

Project Design Matrix 3 (PDM2)

Project Title: Ethiopian Water Technology Centre (EWTEC) Project Phase III

Project Period: December 2008 – 2013 (5 years)

Target Group: Water Supply Technicians and Engineers of Ethiopia Final Beneficiaries: General Public of Ethiopia

Date Prepared: 27th Jan. 2011

NARRATIVE SUMMARY	OBJECTIVE VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>OVERALL GOAL The number of skilled human resources who deal with groundwater/water supply management for sustainable water supply construction and maintenance in Ethiopia is increased.</p>	<ol style="list-style-type: none"> 1 Approximately 6,000 technicians and engineers among RWB, ZWRO, TWSSO, WWO, Government enterprises, TVETC instructors, private sector (consulting & drilling companies), and NGOs complete EWTEC training 2 Knowledge and skills acquired by trainees are transferred to other colleagues in training participating organizations. 	<ol style="list-style-type: none"> 1. GTP , PASDEP Annual Report, MoWEs Annual Report, Statistical reports published by the Office of the Statistics, Annual reports from international agencies, EWTEC statistic data / Annual Report 2. Interviews, Impact survey 	
<p>PROJECT PURPOSE Capacity of EWTEC as a core training centre for water supply technicians and engineers of Ethiopia is strengthened.</p>	<ol style="list-style-type: none"> 1. EWTEC Certificates are well acknowledged as a technical certification in the water sector 2. EWTECs Officers have sufficient knowledge to assess needs, plan, coordinate, conduct, and evaluate training activities 3. Mid-to Long-term Strategy of EWTEC is approved by MoWE, and is acknowledged by training participating organizations and donors. 4. Financial plan to implement the operational plan of the Strategy is endorsed by MoWE. 	<ol style="list-style-type: none"> 1. Interviews, Questionnaire Survey, Project records (satisfaction & reputation by trainees, related organization, ministries & donors) , Number of visitors to the Centre 2. Interviews, Questionnaire Survey for EWTECs Officers, Project records 3. Strategy Paper, Meeting records, Dissemination seminar records 4. Financial plan, Meeting records 	<ol style="list-style-type: none"> 1. EWTEC expands its training capacity. 2. EWTEC trainees will continue to work on water supply development and management work. 3. Budget allocation for development of water supply facilities and maintenance including training budget will be sustained and the work will be continued. 4. No serious natural disasters occur that adversely affect water resources in the country. 5. Water sector policy of the Ethiopian government will not drastically change on development and management of water supply services. 6 Donor Funding to support capacity building efforts in the Water Sector will continue.
<p>OUTPUTS 1. Mechanisms to sustain constant quality improvements in EWTECs training activities are fully established</p>	<ol style="list-style-type: none"> 1.1 Final Examination tests on respective training modules are prepared and conducted. 1.2 Needs Assessment, Course Evaluation, Impact survey and questionnaire are institutionalized as regular activities and their results are incorporated into training activities 1.3 Database on external human resources with specific specialization is developed and updated. 1.4 Technical skills, knowledge and know-hows to improve the quality of training are accumulated in EWTEC through Training Technical Committee (TTC), provided that the appropriate number of staffs are available. 	<ol style="list-style-type: none"> 1.1 Final Examination tests, Interviews, Questionnaire Survey, Project records 1.2. Training need assessment survey, Inter Course Evaluation, Impact survey, Interviews, Questionnaire Survey, Project records 1.3 EWTEC Database sheet on external trainers, Interviews, Questionnaire Survey, Project records 1.4 TTC regular meeting record, Interviews, Questionnaire Survey, Project records 	
<p>2. Technical knowledge and skills on water supply and management are improved for technicians and engineers from public, private sector, NGOs, TVETC instructors, and other African participants.</p>	<ol style="list-style-type: none"> 2.1 Number of training courses is increased to 15 (*currently planned). 2.2 Training curriculum & modules, teaching materials & handouts are revised for all the existing courses in order to the increase the proportion of practical training. 2.3 Participation from private sector and NGOs is increased up to 10% of total trainees. 2.4 Final Examination tests at the end of respective modules reach 75/100 as average and also exceed 50% of trainees as 80/100 score. 2.5 Approximately 1,500 technicians among RWB, ZWRO, TWSSO, WWO, TVETC instructors, private sector and NGOs complete EWTEC trainings by the end of the project term. 2.6 The bosses of ex-trainees are satisfied with the technical capacity and performance of ex-trainees. 	<ol style="list-style-type: none"> 2.1 Training & Project records 2.2 Training Curriculum & modules, Teaching materials & Handouts produced by EWTEC staff 2.3 Trainees' database 2.4 Final Examination tests, Project records 2.5 EWTEC Database sheet on ex-trainees(List of graduates), Project records 2.6 Questionnaire Survey, Interviews(Impact survey) 	

NARRATIVE SUMMARY	OBJECTIVE VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
3. Capacities are developed to provide technical instructions of course coordinators, instructors, mechanics and drillers who conduct training at EWTEC.	3.1 Levels of technical knowledge and skills of course coordinators and instructors are improved. 3.2 Course coordinators and instructors acquire practical knowledge and skills of field work. 3.3 Levels of satisfaction among trainees on levels of knowledge and technical expertise, teaching methods, course management and attitudes are increased.	3.1 Capacity Improvement sheet for Instructor, Project records, Evaluation by JICA Experts 3.2 Interviews, Questionnaire Survey 3.3 Inter course Evaluation sheet, Interviews, Questionnaire Survey (Impact survey), Project records	
4. Sustainable institutional management capacity in terms of organizational, financial, accounting, personnel, marketing, and workshop management capacity of EWTEC is strengthened.	4.1 Development of Medium-to Long-term Strategy and Operational plan. 4.2 Necessary budget and human resources are ensured according to the annual operational plan 4.3 Marketing activities are enhanced if EWTEC is directed to be semi-autonomous entity. 4.4 Conduct financial and organizational analysis if EWTEC is directed to be semi-autonomous. 4.5 Periodical update of database on training participants 4.6 Publicizing of EWTEC annual report 4.7 Periodical update of EWTEC homepage	4.1 Medium-to Long-term Strategy and Operational plan 4.2 Budget & Expenditure Reports, Personnel list, Project records 4.3 Marketing strategy, Project records 4.4 Project records, Interviews 4.5 EWTEC Database sheet on ex-trainees, Project records 4.6 EWTEC annual report, Project records 4.7 EWTEC Homepage, EWTEC brochure & Newsletters, Project records	

ACTIVITIES	INPUTS		
ACTIVITIES	JAPAN	ETHIOPIA	
<p>1-1. Specify points of improvement based on evaluation and monitoring of course content</p> <p>1-2. Monitor, evaluate and revise training curriculum and materials in each field</p> <p>1-3. Improve external training instructor management.</p> <p>1-4. Monitor, evaluate and improve activities and stock technical know-how.</p> <p>1-5. Conduct impact study and study on future of training course</p> <p>1-6. Carry out capacity development for knowledge management (collection of materials, and sharing knowledge and know-how of instructors)</p> <p>2-1. Develop mid-term training plan</p> <p>2-2. Revise training curriculum & modules, hand-outs and materials for the basic course with more emphasis on practical training</p> <p>2-3. Prepare materials for new courses and create modules</p> <p>2-4. Assist to carry out training courses.</p> <p>2-5. Carry out technical transfer to course coordinators of the local advanced courses in which income generation is expected when EWTEC is transformed to be semi-autonomous.</p> <p>3-1. Provide technical advice including teaching methods throughout the training courses.</p> <p>3-2. Improve capacity of coordinators and instructors on specialized techniques throughout JICA Experts' assignment period.</p> <p>3-3. Carry out capacity development for maintenance of equipment used in training</p> <p>4-1. Hold periodical meetings among C/Ps and JICA Experts to inform the progress of the Project and to discuss issues.</p> <p>4-2. Develop mid- to long-term EWTEC Strategy which includes vision, mission, role and position, and its operational plan.</p> <p>4-3. Disseminate the Strategy and operational plan to stakeholders (donors, private sector, NGOs, etc.).</p> <p>4-4. Develop financial plan based on the EWTEC Strategy.</p> <p>4-5. Develop marketing strategy and carry out marketing activities accordingly.</p> <p>4-6. Collaborate with MoWE for ensuring necessary budget and human resources for enhancing the operation of EWTEC.</p> <p>4-7. Conduct financial and organizational planning to support activities of Committee on position of EWTEC.</p> <p>4-8. Conduct activities of public relations to improve EWTEC capacity.</p>	<p>1) Dispatch of Japanese Experts</p> <ol style="list-style-type: none"> 1. Chief Advisor/Organizational Operation 2. Assessment Program 3. Training Management 4. Hydro-geology/Volcanology 5. Drilling Technology 6. Drilling Machineries Maintenance 7. Water Supply Engineering 8. Machinery/Electric Machinery 9. IEC/Teaching Method 10. Information Management <p>Other experts from different specialties will be dispatched based on necessities</p> <p>2) Acceptance to counterpart personnel for training To be conducted when necessary</p> <p>3) Equipment procurement: training workshop equipment, etc. Needs for equipment will be determined after conducting a detailed needs survey and curriculum development</p> <p>4) Local operational costs To be determined</p>	<p>1) Appointment of Counterparts as in the organizational structure EWTEC Center Head Managers in necessary managerial areas Course coordinators and instructors for following areas:</p> <ol style="list-style-type: none"> 1. Water Supply Engineering 2. Water Supply Management 3. Drilling Technology 4. Drilling Machines Maintenance 5. Electrical Machines Maintenance 6. Ground Water Investigation <p>2) Provision of office space At EWTEC</p> <p>3) Contribution of local cost</p> <ol style="list-style-type: none"> 1. MoWE Administrative management cost of EWTEC Operational cost of basic courses (cost share) 2. Regional Water Bureaus Operational cost of basic courses (cost share) 	<ol style="list-style-type: none"> 1. EWTECs mandate and function as a training institution is sustained. 2. Appropriate number of EWTEC personnel gets assigned and continue to work at EWTEC. 3. Salary and incentive schemes of course coordinators and instructors do not get worsened any further. 4. Appropriate level of budget allocated for training courses. (secure professional trainers) 5. Expansion of EWTECs facilities and equipment gets budget allocated and implemented.
			<p>PRE-CONDITION</p> <p>EWTEC is to be institutionalized in the official structure of the Ministry of Water and Energy</p>