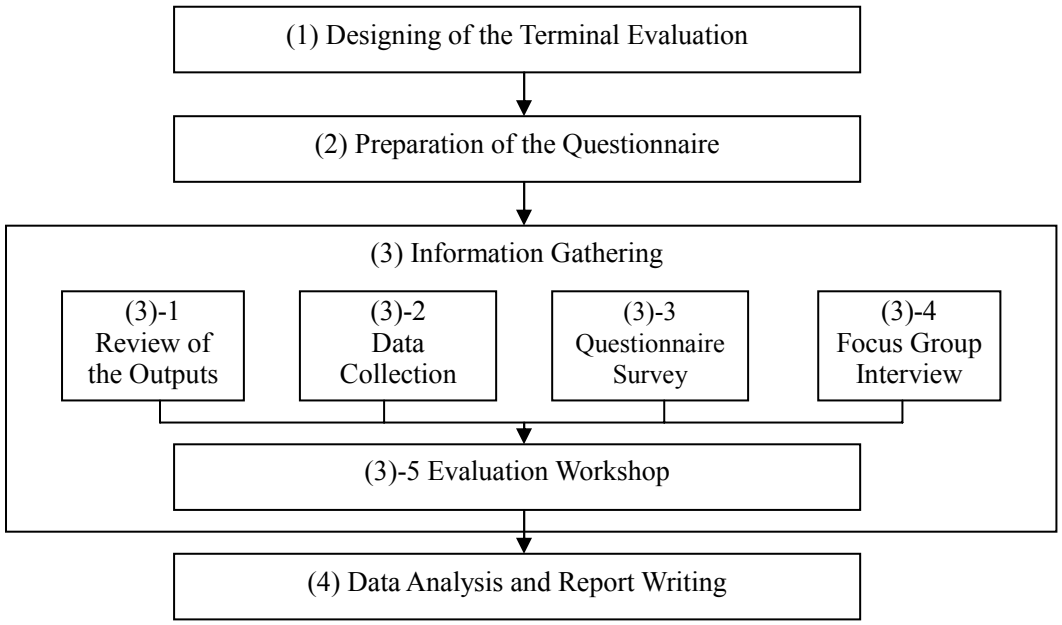
Table 10-3: Indicators Covered by the Terminal Evaluation

Indicators	Data Source/ Methodology of Data Collection
1) Indicators for the Long-term Goal:	
1)-1 Enrolment, GER, NER, dropout rate, and gender disparity of the primary education of the target area	- Analysis of the annual abstract and/or other relevant statistics and documents
2) Indicators for the Mid-term Goal:	
2)-1 Level of recognition/use of the WPEDPs at the federal, region, zone and woreda levels	- Questionnaire survey of WEO officers - Focus group interview with WEO officers - Assessment of the OEB and the SMAPP Project Team
2)-2 Fund mobilization and project implementation based on the WPEDPs	- Questionnaire survey of WEO officers - Focus group interview with WEO officers
3) Indicators for the SMAPP Project Purpose:	
3)-1 Quality of the WPEDPs	- Assessment by the OEB and the SMAPP Project Team - Feedback from WEO officers and other stakeholders
3)-2 WEO officers capacity in - data management - situation analysis/projection - planning of strategies - cost estimates - compilation of the plan	- Questionnaire survey of WEO officers - Focus group interview with WEO and ZEO officers - Evaluation workshop with the Task Forces
3)-3 ZEO officers capacity in - data management - orientation and facilitation - leadership	- Questionnaire survey of ZEO officers - Focus group interview with WEO and ZEO officers - Evaluation workshop with the Task Forces
3)-4 OEB officers capacity in - operation and maintenance of EMIS - operation and maintenance of OEdMap - supervision and technical support for preparation of the WPEDPs	- Evaluation workshop with the Task Forces - Observation by the SMAPP Project Team - Review of the SMAPP Progress Reports
4) Indicators for the Project Outputs: achievements and effectiveness of the following items	
4)-1 Overview Reports prepared	- Review of the SMAPP Progress Reports - Questionnaire survey of WEO officers - Focus group interview with WEO and ZEO officers - Evaluation workshop with the Task Forces
4)-2 AEC improved	
4)-3 EMIS enhanced	
4)-4 OEdMap developed	
4)-5 WPEDPs produced	

(Source: Prepared by the SMAPP Project Team)

The information gathering for the terminal evaluation consisted of five main activities: namely, i) a review of the outputs including the OEdMap, the WPEDPs, school registers etc.; ii) data collection from the existing statistics and documents; iii) a questionnaire survey of WEO and ZEO officers; iv) a focus group interview with WEO and ZEO officers; and v) an evaluation workshop with the OEB Task Force members.

The steps for the terminal evaluation are shown in Figure 10-1.



(Source: Prepared by the SMAPP Project Team)

Figure 10-1: Steps for the Terminal Evaluation

The questionnaire survey of the WEO officers was done during the Quarterly Review Meeting held by the OEB in the end of April 2007, while the focus group interviews were conducted during the Marketing Fair in the middle of June 2007. The other data collection activities were done during the field survey period in June 2007.

10.3 CONSTRAINTS IN CONDUCTING OF TERMINAL EVALUATION

During the information gathering for the terminal evaluation, the SMAPP Project Team faced the following constraints:

(1) A questionnaire survey was conducted to assess the WEOs' improved capacity gained through the SMAPP Project, and using the outputs of the baseline survey, the mid-term and the terminal evaluations were compared. However, because of the high turnover rate of the WEO officers, the respondents to the three questionnaire surveys were not the same.

(2) Enhancement of the EMIS was one of the main components of the SMAPP Project, targeting primarily the improvement in the timeliness for reporting and improvement in the accuracy and appropriateness of the collected data. However, due to the sudden replacement of the original EMIS with the UIS-EMIS, the EMIS process was totally delayed. The accuracy of the data was also negatively affected because of the shortage of staff and data collection training in the new AEC questionnaire forms. As a consequence, it was impossible to measure the effectiveness of the efforts made by the SMAPP Project for EMIS enhancement.

(3) The educational data to assess the SMAPP Project contribution to overall goals were not available, because the timing for data collection of the last AEC 1999 E.C. (2006/07) was done in March 2007, which was too early to see the impact and the AEC data was not ready to be reviewed yet.

(4) The changes in administrative boundaries for zones and woredas made it difficult to compare baseline data with education data collected in 1998 E.C. (2005/06) to see changes during the SMAPP Project.

(5) To measure the impact in staff capacity development in the education officers, the timing of the terminal evaluation was too early to see if there were changes in their routine educational services work at the regional, zone, and woreda levels.

10.4 FINDINGS ON ACHIEVEMENT OF THE PROJECT OUTPUTS

The SMAPP Project was expected to produce four main outputs: i) an Overview Report; ii) an improved AEC and EMIS; iii) a school mapping database developed at the regional level; and iv) woreda primary education development plans prepared by the WEOs.

Among the four expected outputs of the SMAPP Project, three outputs, the Overview Report, the school mapping database, and the WPEDPs were achieved, while the improvement in the AEC and the EMIS was not completed, for negatively influenced by external conditions out of control by the Project

10.4.1 Overview Report

An Overview Report was prepared as scheduled and 10 copies (5 for the OEB and 5 for JICA) were submitted as originally scheduled.

The contents of the Overview Report covered the information needed to understand the conditions of primary education in the Oromia Region. Based on the request of the OEB, an additional 41 copies of the Overview Reports were provided by the SMAPP Project to the OEB for the use of the OEB and ZEO officers.

10.4.2 Enhanced AEC and the EMIS

The outputs of the AEC and the EMIS enhancement by the SMAPP Project were:

(1) A total of around 500 WEO and ZEO officers were trained in the two-day training in the SMAPP Training Workshops in data management, focusing on data definitions and the use of the education data and indicators.

(2) Four (4) officers of the OEB EMIS Team were trained in data management through on-the-job training through technology and knowledge exchange with the SMAPP Project Team during the two-and-a half year project period.

(3) 79,000 copies of the Grade 1 class registry and 8,000 sets of the school records forms, including registry forms for new students or intake into Grade 1, registry of transfer-in, and registry of transfers-out, a transfer certificate, were produced and distributed to all of the primary schools in the Oromia Region.

(4) Data for the SMAPP pilot woredas collected by the 1998 E.C. (2005/06) AEC were checked, cleaned, and processed for the use in the OEdMap database.

(5) The school information matrix for each woreda, which included school data from the 1998 E.C. (2005/06) AEC, was prepared for the micro-planning exercises to prepare the WPEDPs.

(6) A survey was conducted to understand the influence caused by the UIS-EMIS introduction and countermeasures were discussed by the EMIS Team and the SMAPP Project Team.

However, in spite of the activities of the SMAPP Project mentioned above, the timeliness and data accuracy of the AEC and the OEB EMIS could not be improved during the SMAPP Project period.

This was because, as mentioned in Chapter 4 of this report, the unexpected introduction of the UIS-EMIS, in September 2005 changed the AEC questionnaire forms and the EMIS database in the midst of the 1998 E.C. (2005/06) AEC preparation. This event critically inhibited the SMAPP Project from pursuing EMIS enhancement activities as scheduled.

Besides the introduction of the UIS-EMIS, the SMAPP Project activities also caused some negative effects on data entry for the 1998 E.C. (2005/06) EMIS. In order to prepare the latest data for the SMAPP micro-planning exercise, the EMIS Team was urgently forced to input the AEC data for the SMAPP pilot woredas, although that was their first experience with inputting data into the newly introduced UIS-EMIS.

The annual abstract of the 1998 E.C. (2005/06) EMIS, which was expected to be issued in March 2006, was not produced yet; the 1999 E.C. (2006/07) AEC, which was planned to be conducted in September 2006, was conducted in March 2007; and the data entry for the 1999 E.C. (2006/07) was being carried out as of June 2007.

10.4.3 School Mapping Database Developed at the OEB

The school mapping system named "OEdMap (= Oromia Education Map)" was developed at the OEB level. The outputs were:

(1) The OEdMap database was developed to cover the 117 SMAPP pilot woredas of the seven (7) SMAPP pilot zones and to have linkage with the EMIS. It was operated at the SMAPP Project Office in the OEB.

(2) Six (6) officers of the EMIS Team of the OEB were trained in updating, operations and maintenance of the OEdMap through Task Force discussions and activities, operation and management training courses, and on-the-job training during the two year project period. Among these six (6) officers, two officers had the enough skills and knowledge to update and operate the OEdMap.

(3) A total of around 230 WEO officers were trained in measuring school locations with GPS receivers.

(4) Four (4) manuals for updating and operating the OEdMap system were produced: namely: i) An Introductory GIS and School Mapping; ii) An Intermediate GIS and Utilization of School Mapping; iii) OEdMap Operation, Management and Updating; and iv) Using a GPS for School Mapping.

(5) Two (2) supplemental manuals were developed, including i) Data Transfer from EMIS to OEdMap and ii) Quick Start Guide for GPS.

(6) 20 copies of the OEdMap Manual Collection of the six (6) manuals were provided to the OEB.

(7) A set of the OEdMap package of the data and tools for micro-planning, monitoring and evaluation was given to each of the 117 SMAPP pilot WEOs during the 4th SMAPP Training Workshop for micro-planning. The package included: i) a School Coverage Map, ii) a School Information Map, iii) a School Information Matrix, and iv) a Woreda School Map.

The SMAPP Project accomplished the expected outputs for OEdMap development at

the OEB level. In order to expand the use of the OEdMap in educational administration not only at the regional level, but also at the woreda level and to enhance the sustainability of the OEdMap database, proper personnel and financial resource allocation to the OEdMap unit of the EMIS Team were secured.

10.4.4 WPEDP Prepared by the WEOs

The first versions of the WPEDPs were produced in the SMAPP Project by the WEO officers. The outputs of the WPEDPs preparation were:

(1) A process and methodology for micro-planning to prepare the WPEDPs, with the school location data from the OEdMap and the school indicators from the EMIS, was developed by the SMAPP Project and was put into practice by the OEB, ZEO and WEO officers.

(2) 117 WPEDP drafts were produced by the WEO officers in Afan-Oromo (Oromo language), through the micro-planning process and methodology developed by the SMAPP Project, at the 4th SMAPP Training Workshop.

(3) 117 WPEDPs were approved by the woreda cabinets.

(4) An English summary version was prepared for each of the 117 WPEDPs.

(5) A SMAPP Micro-planning Training Manual was developed in English and in Afan-Oromo (Oromo language); Copies of the manuals in English and in Afan-Oromo were delivered to the OEB, ZEO and WEO officers.

(6) A total of around 800 WEO officers were trained in micro-planning and in enrolment projections at the 1st, 2nd and 3rd SMAPP Training Workshop.

(7) Around 430 WEO officers were trained in micro-planning, enrolment projection, data analysis with the OEdMap package (School Coverage Map etc.), and preparation of the mid-term plan at the 4th SMAPP Training Workshop.

(8) A total of around 120 ZEO and WEO officers were trained in marketing and resource mobilization of the WPEDPs at the Marketing Fair.

(9) 13 ZEO officers were trained in micro-planning and facilitating the WEOs' activities for preparing the mid-term plan at the 3rd and 4th SMAPP Training Workshop.

(10) Five (5) officers of the OEB PRPD were trained in the data management, micro-planning, projection, data analysis with the OEdMap package, in the preparation of the WPEDPs, and in the marketing of the WPEDPs through Task Force discussions and activities, four (4) SMAPP Training Workshops, and knowledge and skills exchanges during the two year project period.

Based on the achievement levels listed above, the SMAPP Project accomplished the expected outputs for the WPEDPs preparation at the OEB, ZEO and WEO levels. The OEB was provided continuous guidance and support for the ZEOs and WEOs in their marketing, implementation, monitoring and updating of the WPEDPs.

10.5 FINDINGS ON ACHIEVEMENT OF PROJECT PURPOSE

The purpose of the SMAPP Project was; "The capacity of the WEO officers is to be developed in data management, planning and marketing of the WPEDPs in the seven (7) pilot zones of the Oromia Region with the enhanced technical support of the

OEB."

Figure 10-2 shows the areas, the levels and the activities of education administration covered by the capacity development activities of the SMAPP Project.

Levels \ Areas	Data Management	Planning	Marketing and Fund Raising	Implementation	Monitoring and Evaluation
Federal Government	N.C.	N.C.	N.C.	N.C.	N.C.
OEB	EMIS enhancement OEdMap development and operation and management	Supervision of micro-planning	Holding and facilitating of a marketing fair	N.C.	N.C.
ZEOs	Definition of education data	Facilitation of micro-planning	Facilitating in a marketing fair	N.C.	N.C.
SMAPP Pilot WEOs	Collection of school location data with GPS Definition of education data	Micro-planning Preparation of WPEDPs	Presentation in a marketing fair	N.C.	N.C.
CRCs	N.C.	N.C.	N.C.	N.C.	N.C.
Primary Schools	Distribution of school records	N.C.	N.C.	N.C.	N.C.

Note: N.C. = Not covered by the SMAPP Project

(Source: Prepared by the SMAPP Project Team)

Figure 10-2: The Areas, Levels and Activities of the Education Management Covered by the Capacity Development of the SMAPP Project

As shown in Figure 10-2, the SMAPP Project covered the OEB, ZEOs and pilot WEOs in the Oromia Region, as the target levels for capacity building in education administration. The primary schools were provided with a new school records form, while no training was given. The federal government and the CRCs were not covered.

The data management and planning were the main capacity development areas for the SMAPP Project. An awareness of the importance of marketing was improved through the holding of a marketing fair among the OEB, ZEOs and the pilot WEOs; however, trainings in marketing and fund raising were not fully provided. The knowledge and skills for implementation, monitoring and evaluation were not covered by the SMAPP Project.

To assess the achievement level of the project purpose for staff capacity development, four (4) indicators were used: i) quality of the WPEDPs; ii) the growth in WEO officers' capacity; iii) the growth in ZEO officers' capacity; and iv) the growth in OEB officers' capacity.

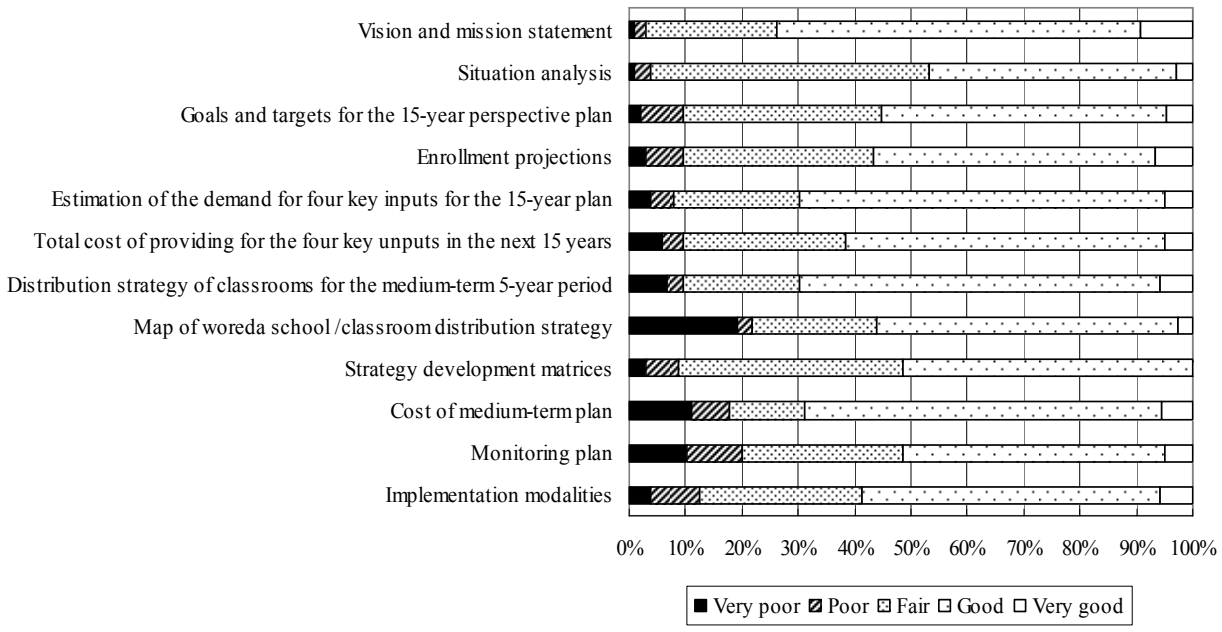
In addition to the capacity development of the WEO officers, the personnel and institutional capacity of the OEB and the ZEOs needed to be improved to provide appropriate support for the WEOs. Therefore, the performance indicators covered the OEB, ZEO and WEO levels.

The capacity of the WEO, ZEO, and OEB officers was improved in general; despite a high turnover rate observed during the SMAPP Project. The capacity of the WEO officers were expanded to include data analysis and how to prepare a WPEDPs. The capacity of the ZEO officers was enhanced in the area of staff training facilitation. The OEB officers expanded slightly their capacities in the areas of data collection operations and markedly in the updating of the OEdMap and in micro-planning, preparation and marketing of the WPEDPs.

The capacity of the WEO, ZEO and OEB officers in data collection and reporting for the AEC and the EMIS were not as effectively enhanced as hoped and scheduled.

10.5.1 Quality of WPEDPs

At the end of the 4th SMAPP Training Workshop, where the first version of the WPEDPs drafts were produced, the drafts were reviewed and checked by the ZEO officers, who played a positive role as facilitators during the Workshop. Figure 10-3 shows the percentage of the rating results done by the ZEOs on the main components of the WPEDPs: from very good to very poor.



(Source: Prepared by the SMAPP Project Team)

Figure 10-3: Percentage of the Rating Results by the ZEO on the Components of the WPEDPs by the ZEO

Based on Figure 10-3, more WPEDPs showed better quality in the components of vision and mission statement, situation analysis, goals and target setting, and strategy development, where the WPTs handled qualitative data rather than quantitative data. More WPTs found difficulties in mapping woreda school and classroom distribution strategy, costing of mid-term plan, and preparation of monitoring plan, which the WPTs were not familiar with in their routine work.

The quality of the WPEDPs created by the SMAPP Project can be assessed as follows:

(1) Based on the results of the assessment done by the ZEOs outlined above, it can be concluded that the first version WPEDPs were well done by the WPTs, considering it was their first experience in preparing a mid-term plan based on the objective data used and analysed and that they had to develop the WPEDPs during the limited time of six (6) days in the 4th SMAPP Training Workshop.

(2) The narrative sections of the WPEDPs, such as the vision and mission statements and the mid-term strategies, were relatively better conceptualised and written than the sections based on education indicators and school maps, which showed that the WEOs needed more training in data management and analysis and in the use of the school maps.

(3) According to the observation of the SMAPP Project Team, the first version of WPEDPs needed the following improvements:

   1) The contents and structure of the WPEDPs can be more simplified.

   2) Education and socio-economic indicators need to be improved based on the EMIS and the national census.

   3) Length of the WPEDPs can be reduced.

   4) More time is needed to prepare the WPEDPs.

   5) A key person from the schools or the community should be included on WPT.

(4) All of the 117 WPEDP drafts prepared during the SMAPP Training Workshop were approved by the woreda cabinets and regarded as the official documents for the woreda. This was a good indication of the WEOs' interests in and strong sense of ownership for the WPEDPs.

(5) The Marketing Fair provided the WEO officers with a good opportunity to review their WPEDPs and market them to development partners.

10.5.2 WEO Officers' Capacity

To assess how the capacity of the WEOs was enhanced by the SMAPP Project, a self-assessment survey was conducted by the WEOs at the mid-term evaluation and at the terminal evaluation. In addition, a focus group interview with the WEO officers was carried out by the OEB members and the SMAPP Project Team as part of the data collection for the terminal evaluation.

Table 10-4 shows the results of the WEOs' self-assessment in the terminal evaluation. The mean of ratings indicated that WEOs were more confident of their skills in situation analysis and in their understanding of the objectives of the WPEDPs, while they needed to have their skills improved in AEC data collections and in understanding school location maps.

Table 10-4: Capacity of the Respondent WEO Officers in the Seven Pilot Zones Based on the Survey in the Terminal Evaluation

Questions	No. of Respondents	Mean of Rating	Rating of Self Assessment of Improvement				
			1 (No change)	2 ←	3 (Partly improved)	4 →	5 (Very much improved)
1. Education Data Collection and Management							
1-1 How is your understanding of education indicators?	84 (100%)	3.86	2 (2.4%)	3 (3.6%)	23 (27.4%)	32 (38.1%)	24 (28.5%)
1-2. Did you successfully collect AEC questionnaire last year?	81 (100%)	3.39	7 (8.6%)	7 (8.6%)	24 (29.6%)	33 (40.8%)	10 (12.4%)
1-3 Do you check AEC questionnaire collected by schools?	77 (100%)	3.51	9 (11.7%)	4 (5.2%)	20 (26.0%)	26 (33.7%)	18 (23.4%)
1-4 How is the reliability of the education data collected in your woreda?	80 (100%)	3.51	0 (0.0%)	1 (1.3%)	44 (55.0%)	28 (35.0%)	7 (8.7%)
2. Planning							
2-1 Your understanding of the objectives of WPEDPs is improved?	82 (100%)	4.13	1 (1.2%)	0 (0.0%)	19 (23.2%)	29 (35.4%)	33 (40.2%)
2-2 How is your skill to analyze education indicators for situation analysis?	81 (100%)	3.92	1 (1.2%)	1 (1.2%)	21 (26.0%)	38 (46.9%)	20 (24.7%)
2-3 How about your understanding how to use the school location map?	83 (100%)	3.71	2 (2.4%)	4 (4.8%)	29 (34.9%)	29 (35.0%)	19 (22.9%)
2-4 How about your skills of situation analysis and prioritization of problems?	80 (100%)	4.22	1 (1.2%)	1 (1.2%)	9 (11.3%)	37 (46.3%)	32 (40.0%)
2-5 How about your skills to formulate objectives and strategies?	82 (100%)	4.03	1 (1.2%)	1 (1.2%)	20 (24.4%)	32 (39.0%)	28 (34.2%)
2-6 How is your skill to prepare a woreda budget plan?	81 (100%)	4.03	0 (0.0%)	1 (1.2%)	14 (17.3%)	47 (58.0%)	19 (23.5%)
3. Office Management							
3-1 How about your skill to monitor the school performance?	81 (100%)	4.13	0 (0.0%)	0 (0.0%)	10 (12.4%)	50 (61.7%)	21 (25.9%)
3-2 Haw about your office management skills?	82 (100%)	3.95	0 (0.0%)	4 (4.9%)	19 (23.2%)	36 (43.9%)	23 (28.0%)

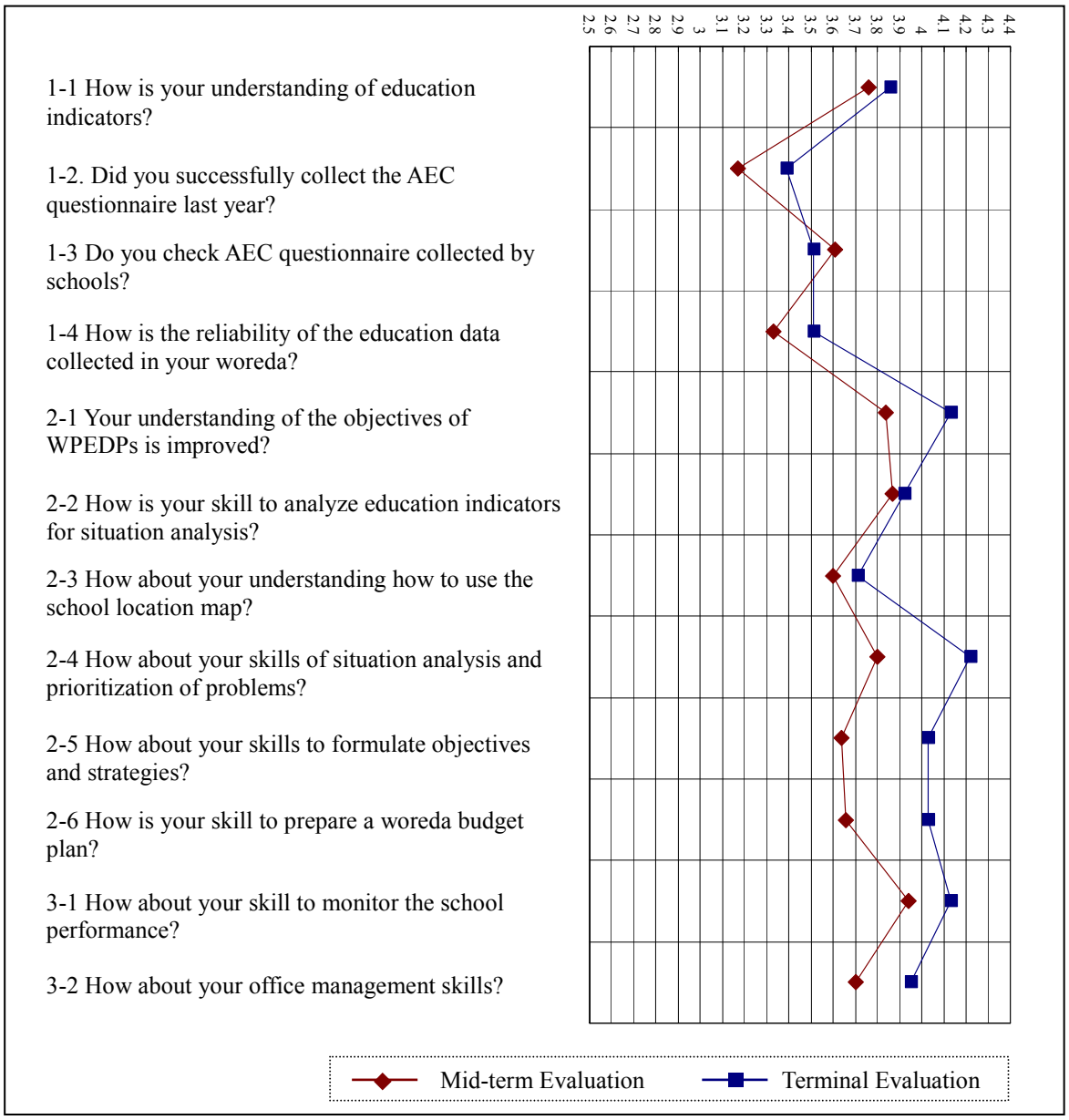
(Source: Prepared by the SMAPP Project Team)

Figure 10-4 below showed the change of the mean of rating between the self-assessment at the mid-term evaluation and the one at the terminal evaluation. Although the respondents in the two evaluations were not the same, it might be possible to say that the capacity of the WEOs was improved in general.

The WEO officers' capacity to understand the objectives of the WPEDPs, the situation analysis process, the formulation of objectives and strategies, and the preparation of a budget plan had been increased and developed, while the capacity to check the AEC questionnaire had lower ratings.

The ratings for the capacity to collect the AEC questionnaire and the assurance for the reliability of the AEC data collected by the WEOs remained low. The capacity to understand how to use the school location map showed low ratings, also. At the same

time, Figure 10-4 shows there were some needs for improvement in WEO office management.



(Source: Prepared by the SMAPP Project Team)

Figure 10-4: Comparison of the Mean of Rating of the WEOs' Self-Assessment between the Mid-term and the Terminal Evaluations

During the focus group interview with the WEOs, the following observations were made related to their capacity development during the SMAPP Project:

(1) The training and meetings with the ZEO and WEO officers with the school directors had improved data collection and management; however, the high turnover rate and the limited checking system of the data collected sometimes inhibited the improvement in data accuracy.

(2) Most of the WEO officers regarded the OEdMap as useful tools to know the status of education in their woreda; however, they need more training in interpreting the

information from the maps in order to prepare their WPEDP.

(3) The WEOs understood the importance and usefulness of the WPEDPs through the micro-planning exercises and through their experiences in the Marketing Fair.

(4) The WEOs needed more and improved information with respect to marketing, proposal preparation and fund raising based on their WPEDPs.

(5) The frequent turnover of staff in government offices at the woreda level, limited exposure to the NGOs different, often complicated applications and procedures required by donors making the WEOs' marketing activities difficult.

(6) Due to the high turnover rate of the WEO officers, the officers trained by the SMAPP Project to handle GPS receivers and micro-planning have already left their positions in some of the WEOs.

(7) The new WEOs that were set up following administrative changes, faced many difficulties: including shortages of personnel and a lack of facilities and equipment.

The achievements in capacity development for the WEO officers by the SMAPP Project can be summarized as follows:

(1) The capacity of the WEO officers in understanding educational indicators, situation analysis, planning and marketing was improved to a certain extent by the SMAPP Project; however, the OEB and the ZEOs need to consider the negative affects of the high WEO officers' turnover rate on the sustainability of achievements.

(2) Although Figure 10-4 shows that the capacity for WEO officers to do situation analysis and formulate objectives and strategies were given higher scores in the self-assessment by the WEOs, as mentioned above, these activities seemed to be carried out mainly based on their personal experiences and previously acquired knowledge. In order to improve the quality of the WPEDPs, the WEOs' capacity do an analysis of education indicators and to create school maps and do planning using these data and tools needed to be enhanced.

(3) A sense of their leadership role and sense of ownership of the school map and WPEDP was developed among the WEO officers,. These outcomes need to be followed up and supported by the ZEOs and the OEB.

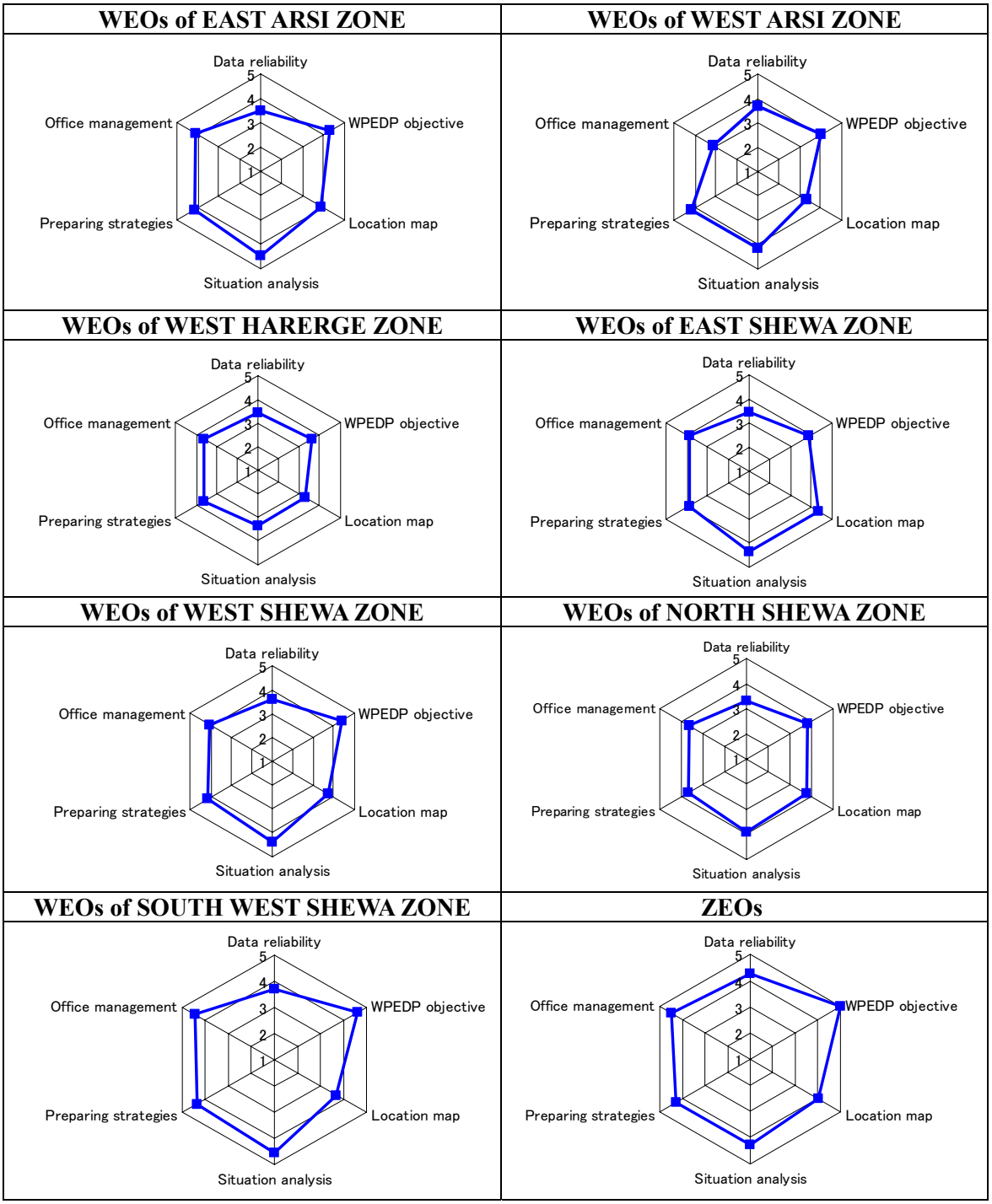
In Figure 10-5, there are radar charts which show the ratings at the terminal evaluation for WEO capacity by zone, and the ZEO capacity on the six (6) skills and knowledge which are as follows:, i) AEC data reliability; ii) an understanding of WPEDP objectives; iii) an understanding of the school location map; iv) the conduct of a situation analysis; v) the preparation of objectives and strategies; and vi) office management,.

The radar chart for the ZEOs shows that they had more capacity in those areas than the WEOs. The South West Shewa Zone had the largest radar chart, showing the highest scores for the WEOs among the zones.

Some of the radar charts had similar shapes. For example, the radar charts for the East Arsi Zone, West Shewa Zone and South West Shewa Zone have similar shapes, which show lower scores in the AEC data reliability and better scores in understanding WPEDP objectives and conducting a situation analysis. West Harerge Zone and North Shewa Zone indicate smaller radar charts, which may show they need to improve

more in all of the six (6) skills. The radar chart for the West Arsi Zone shows that they had less capacity to understand the school location maps and in office management, compared with other items than other zones.

These findings might be useful as basic information for the training needs assessment.



(Source: Prepared by the SMAPP Project Team)

Figure 10-5: Rader Chart of Ratings of the ZEO and WEO Self-Assessment for the Main Skills for Capacity Development during the SMAPP Pilot Zones

10.5.3 ZEO Officers' Capacity

The ZEOs played a role as facilitators during the micro-planning training. They guided and assisted the WPTs in situation analysis and in the preparation of the WPEDPs. The self-assessment survey by the ZEOs (Table 10-5) and the focus group interviews with the ZEOs were conducted at the terminal evaluation.

Table 10-5: Capacity of the Respondent ZEO Officers of the Seven Pilot Zones Based on the Questionnaire Survey of the Terminal Evaluation

Questions	No. of Respondents	Mean of Rating	Rating of Self Assessment of Improvement				
			1 (No change)	2 ←→	3 (Partly improved)	4 ←→	5 (Very much improved)
1. Education Data Collection and Management							
1-1 How is your understanding of education indicators?	4 (100%)	4.50	0 (0.0%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	3 (75.0%)
1-2. Did you successfully collect AEC questionnaire last year?	4 (100%)	4.25	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (75.0%)	1 (25.0%)
1-3 Do you check AEC questionnaire collected by woredas?	4 (100%)	3.00	1 (25.0%)	0 (0.0%)	1 (25.0%)	2 (50.0%)	0 (0.0%)
1-4 How is the reliability of the education data collected in your woreda?	4 (100%)	4.25	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (25.0%)	2 (50.0%)
2. Planning							
2-1 Your understanding of the objectives of WPEDPs is improved?	4 (100%)	5.00	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100.0%)
2-2 How is your skill to analyze education indicators for situation analysis?	4 (100%)	4.75	0 (0.0%)	0 (0.0%)	0 (0/0%)	1 (25.0%)	3 (75.0%)
2-3 How about your understanding how to use the school location map?	4 (100%)	4.00	1 (25.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (75.0%)
2-4 How about your skills of situation analysis and prioritization of problems?	4 (100%)	4.25	0 (0.0%)	0 (0.0%)	1 (25.0%)	1 (25.0%)	2 (50.0%)
2-5 How about your skills to formulate objectives and strategies?	4 (100%)	4.25	0 (0.0%)	1 (25. 0%)	0 (0.0%)	0 (.0.0%)	3 (75.0%)
2-6 How is your skill to prepare a budget plan?	4 (100%)	4.00	0 (0.0%)	0 (0.0%)	1 (25.0%)	2 (50.0%)	1 (25.0%)
3. Office Management							
3-1 How about your skill to monitor the school performance?	4 (100%)	4.50	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (50.0%)
3-2 Haw about your office management skills?	4 (100%)	4.50	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (50.0%)	2 (50.0%)

(Source: Prepared by the SMAPP Project Team)

At the terminal evaluation, there were only four (4) ZEO officers covered by the self-assessment survey to rate the ZEO officers' capacity; however, all of them showed relatively high rating scores on all of the capacity items (Table 10-5). They showed good scores in understanding the indicators and objectives of the WPEDPs, the conduct of a situation analysis and in the formulation of objectives and strategies. They were not good at checking the AEC questionnaire, as was the case with the WEOs.

During the focus group interview with the ZEOs, the following observations were made:

(1) The awareness of the importance of using accurate data was improved among the WEOs and ZEOs.
(2) The training of the WEOs and school directors was conducted once per year; however, the high turnover rate of the officers inhibited the WEOs from keeping trained officers for their original duties.
(3) The school maps were useful for site selection for school construction, the selection of kebeles for school construction, and for the monitoring of donor agency and NGOs' interventions.
(4) The members of the WPT, including WEO officers and the members of the woreda cabinet, made the WPEDPs more powerful and acceptable.
(5) The WPEDPs were useful to WEOs for preparing their annual plans and project proposals for fund raising.
(6) To make the WPEDPs more practical and useful, the accuracy of the education data and indicators should be improved.
(7) Training in marketing and fund raising will be provided for the WEOs and ZEOs.

The achievement of the capacity development for the ZEO officers by the SMAPP Project can be summarized as follows:

(1) The capacity of the ZEO officers in facilitating and guiding the WEO officers in data management, situation analysis and preparation of the WPEDPs was improved by the SMAPP Project in general.
(2) The roles and responsibilities of the ZEOs in supporting the WEOs, monitoring the progress of the AEC data collection and WPEDPs implementation should be clarified and enhanced.

10.5.4 OEB Officers' Capacity

A wrap-up workshop with the OEB officers was carried out to review the SMAPP Project achievements, where the following observations were made:

(1) The importance of the need for improvement in the school records was well understood.
(2) The EMIS Team members needed training in how to prepare proper education abstracts in addition to the enhancement of the EMIS database.
(3) The EMIS Team members regarded the OEdMap as an important additional database for data management and as tools for planning, which should be sustained.
(4) The development and updating of the OEdMap was costly.
(5) With the OEdMap, it might be possible to minimize conflicts related to political issues arising in school site selection.
(6) Through micro-planning, the PRPD could initiate the WPTs to identify and prioritize their education problems and to develop improvement strategies.
(7) The PRPD learnt how to prepare long-term and mid-term plans based on using more sophisticated projection and the data analysis techniques.
(8) A marketing fair was a good introduction to learning how to approach donors and NGOs and to share experiences among the OEB, ZEOs and WEOs.
(9) A marketing fair is to be held at the zone level as well as regional level by the OEB officers.

The achievement of the capacity development of the OEB officers by the SMAPP Project can be summarized as follows:

(1) The capacity of the EMIS Team in operations and maintenance of the EMIS and the OEdMap was developed and enhanced, although there were still some challenges remaining due to the introduction of the UIS-EMIS and the high turnover rate of the OEB officers.

(2) The capacity of the PRPD members was improved in micro-planning, supervising and motivating the ZEOs and for WEOs in preparing the WPEDPs and for marketing the plans.

(3) The OEB's sense of the ownership of the OEdMap and the leadership of the WPEDPs were enhanced through the micro-planning and the marketing fair, which should be improved to strengthen to support the WEOs' activities for the education improvement.

10.6 CONTRIBUTION TO OVERALL GOALS

The overall goal of the SMAPP Project was to make "Educational improvements in primary education. The goal will to be efficiently promoted following the implementation of the WPEDPs in the Oromia Region." As mentioned above regarding the constraints for the terminal evaluation, the education data was not available to see the changes before and after the SMAPP Project.

Table 10-6 shows the GER of the SMAPP pilot zones, the non-pilot zones and Oromia Region from the EMIS 1997 E.C. (2004/05), as before-the-project data, and from the 1998 E.C. (2006/07) EMIS, as middle-of-the-project data. The 1998 E.C. (2006/07) EMIS data was the latest data available as of the late June 2007.

Table 10-6: GER of the SMAPP Pilot Zones, Non-Pilot Zones and the Oromia Region (1997 E.C. and 1998 E.C.)

	1997 E.C. (2004/05)			1998 E.C. (2005/06)		
	SMAPP Pilot Zones	Non-pilot Zones	Total of Oromia Region	SMAPP Pilot Zones	Non-pilot Zones	Total of Oromia Region
1. Total GER	87.3%	83.6%	85.4%	89.0%	90.3%	89.6%
2-1 GER of 1st Cycle	NA	NA	NA	106.3%	115.3%	110.7%
2-2 GER of 2nd Cycle	NA	NA	NA	65.5%	58.3%	61.8%
3-1 GER of Boys	99.2%	96.7%	97.9%	100.4%	101.4%	100.9%
3-2 GER of Girls	75.1%	70.4%	72.6%	77.6%	78.8%	78.2%

(Source: EMIS Database and the EMIS Team of the OEB)

When looking at the data from the EMIS 1998 E.C. (2005/06), the SMAPP pilot zones had lower GER of the 1st Cycle than the non-pilot zones and the Oromia Region as a whole, while they had higher GER of the 2nd Cycle than the non-pilot zones and the Oromia Region.

The GERs for the SMAPP pilot zones increased from 1997 E.C. to 1998 E.C. (2004/05), while the ones for the non-pilot zones and the Oromia Region increased more. The SMAPP pilot zones had higher GERs for both boys and girls, and in total than the non-pilot zones and the Oromia Region as a whole in 1997 E.C. (2004/05); however, it had lower GERs for boys and girls, and in total than the non-pilot zones and the Oromia Region as a whole in 1998 E.C. (2005/06).

It was impossible based on the EMIS data to assess if the SMAPP Project contributed to the achievement of the overall goal of the project as mentioned above. What is possible to say here is that there are still a lot of needs for improvement in access to primary education as well as the need for timely preparation of the EMIS database and the EMIS abstract in the Oromia Region.

Based on the findings of the terminal evaluation survey, "The Conclusion," including impacts, sustainability and lessons learnt from the SMAPP Project, is provided in Chapter 11 and "The Recommendations" are in Chapter 13 of this report.

PART III:

CONCLUSION AND RECOMMENDATIONS

CHAPTER 11: CONCLUSION

11.1 ACHIEVEMENTS OF THE SMAPP PROJECT

The achievements made by the SMAPP Project are summarized in Table 11-1 based on the findings of the Terminal Evaluation.

Table 11-1: Achievements of the SMAPP Project

Component	Results
General Overview	- The expected outputs of the SMAPP Project were achieved as planned in the Scope of Work signed by OEB and JICA in December 2004, with the four (4)-month extension, with the exception of the capacity development in data collection, management and achieving the enhancement of the EMIS.
EMIS Enhancement	- Understanding on the importance of data accuracy and timely data collection and management was deepened at all the levels of the education administration offices. - The OEB's competence on reporting of the EMIS was not improved during the SMAPP Project period, due to external changes caused by the introduction of the UIS-EMIS.
School Mapping (OEdMap)	- The expected outputs through the development of school maps were accomplished at the OEB level. - The institutional arrangements to sustain operations and management of the OEdMap were made at all levels of the OEB, ZEOs and WEOs, with the notion that proper personnel and financial resource allocations to the EMIS Team should be continued to be secured.
Micro-Planning	- The SMAPP Project accomplished the expected outputs of the WPEDPs preparation at the OEB, ZEO and WEO levels. - A process and methodology for the micro-planning exercise to prepare the WPEDPs, using the data and tools of the OEdMap and the EMIS, was developed by the SMAPP Project and put into practiced by the OEB, ZEO and WEOs. The 117 WPEDPs were produced by the SMAPP pilot WEOs and approved by the respective Woreda Cabinets. - The OEB, ZEOs and the SMAPP pilot WEOs experienced marketing of the WPEDPs for fund raising at the Marketing Fair.
Capacity Development	- The professional capacities of the WEO, ZEO and OEB officers were in general well improved. - The capacity of the WEO officers was developed in data analysis using the OEdMap package and in the preparation of the WPEDPs. - The capacity of the ZEO officers in training facilitation and leadership were enhanced. - The OEB officers in operations and the updating of the OEdMap and in micro-planning, in making enrolment projections, the preparation of the WPEDPs and marketing of the WPEDPs were all strengthened. - Yet the capacity of the WEO, ZEO and OEB officers in data collection, management and reporting, which were related to the EMIS, were not effectively enhanced through the SMAPP Project.

11.2 IMPACT OF THE SMAPP PROJECT

The main impacts of the SMAPP Project are outlined below:

(1) **Improved understanding of the importance of education data:** The OEB, ZEOs and WEOs' understanding of the importance of the needs for accuracy of education data and of timely data collection and management was deepened through the entire process of school mapping and micro-planning exercises. This motivated the OEB's to take initiatives to provide WEOs with training in proper use and entry of project developed school record formats.

(2) **Introduction of the concept of planning and monitoring with visualized school maps:** The OEdMap school coverage maps were recognized as a practical, visual planning tool for the WEOs to formulate resource distribution strategies and plans for schools and classrooms. Those materials could be also used for monitoring. The OEdMap thematic maps were also recognized as useful planning and monitoring tools for the OEB and ZEOs to use when discussing education quality improvement.

(3) **Use of the WPEDPs as a woreda official document:** The importance of the micro-planning exercises in the national decentralized governance effort was recognized by the OEB, ZEOs and WEOs of the SMAPP pilot areas. The WPEDPs were subject to appraisal by each Woreda Cabinet for the purposes of approval as officially sanctioned development plans. This official recognition of the WPEDPs as their woreda plans motivated the WEOs to use them as key reference materials for fund-raising and for organizing the implementation of the plan.

(4) **Enhanced confidence and leadership of the WEOs:** The impact of the WPEDP has begun to be observed. Each WEO had, in the past, been mandated to prepare annual operational plans without any mid-term development scenario or long-term perspective. The WEOs are now confident in presenting their WPEDPs to the appropriate government organizations, NGOs, local private investors and other external supporting agencies. Additionally, the WEOs' leadership roles and initiatives were promoted.

(5) **Strengthened leadership of the OEB:** The OEB's leadership in education development was strengthened through the activities of the Task Forces, which increased the OEB's efforts for: i) the expansion of the OEdMap coverage with five additional woredas; ii) organizational arrangements for operation and management of the OEdMap; iii) budgetary arrangements for printing school records forms and operating and managing the OEdMap, and iv) mobilization of a quarterly review meeting to prepare for the marketing fair and the terminal evaluation.

(6) **Enhanced unity of the education administrations in the Oromia Region:** The approaches employed by the SMAPP Project to combine the region, zones and woredas into a single unit to work together under the SMAPP Project functioned effectively to strengthen decentralized governance.

(7) **Increased interest in the analytical tools with GIS:** The OEdMap caught other sectors' interest, as well as the MoE, with respect to the value for the use of the GIS in development planning and management in the SMAPP Project.

11.3 ANECDOTES OF THE SMAPP PROJECT IMPACTS

There were several cases, reported by the OEB, ZEOs and WEOs, that the SMAPP products were used as expected and unexpectedly under their leadership. The following are some of the sample anecdotes relating to the SMAPP Project impacts collected by the SMAPP Project Team before the end of June 2007.

(1) **Use of the OEdMap at the PRPD of the OEB:** The PRPD of the OEB already used the OEdMap school coverage maps in order to identify needy woredas and kebeles and for discussing school construction projects with NGOs.

(2) **OEB's guidance of the use of the OEdMap and the WPEDPs for the WEOs:** The Director of the OEB officially instructed the WEOs about the use of the OEdMap school coverage and school information maps with the WPEDP for fund raising and monitoring purposes at the Quarterly Review Meeting in April 2007.

(3) **Exhibition of the WPEDPs at the zone level:** Both of the Arsi and North Shewa zones held "Exhibitions" with their respective WEOs in March 2007 to present their WPEDPs to the stakeholders, including the private sector, and to show the stakeholders the identified kebeles which did not have any schools.

(4) **WEOs' use of the WPEDPs for negotiating with NGOs:** Some WEOs already used their WPEDPs for negotiating, with NGOs, for site selection of their school and classroom construction projects by prioritizing the needy kebeles

(5) **World Vision's decision to support the Degelu Tijo Woreda WPEDP:** World Vision decided to provide funds for Degelu Tijo Woreda to implement some of the prioritized projects in their WPEDP in June 2007.

(6) **Revitalizing a "NGO-Government-Community Forum":** The OEB planned to revitalize a "NGO-Government-Community Forum," which would be organized by the OEB and the NGOs, as a venue for presenting the WPEDPs for the public consultation.

11.4 SUSTAINABILITY OF THE SMAPP PROJECT OUTPUTS AND IMPACTS

11.4.1 Technical Sustainability

(1) **Technical competence of the OEB and ZEOs:** The results of the terminal evaluation indicated growth in the competence improvement of the OEB officers in the operation and management of the OEdMap. It is expected that the OEB will develop new forms of the OEdMap products that would help decision making at the OEB and higher levels after training in order to develop thematic maps described in chapter 5. Through the assessment made by the SMAPP Project Team, it can be said that the OEB staff reached the minimum basic technical level to operate and manage the present form of the OEdMap. When we look at the micro-planning exercise in terms of making it operational, the technical competence of the Task Force members was verified to produce manuals and to act as resource persons for the control of the quality of the WPEDP. The facilitation team of the ZEO officers is another promising venue to discuss technical sustainability for continuing the micro-planning exercises.

(2) **Technical competence of the WEOs:** Updating the OEdMap depends on the capability of the WEO officers to conduct the school location survey. Their competence was enhanced during the SMAPP Project by collecting nearly 430

data for newly constructed schools and previously un-surveyed schools. The WEO officers need to receive training in GPS each time before the school location survey is done. Some of the WEOs were reported to use the WPEDP and the OEdMap products for their own fund-raising campaigns and showed their capability to explore the wider use for these products. Experience sharing of these products among the WEOs shall bring about the systematic use of the WPEDP and the OEdMap for monitoring.

(3) **Verifying the values of using the OEdMap and the WPEDP:** Usefulness of the school coverage map was verified in formulating physical development plans including construction plans for new primary schools. The school coverage maps are useful and meaningful for improving access to primary education, while the school information maps are effective analytical tools for planning the improvements in the quality of educational services and bringing about more gender equity. The values of using the WPEDP depend on the scope of the WPEDP. The presently developed 117 WPEDP focused on increasing access to primary education through physical improvements. The scope of the WPEDPs should be extended flexibly to address various educational improvement issues relating to quality, internal efficiency, and/or equity.

11.4.2 Institutional and Organizational Sustainability

(1) **Designating units of operation:** The PRPD has been identified and officially designated as a unit that has duties and responsibilities for continuing activities carried out by the SMAPP Project, especially EMIS enhancement and operation and management of the OEdMap. The EMIS Team has acquired rich experiences in order to conduct the AEC that can be mobilized for operation and management of the OEdMap as institutionalised routine work, With regard to the micro-planning, the PRPD has been officially designated for continuing similar exercises in micro-planning training. The PRPD's experiences in revising the Oromia ESDP can be mobilized for micro-planning training exercises and for monitoring the WPEDP. In this regard, the existing mechanisms can be mobilized to improve sustainability. The integration of organizational experiences into innovative programmes would contribute to institutional sustainability.

(2) **Placing the OEdMap and the WPEDP in the governance operational structure:** 117 WPEDPs were officially approved by the respective Woreda Cabinets. This was an essential step to place the WPEDP in the governance operational structure. Practical and continued use of the WPEDP as a key official reference document for funding by either the internal budget or from external support is required. The OEdMap products may also require official recognition in the governance operational structure, as EMIS data is now officially reported in annual education statistics abstract. The current discrepancy in the coverage between the EMIS and the OEdMap should be resolved by expanding the coverage of the OEdMap.

(3) **Inter-organizational arrangement:** It was found that basic information for administrative and demographic data, including woreda and kebele boundaries, population, and other demographic data, is not systematically shared by the OEB and BoFED or with any other authorities concerned. Updating the WPEDP by using the OEdMap data requires systematic information flow and sharing among the relevant organizations. Inter-organizational arrangements to share these data

regularly between the BoFED and OEB will improve the quality and efficiency of the OEB's updating of the WPEDPs and the OEdMap.

11.4.3 Financial Sustainability

(1) Sustainability of WPEDP: The education sector is receiving in general the largest share of the budget at the regional level and at the woreda level in particular. This is consistent with the first priority given to the education sector by both the regional and woreda administrations on public expenditure. Therefore, there should be enough room for WEOs to secure the budget by utilizing the WPEDP.

(2) Sustainability on OEdMap Operations: For the preparation of 2000 E.C. (2007/08) budget, the OEB submitted a budget proposal to BoFED in March 2007. The OEB received an official notice from the BoFED on approved allocations from the OEB budget. The budget amount was reduced in comparison with their proposal. The budget for printing and distribution of school records and for conducting the school location survey was obtained by the PRPD, while the budget for updating of the WPEDPs has not been secured yet.

11.5 CONTRIBUTION TO THE OEB/JICA PROGRAMME TO IMPROVE ACCESS TO THE QUALITY PRIMARY EDUCATION IN OROMIA REGION

The SMAPP Project undertook, in a complementary relationship with its sister project of the ManaBU Project, making a contribution to the achievement of UPE in the Oromia Region under "The OEB/JICA Programme to Improve Access to Quality Primary Education in the Oromia Region."

In order to achieve the goals of the Programme, "to improve access to quality primary education in the Oromia Region," the SMAPP Project dealt with the enhancement of planning capacity at the regional and woreda levels, while the ManaBU Project focused on planning at the woreda and school levels. Both of the Projects contributed to the enhancement of WEO professional capacities, which was the focal point of education improvement under the decentralization governance effort, from different viewpoints.

The SMAPP Project, considered the WEOs as leaders and coordinators dealing with the OEB, ZEOs, Woreda Cabinet, and other stakeholders including NGOs and donors in covering capacity development in data management of the AEC, planning, and marketing and fund raising for improvement project implementation. On the other hand, the ManaBU Project regarded the WEOs as leaders and coordinators dealing with school and the community members in their woredas to develop their capacity in planning through community participation in school construction and management through community mobilization.

Additionally, the SMAPP Project outputs were utilized by the preparatory study of the Grant Aid Scheme for Community Empowerment of the Government of Japan. The OEB prepared a long-list of prioritized requirements for school and classroom construction in the SMAPP pilot woredas based on the WPEDPs. It might have been difficult to prepare such a long-list by reflecting the needs in the woredas without the WPEDPs.

11.6 CONCLUSION

The SMAPP Project, as summarized, has achieved the project purpose and produced the outputs except for the OEB's capacity development of the EMIS data management and reporting. Insufficient information sharing existed between regions and respective woredas after duty and responsibility for the development of primary education was devolved to the woreda level. This made it difficult for the OEB to supervise whether primary education services have been equally delivered to its population. In addition, due to the lack of the mechanism for accumulating woreda plans in the region, it was also difficult for the OEB to obtain a budget for woredas based on those often ill-organized and non-standard woreda plans. By having a clear grasp of the spatial information of present education services and by sharing woreda mid-term plans between the OEB and respective woredas, it made it possible to create two important elements in order to relieve this chaotic situation. The OEB recognized, through the implementation of the SMAPP Project, that micro-planning methods with the OEdMap and participatory approach covered those two elements and helped effectively measurable improve the situation. In a broader sense, the OEdMap and participatory approaches were two effective methods for the support of decentralization in the education sector. According to the results from the terminal evaluation, although there is no statistical evidence for the achievement of the overall goal, improving access to primary education, at this point, the post-project evaluation is expected to prove that the project has significantly contributed to this overall goal.

Recommendations as to the need for continuation of the SMAPP activities in order to achieve UPE in the Oromia Region will be discussed in Chapter 12 based on the lessons learnt discussed below.

11.7 LESSONS LEARNT

(1) **Consistency with the government policies and needs:** It was recognized during the period of the SMAPP Project that WEO capacity development officers in data management and planning was urgently necessary and consistent with the Oromia regional needs as well as policy emphasises. The presence of such consistency led to the OEB, ZEO and WEO making a strong to implement the SMAPP Project.

(2) **Effectiveness of the output-oriented approach and usefulness of the tangible outputs:** The school records, the OEdMap, and the WPEDPs were highlighted products of the SMAPP Project. These tangible products motivated the OEB, ZEOs and WEOs to make actual use of the products. The results of sample monitoring on the use of the new school records indicated several useful outcomes related to basic data handling by school directors and teachers at the school and the classroom levels.

(3) **Importance of the understanding of the existing mechanisms:** Before introducing the new OEdMap planning mechanism or tool and the micro-planning process, the existing routine work of the OEB were not well studied by the SMAPP Project Team. If the SMAPP Project Team and the OEB had considered carefully how and why the new planning tools needed to be introduced, some problems during the SMAPP Project might have been avoided; such as trying to use the poor school registration system, which had too many school name and ID inconsistencies, a lack of the historical school record keeping, and the overburdening duties of the education officers, might have been addressed in some other ways by the SMAPP Project.

(4) **Collective leadership:** The two Task Forces formed within the OEB helped the OEB members socialize all the necessary knowledge and skills using a participatory consensus process, which resulted in the production of practical products including new school records, and various useful guidelines for the making of the OEdMap and the WPEDPs. The formation of the two Task Forces provided a basis for delineating the roles among the Task Force members and in the OEB.

(5) **Process of learning by doing:** The entire SMAPP Project implementation process used a learning by doing training process. The formation of the Task Forces was arranged to foster mutual learning. The mutual learning process provided the OEB, ZEOs, and WEOs with the opportunities not only to learn and improve by themselves, but also to formulate and exchange useful lessons and suggestions with each other. These lessons, which were not monitored or collected systematically, made the SMAPP products more practical and useful.

(6) **Systematic coordination and networking among the different projects:** The introduction of the UIS-EMIS caused delay in the data entry and verification process for the EMIS and OEdMap production. The SMAPP Project and the UIS-EMIS Project had their own timeframes and objectives, which were not linked to each other. The outputs and reports from these projects were not shared by the relevant departments within the OEB, which might have produced some mutually useful synergies between these two closely related projects.

(7) **Multi-level approach to primary education development:** A single woreda could not ensure the equal distribution of educational services in the Oromia Region, although primary education development and planning were decentralized to the woreda level. The OEB and the SMAPP Project Team learnt the importance of systematic data sharing between the region and the woredas. One of the tools employed to minimize the information gap was the visualization of the EMIS data into the OEdMap. Another positive aspect was the micro-planning exercise, which has helped to standardize the planning process and the contents of the WPEDP.

CHAPTER 12: RECOMMENDATIONS

12.1 TECHNICAL RECOMMENDATIONS

12.1.1 For the Improvement of the EMIS

(1) Improvement of school records for standardization

It came apparent early in the Project that there was a need to develop a format for an attendance monitoring sheet, which revealed many other areas of record keeping needing revision and attention. The SMAPP Project developed a continuous process for improving school records, including records format standardization and common record reporting procedures. Standardization was recommended not only for enhancement of data accuracy but also to make school management more efficient. It is suggested that comments from school directors and teachers on the then current school records be solicited by the OEB and the ZEOs for updating the school records formats. After careful examination by the OEB, the formats for school records will be revised when the ESDP is revised. Revisions will be implemented within the financial capacity of the OEB.

(2) Introduction of school registration system

Consistency among school IDs and school names should be improved. This is one of the fundamental problems needing resolution in order to improve EMIS data management and get maximum use from the OEdMap. In this regard, it is recommended that the school registration system use standardized forms and procedures under OEB's directives and supervision. The establishment of a standardized school registration system is also related to desired improvements in school management. For instance, the OEB should know the number of existing schools with accurately recorded names and IDs, before it distributes the AEC questionnaire. By carefully controlling reliable school data, the OEB can control the required number of AEC questionnaires for each WEO. In return, each WEO can properly manage the distribution and collection of the AEC questionnaires to and from each school.

(3) Development of a guideline on the AEC

The AEC office routine work should be simplified and shared among the officers concerned. Currently most of all AEC processes are managed by only one person. This is a very risky situation with respect to the sustainability of the AEC data system in a country like Ethiopia where a very high turn-over rate prevails. One of the solutions is to develop a guideline for AEC procedures. If the process of the AEC is clearly documented with easy instructions, anybody could follow the process using only the guidelines even if just pressed into service. Moreover, it would contribute to the improvement of data accuracy and management.

(4) Development and dissemination of the AEC check list

Training in the AEC has been conducted for the ZEOs and WEOs by the OEB. However, data accuracy has not improved to a satisfactory level. One of the reasons may be insufficient data checking at the woreda level. To enhance the capacity at the woreda level, there is now a check list which shows how the AEC questionnaire

booklet might be useful. For example, the check list guides the WEOs to 1) count the number of the AEC questionnaires to be collected with school names; 2) confirm the presence of the mark '✓' in the columns like the sex of teachers, either male or female; and 3) check the figures written in specific columns such as the numbers of students, sections and classrooms.

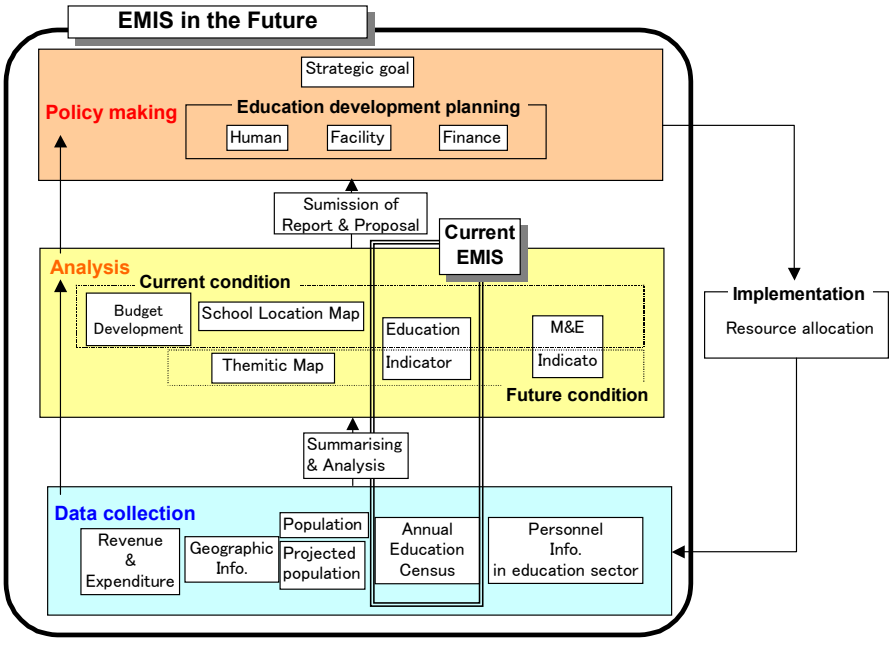
It is also suggested that the check list booklet should contain a case showing how to fill in the columns, including notations on some common reporting errors, so that the WEO can easily and more effectively check submitted questionnaires.

(5) Improvement of the office efficiency

The PRPD are heavily loaded by routine work and often burdened by too frequent attendance at a variety of training workshops. In this circumstance, the EMIS Team of the PRPD has requested that it take more responsibility for EMIS operation and management of the OEdMap making and for the supervision of the continued exercise of micro-planning and monitoring and the advisory service for the WPEDPs. To ensure the sustainability of the operations, it is recommended that work efficiency be improved by reducing the work load or simplifying work procedures. This shall be done through conducting a series of workshops, where the current practices and performance of the tasks of the PRPD and the EMIS Team are reviewed as to their effectiveness and efficiency and improvements made.

(6) Enhancement of the data analysis and reporting capacity

The capacity development in data analysis and reporting is necessary for better planning of education development as well as for monitoring and supervision of the schools. One of the recommendations is to integrate the different data management systems related to education management into the EMIS as shown in the Figure 12-1.



Note: Only primary interactions between different data sets are shown here.

Figure 12-1: Integrated Data Management Systems for Education Management

In consideration for the wider scope of the EMIS framework, enhancement of analytical capability of statisticians, planners, monitoring and evaluation experts of the OEB is recommended through on-the-job trainings or workshops organized by the ZEOs or OEB.

12.1.2 For Operationalization of the OEdMap

(1) Strengthening of the Institutionalization of the OEdMap

Based on a common recognition of the usefulness of the OEdMap for education data management and planning, it is recommended that the tasks necessary for the operation and management of the OEdMap should be institutionalized as part of the routine work performed by the OEB, ZEOs and WEOs. At least, the four main activities, which are distinct but interrelated, should be carried out within routine work. They are: i) data updating through annual school location survey; ii) training in GPS for the WEOs; iii) utilizing the OEdMap products; and iv) exploring potential uses for the OEdMap products as mentioned in Chapter 5.

(2) Expanding the OEdMap Coverage

Although the OEB is managing the OEdMap process developed by the SMAPP Project Team, it will be difficult for the OEB to develop the OEdMap for the rest of 170 woredas in the Oromia Region within their available resources. The experiences with the development and use of the OEdMap for micro-planning exercises helps the OEB expand the OEdMap coverage by including the rest of 170 woredas. The expansion of the OEdMap is, however, a considerable challenging task. The rest of the 170 woredas include areas where pastoralism is pre-dominant pattern for livelihood. Their settlement patterns are not well studied for planning purposes. Due to a lack for schools or classrooms. Besides pastoralist areas, the rest of the 170 woredas include areas with similar conditions to the SMAPP pilot areas. Hence, expansion of the OEdMap to such areas, although it is challenging, is suggested to be done in order to reach the goals set in the UPE. The expansion of the OEdMap coverage to the entire Oromia Region shall make it possible for the OEB to include selective thematic maps of all the woredas in the Education Statistics Annual Report and renewed ESDP in the future.

In the national context, the MoE has a process for formulating a nation-wide programme to intensify development interventions for the improvement of education quality. One of the highlighted strategies is to strengthen planning and management capacities of all the education administration offices. The MoE already expressed its interests in the Oromia experience in the SMAPP Project. Some donor agencies, like UNICEF, also, expressed interest in using the outputs of the SMAPP Project with the assumption that the inclusion of spatial and education data with the mid-term plan will facilitate a process for planning and promoting their interventions, including such interventions as girl's education programmes and school feeding programmes.

It is suggested that the OEB should introduce stepwise development for expansion of the OEdMap coverage through appropriate approaches for the remaining zones. These zones may be divided into two groups: i) zones with characteristics of sedentary settlement patterns; and ii) zones with characteristic pastoralist settlement patterns.

(3) Establishing inter-organization information sharing mechanisms

1) Strengthening technical monitoring on the UIS-EMIS modification process

The OEB should take initiatives to monitor the process of UIS-EMIS modification that is planned with the assistance of UIS through the MoE. This is because modification will be responsible for technical consultation with the MoE and UNESCO in order to keep both database systems well linked and fully functioning.

2) Strengthening inter-sector information sharing

The updating of the OEdMap requires not only new survey results for school locations, but also the latest information on administrative unit boundaries for zones, special town woredas, and woredas together with their socio-economic data. The BoFED is the responsible agency for periodic updating of these data.

For effective and efficient updating of the OEdMap data, it is recommended that the OEB, especially the PRPD EMIS Team should consult with BoFED on a regular basis, preferably on a quarterly basis, to collect basic administrative information. It is also suggested that the OEB have regular contact with CSA to collect and update demographic information, since CSA conducts the National Census periodically. Data through the National Census should be utilized for updating of the OEdMap.

3) Building multi-sector data linkages

During the SMAPP Project, three sector organizations showed interests in the production of OEdMap, which were the Oromia Bureau of Health, the Oromia Irrigation Development Authority and the BoFED. This is an indication of the possibility to build a multi-sector information database with the GIS. In response to this concept, the OEB, in consultation with SMAPP Project Team, came up with the idea that a multi-stage development approach to a GIS based administrative function being introduced and established in the Oromia Region. Figure 12-2 shows graphically how sharing spatial data among relevant institutions can be done. Advanced stages of GIS development shows that the data centre, which is called for in this report, shall be established in order to manage and distribute data efficiently, while several sector agencies like OEB develop the GIS database. This data centre may be able to function as an exporter of common spatial data like administrative boundaries, demographic data, socio economic data to different sector agencies requiring it and in return to import sector-specific data from each sector agency. Each sector handles the specialized data required specifically for sector development.

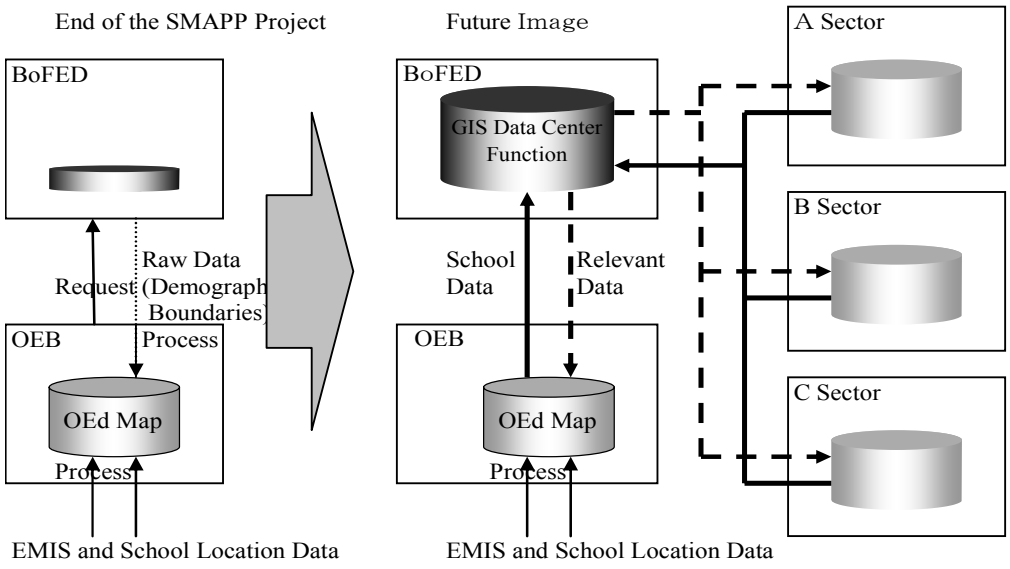


Figure 12-2: Future Multi-sector Data Linkages

12.1.3 For Enhancement of Micro-Planning

(1) Institutionalization of the Micro-Planning.

Institutionalization of micro-planning should be accomplished through:

1) Continual use and materialization of the WPEDP

It is recommended that the routine work of the OEB, ZEO, and WEO should correspond and, as much as possible be directed by the WPEDP. The presentation and use of the WPEDP should build public awareness for a woreda's official plan and create transparency as to its progress. In addition, the WEOs should use the WPEDPs for their technical consultations with various stakeholders including woreda cabinets, the wider local community, private investors, NGOs, donor agencies and the like for materialization and realization of the plan.

2) Placing the WPEDPs in the process of the annual budget and planning cycle

It is important in the management of development to embed a mid-term development plan with a long-term perspective into the planning and budgeting cycle every year. It is suggested that the WEOs use the WPEDP as the basic and official reference in the preparation of annual plans and budgets for the next fiscal year. The result will be a more technical and sound annual implementation plan. This annual plan and budget development exercise should follow the consultative and participatory processes that most WEOs enjoyed practising during the micro-planning exercise in the SMAPP Project. A similar consultative participatory and consensus building process should take place within the woreda administrative units.

3) Strengthening monitoring and evaluation of the WPEDPs

It is recommended that the monitoring and evaluation of the WPEDP should be strengthened. Proposed activities for WPEDP monitoring and evaluation are presented in Chapter 9. It is also suggested that existing consultative and technical meeting

within sector development administration in Oromia shall be mobilized. The quarterly review meeting that the OEB organizes at the presence of WEO and ZEO shall be one of appropriate candidate venue. The Table 12-1 shows suggested time frame of the quarterly review meeting to be mobilized into the monitoring and evaluation of the WPEDP. It is also suggested that the OEB compile the results from the mid-term evaluation and the terminal evaluation to report to the Oromia Presidential Office and the Cabinet so that the summarized information will be shared with the MoFED.

Table 12-1 Suggested Use of the Quarterly Review Meeting for M&E of the WPEDP

	1st Quarterly	2nd Quarterly	3rd Quarterly	4th Quarterly
2000 E.C.	- Summary of the progress of the previous year - Presentation of action plan of the year	- Summary of progress from the last quarter - Any lessons learned - Issues for the next step	- Summary of progress from the last quarter - Discussion on an outline of the mid-term evaluation of WPEDP - Issues for the next step	- Summary of progress of the year - Mid-term evaluation of the WPEDP - Issues for the next year - Preparation of action plan for the next year
2001 E.C.	Same as above	Same as above	- Summary of progress from the last quarter - Any lessons learned - Issues for the next step	- Summary of progress of the year - Issues for the next year - Preparation of action plan for the next year
2002 E.C.	Same as above	Same as above - Understanding guidelines for terminal evaluation and updating	- Summary of progress from the last quarter - Preparation for the terminal evaluation and updating - Issues for the next step	- Terminal Evaluation - Preparatory work for updating of the WPEDP - Preparation of action plan for the next year

(Source: Prepared by the SMAPP Project Team)

4) Continuous capacity development of the woreda education officers

It is recommended that the OEB provide the ZEO officers, especially planning and statistics professionals, with technical and professional support so that they can help the WEOs prepare their annual plans and budgets to achieve the goals and targets set in the WPEDP.

5) Review of the functions and responsibilities of the PRPD and EMIS Team

Institutionalisation of micro-planning at the regional level will not be possible without the existence of pro-active planning experts and an EMIS Team within the OEB who are technically and organizationally capable. Reviewing the functions and responsibilities of the PRPD, it is suggested that present and future needs for supports be considered in order to sustain region-wide micro-planning. Also, it is necessary that

stable training and technical support be provided in order to enhance the planning capacity of the PRPD and EMIS Teams.

(2) Expand the coverage of the micro-planning to the non- pilot zones

It is recommended that the OEB expand the woreda-level micro-planning exercise to cover the remaining 10 zones. This will assure uniformity in the planning processes in all the woredas in the region and build up their capacities to promote equitable development of a primary education system across the region. It is suggested that the OEB organize training workshops by using zone based facilitators.

The expansion of the coverage for micro-planning needs an implementation strategy. Since the OEdMap are one of critical planning data required for micro-planning, it is suggested that the coverage for micro-planning follow the same steps for OEdMap Expansion which is recommended in the Section 12.12.

(3) Deepen the level of the micro-planning by expanding the scope of planning

As explained in Section 7.3, micro-planning not only should be at the woreda level but also at the school level. This is necessary in order to solve the problems occurring within school settings. However, micro-planning at the school level is realistically very difficult since the number of target schools, that must be involved would increase dramatically. The GoE expressed their willingness to support CRCs and centre schools in the areas, in order to improve the quality of education provided. Although there is a plan to have one WEO assigned to reside in every CRC, the OEB's support plan, budget, and regular administrative services are not yet fully prepared to do this. It is recommended that activities to improve the quality and outreach of education will be undertaken not at the woreda level but at the school level by targeting the CRCs as a centre for these activities. Below are points to be considered while undertaking school-level activities and micro-planning.

1) Conducting rapid assessment on best school management practices

It is recommended that the OEB collect and analyze empirical knowledge on best practices for school management in a few sample schools from selected woredas. It is suggested that the OEB have an operational idea on how to integrate findings into micro-planning exercises in order to define government school management delivery services for an operational term.

2) Identifying needs for professional staff capacity development

Accurate data are necessary to improve school management. Those data include school finance, school facility management, etc. as well as data that have been already adopted, like the school record developed by the SMAPP Project. The actual information and data related to school management are accumulated by continuously recording the pilot school data. This information can be used meaningfully when new activities are considered for further school improvement.

3) Preparation of field guideline for the improvement of school management

Based on the findings of the assessment, it is recommended that the OEB develop a field guide with examples of best practices for dissemination and use by other schools and communities for the initiating of local planning and for improving the implementation and management of these plans. The content of field guidelines for school data management and planning should be incorporated into the WPEDP in

micro-planning exercises.

12.2 INSTITUTIONAL RECOMMENDATIONS

12.2.1 Continuous Capacity Development in Data Management and Planning

In May 2007, the MoE produced a position paper entitled 'Concept Note on Ethiopia General Education Quality Improvement Programme (GEQIP)' emphasising that the improvement of education quality should be accompanied with an increase in access. The paper proposed a package programme in six core areas: i) teacher development; ii) curriculum improvement; iii) improvement of management and administration; iv) school improvement; v) civic and ethical education; and vi) information communication technology (ICT). Management improvement and administrative capacity development were recognized as key factors to achieve ESDP goals. The paper focused on the importance of capacity development in sector planning and management, monitoring and evaluation, financial planning and management, information management, and other related managerial areas.

It is recommended that capacity development in education data management and planning should be strengthened at all regional, zone and woreda levels. Since data accuracy heavily depends on the reliability of data management at school level, it is suggested that the scope of capacity development would be deepened to the CRC level, which function, also, to guide non cluster schools. Under this idea, the CRCs would serve as leaders for school improvement in school management and education quality. It is suggested, also, that the scope of capacity development be widened to include the improvement of education quality in response to the policy emphasis in ESDP III. The enhanced and coordinated data management system could provide the OEB and WEOs with a more useful information base to expand the scope of the WPEDP, so that the WEOs could take a more holistic approach to primary education development.

12.2.2 Continuous Use of the Products of the SMAPP Project for Institutionalization

GEQIP's policy that describes increased access to educational opportunities needs to come in line with improving the quality of education, agrees with the basic principals of the SMAPP Project. Therefore, the OEdMap and WPEDP, as mentioned in Section 12.2 and 12.13, will play important roles in this new policy, if they are used in the OEB's routine work.

Moreover, the OEdMap and WPEDP are expected to function as a means to monitor data in order to make policy recommendations in the future. Utilizing these data as spatial information for reviewing the Minimum Standard of Services (MSDS) is especially recommended.

12.2.3 Building Institutional Memory at All the Levels

Some recommendations are herein made in order to ease the negative impacts of the discontinuance of government services due to high staff turnover rates, so that the positive impact of the SMAPP project can be sustained within the OEB. It is recommended that all the education offices, i.e., the OEB, ZEO, and WEO, consciously devise office work procedures to maintain and improve the efficiency of office work and its effectiveness through collective working relationships and improved leadership. Sharing information among officers is the first thing to be

strengthened. Duties with the detailed tasks to complete a duty, work activities with work flow and schedule should be clearly known by each officer engaged in data management and planning. Whenever any officer participates in any training workshop for education data management and planning, the trained officer should at least make a presentation to colleagues on return providing an outline of his or her training with lessons learnt. Guidelines and manuals used in the trainings should be kept and used in the home offices.

The learn-by-doing concept conducted through hands-on instruction and group or team work is also suggested to be used in trainings and strengthened because this is one of the key elements for effective and efficient conduct of the complex tasks of data management and planning. The OEB shall utilize the quarterly review meeting as a venue for planning and monitoring training purposes. In a similar way that the SMAPP Training Workshop was conducted, the quarterly review meetings can be organized in sequential processes through which discussions in the previous meeting could produce some outputs to be used for the next quarterly meeting.

12.2.4 Improving Coordination for Development and Planning Network

The OEB should play a leading role in coordinating activities for the EMIS and OEdMap systems. Annual EMIS and OEdMap activities should be systematically arranged into one work calendar. In this regard, the OEB intends to use the same time frame of the previous AEC procedures for the academic year of 2000 E.C. (2007/08). This OEB's intensions should be strongly supported by the stakeholders.

It is suggested, also, that the OEB should establish a network in collaboration with other governmental agencies and external supporting agencies to implement the WPEDP. The networking among development partners can facilitate a participatory process to revise the ESDP with more realistic planning information.

12.2.5 Strengthening Inter-linkage of Multi-levels of Data Management and Planning

To address education development issues, a multi-level approach is of vital importance to improve the awareness of the needs for education improvement at the school, community and household levels. Data collection and maintenance shall start at the school level, while continual attendance of children should be maintained at the class level. Daily attendance should be effectively controlled and daily records kept properly. Without the management of accurate data at the school level, the quality of education data will remain in question at the time for planning at the woreda and/or regional levels.

It is recommended that the scope of data management and micro-planning will be deepened to a level where woreda education officer can directly contact school directors or teachers. The WPEDP may need to expand its scope for planning to the CRC that will take a leading role to improve data management at the school level.

12.2.6 Improvement in Institutional Understanding of the Computer Security

The SMAPP Project made efforts to improve the data management and planning capacity at the OEB by enhancing EMIS and introducing the OEdMap, which became well accepted, during the SMAPP Project, in the context of education development in the Oromia Region. It should be noted that the computerized systems, such as the EMIS and the OEdMap, are very efficient and convenient, but, at the same time, they

require various types of controls for data and computer security to make them function properly. Regular virus checks, the updating of computer software, the proper maintenance of computer equipment that is often subjected to unstable electric supplies and dusty room environments are necessary and should be strengthened.

For example, viruses were sometimes found in the files which were transferred from the OEB computers to the SMAPP Project computers. The number of the viruses increased after the introduction of the local area networks in the OEB office to operate the network for the UIS-EMIS. It is recommended that OEB take measures for the prevention of viruses and implement regular security updating for the OEB operation system.

Another important issue is about the copyrights for computer software. The SMAPP Project Team bought the GIS software from the outside of Ethiopia, because it was difficult to purchase one with an authorized copyright in Ethiopia. The government and donor agencies, should address the difficulties of purchasing special types of the computer software like GIS with authorized copyrights in some countries like Ethiopia when continuing and conducting projects like SMAPP.

12.3 GENERAL RECOMMENDATIONS

12.3.1 Information Sharing among the Development Projects

At this moment, as mentioned in Section 11.6, there is little coordination in project activities among several development projects implemented in the Oromia Region. It seems difficult for the OEB to coordinate these project activities in order to have more effective and efficient outputs. It is complicated by the fact that various donor organizations have different backgrounds and philosophies of assistance. However, it may be possible to, at least, share information among donors facilitated by the OEB.

In this context, it is suggested that the OEB establish a coordination mechanism to facilitate the sharing of information from the different projects regularly and publicly to avoid overlaps and unnecessary duplication. Secondly, it is also suggested that the OEB have a collective consultation meeting periodically, so that each project office will know more systematically about invaluable outputs from each project implementation. This may lead each project office to complement each other's efforts to maximize effects of project outputs.

12.3.2 Integration of the SMAPP and the ManaBU Projects

The OEB took challenging initiatives to improve three levels of planning, i.e., regional, woreda and community through the implementation of two JICA-assisted Projects, i.e., the ManaBU and the SMAPP Projects simultaneously. Under decentralized governance, it is now well recognized that woreda planning plays a central role. It is suggested that the OEB gradually adapt micro-planning to school level management and planning in accordance with policy directives disclosed in the GEQIP.

In this regard, it is recommended that all the products of the ManaBU Project be integrated, after an internal assessment by the OEB, into micro-planning in order to strengthen and enhance the overall primary education and planning system at the regional, woreda and CRC levels in the Oromia Region.