
日時: 2008年2月28日 16:00-17:00
場所: TVTC(Awassa)
出席者: Mrs.Asegedech Shawl, Mr.Fikre Teshome Dagne
面談者: 上村(記録)

調査の背景と目的を説明後下記の質問を行った。

Q1.TVTCの組織と陣容他

A1.現在AwasaのTVTCには2000名の生徒が在籍しており、その内、水分野は450名となっている。水分野は、Water Supply and Sanitation、Small Scale Irrigation、Electric Courseの3コースに分かれており、毎年150名の卒業生の内、約90%がWoredaに就職している。設立は1997年であるが、水分野は2002年3月より開設された。全体の教師数は132名であり、水分野の教師は32名となっている。なお、教師の勤続年数は平均3.1年である。

Q2.教材他

A2.カリキュラムガイドは水資源省から詳細な内容が届いている。しかしながら、内容が広範囲に及んでおり、それらを全て生徒に教えることは困難である。また、教科書や参考書も水資源省から提供されているもののその絶対数が少ない。

Q3.具体的にどのような機材が不足しているか。

A3.下記の機材が教育訓練には必要である。

- ① 水質分析用機材
- ② 灌漑実験用機材
- ③ 教科書と参考書
- ④ 電気機械関連機材と道具
- ⑤ ポンプ関連(ソーラー、風力、電動、エンジン、ロープ)
- ⑥ 発電機とエアーコンプレッサー及び溶接機
- ⑦ 事務用機材(コピー機、コンピューター、プリンター)と家具(机、椅子)
- ⑧ プレゼンテーション用機材
- ⑨ ミニバス等の移動用車両
- ⑩ 建設用機材(コンクリートミキサー、タイルカッター)
- 21 測量用機材

Q4.EWTECの研修に対して希望する研修内容

A4.下記のコースの研修を特に希望する。ただし、これらは教師の実務経験が少ないことから実習を重視した内容である。

- ⑧ 地下水調査方法と管理
- ⑨ 井戸掘削技術
- ⑩ 電気機械の維持管理
- ⑪ 給水技術
- ⑫ 井戸改修
- ⑬ 水質管理
- ⑭ ロープポンプ及びハンドポンプ
- ⑮ 手掘井戸建設
- ⑯ 社会開発
- ⑰ プロジェクト管理手法
- ⑱ GIS一般

Q.5. 研修時期他

A5.研修期間は夏季休暇の 2 ヶ月間を希望する。教師の給料が増額され、モチベーション、定職率ともが高くなった。

調査所感

Awassa の TVTC は 1997 年に設立されているが、比較的校舎は整備されている。また、土木コースでは校舎内部の舗道の整備を実習として取り入れるなど、工夫が見られる。この TVTC には移動用の車両 2 台も配備されている。さらにはドイツの協力によって施設の増築が開始されており、VTC の教育環境が改善されつつある。



日時: 2008年2月28日 17:00-17:45
場所: World Vision Awassa Office
出席者: Mr.Destaw Berham
面談者: 上村(記録)

調査の背景と目的を説明後下記の質問を行った。

Q1. エチオピアでどのような活動を実施しているのか。

A1. World Vision はアジスアベバにエチオピアの本部を置き、4 州に支局、3 箇所に連絡事務所、7 箇所に現場事務所を有している。スタッフは1200人であり、全てエチオピア人である。南部州では13のプロジェクトを実施しており、その内容は下記のとおりである。

- ⑪ Chenchu Area Development Program
- ⑫ West Abaya Area Development Program
- ⑬ Kumbo Area Development Program
- ⑭ Sodo Area Development Program
- ⑮ Shone Area Development Program
- ⑯ Durame Area Development Program
- ⑰ Q/Bira Area Development Program
- ⑱ Shengkolla Area Development Program
- ⑲ Omosheleka Area Development Program
- ⑳ Kochere Area Development Program
- 21 Sheshemene Area Development Program
- 22 Kulla Area Development Program
- 23 Akayar Area Development Program

これらのプロジェクトは、給水と衛生、食糧安全、教育、保健、HIV、スポンサーシップ管理、環境改善等を含んでおり、飲料水供給だけを目的としているわけではない。

Q2. 所属している技術者の数について

A2. 人数が多く、詳細は不明である。

Q3. EWTEC に期待する研修コースはあるか。

A3. 給水と衛生関連、地下水調査及び管理、プロジェクト管理、GIS 一般等を希望する。研修の機関は出来るだけ短期間を希望する。



World Vision Awassa Office 代表の Mr.Destaw

日時: 2008年2月29日 8:30-10:45
場所: 南部諸民族州水局
出席者: Mr.Tsegasellasic Daniel, Abdul Kerin Nesru, Yared Jillo
面談者: 上村(記録)

調査の背景と目的を説明後下記の質問を行った。

Q1.RWB の組織と陣容

A1.南部諸民族州のRWBは、局長1名、副局長2名、住民参加育成部3名、維持管理部31名、水資源開発部12名、給水衛生部15名の64名が配置されている。

Q2.RWB の主要な活動

A2.主要な活動は州レベルでの地方給水事業に関する、企画や調査、実施を行う。

Q3.今後どのような研修を希望するか。

A3.①地下水調査と管理、②井戸掘削技術、③掘削機械維持管理、④井戸改修、⑤電気機械維持管理、⑥給水技術、⑦水質管理、⑧ロープポンプ、⑨プロジェクト管理、⑩地下水モデル、⑪GIS、⑫リモートセンシング等を希望する。期間は3ヶ月を希望する。



組織図と聞き取り調査の様子

日時: 2008年2月29日 10:30-11:45
場所: Sidama Zone Water Resources Development Office
出席者: Mr.Abbiru Daqamo Danniso, Zenebe Aden 他2名
面談者: 上村(記録)

調査の背景と目的を説明後下記の質問を行った。

Q1.ZWO の組織と陣容

A1.この組織は1996年に設置され、①水資源開発、②水質管理、③水資源サービス開発、④社会資源開発、⑤水資源維持管理のチームが配置されている。事務所の全スタッフは32名である。

Q2.ZWO の主要な活動

A2.当事務所は19のWoredaを対象としており、Woredaから依頼のある水資源開発に関する各種技術的な

支援を行っており、また、Woreda からの要請を州水資源局に取り次ぐ業務も行っている。しかしながら、実際の活動は、調査用機材や車両の不足で効率性は低い。

Q3.どのような技術者を有しているか。

A3.化学 1 名、水理地質 3 名、水利 5 となっている。

Q4.EWTEC の研修にこれまで何名を出したか。

A4.4 名が研修を受け、その評価は高い。

Q5.EWTEC で期待する研修は何か

A5.地下水調査及び管理、給水と衛生、プロジェクト管理、水資源管理、水質管理、掘削技術、ハンドポンプの維持管理、ローカル技術等である。



聞き取り調査の風景



ZWO の事務所

日時: 2008 年 2 月 29 日 15:00-16:40

場所: Ministry of Capacity Building

出席者: Ato Bezabih Gebreyes, Director, Civil Service Reform Program, Ministry of Capacity Building

面談者: 山本(記録)

- エチオピアの国家貧困削減対策である PASDEP、ミレニアム開発目標、分権化政策の下、教育、保健、水を全て包括するセクター改革が行なわれている。
- 公務員改革も14の国家能力向上プログラム National Capacity Building Program(NGBP)の一つ。公務員改革はこの NCBP 全てに通じる萌芽 (embryo) である。
- ビジネス・プロセス・リエンジニアリングを全省で実施中。ビジネスプロセスを開発→組織構造を考える→管理プロセスを変更→成果主義に基づく評価、という一連の活動を行うことになっている。
- ビジネスプロセスは全て消費者である国民のニーズを満たすものにならなければならない。国民の要請に短時間に、効果的に対応できる政府機関作りを目指している。
- 各省庁の役割については、大きな変更はないものの、明確化は必要か。これはビジネスプロセス・リエンジニアリングを実施する中で、組織の存在理由を正当化した後、その役割の再規定が行なわれるかも知れない。
- 成果重視で、これまでの部局-課という形ではなく、全てチームという形で存在する非常に水平的な組織作りが行なわれている。ただし、残念ながらこれまでの重層的な組織が一度に水平的な組織となるには非常な痛みが伴うため、恐らくそのためにはかなりの時間がかかるだろう。
- 能力向上省 Ministry of Capacity Building は、Change Agent としての役割を担っている。2001 年に設立され

たスーパー省で、他の省庁で実施される公務員改革の調整・指導を行なっている。大臣は上級大臣で、元
国務大臣を務めた優秀な人材で、非常に発言権が強い。現在の職員数は 22 名。

- 援助機関では世界銀行、DFID、UNDP が資金・技術支援を行なっている。
- 公務員大学(Civil Service College)、アディスアベバ大学のビジネス管理学部などが公務員改革にかかる研修を実施。その計画・調整を行なうのは、能力向上省。
- 職級、職能については、現在大幅な見直しが行なわれている。DFID の支援で、イギリスの行政システムを学び、エチオピアに適したシステムの構築を行なっている。これは中央政府、州政府、WOREDA の全てのレベルで適用されることになっている。
- 給与は、業績重視となる。そのシステム作りも今後行なっていく。
- 能力向上省は、各省に対し様々な研修を行っている。マネージメント、プロジェクトマネージメント、プレゼンテーションなど。要請があれば、水資源省や EWTEC でも実施可能。
- 公務員改革は、2001 年から開始され、2008 年 6 月に組織改編を実施して終了することになる。フェーズ II は 2010 年まで実施される予定で、組織改編を継続・強化のための活動を展開する予定。
- オロミア、ティグライ、アムハラ州でも、組織改編が実施中。
- 公務員改革については国会が指導権を握っている。
- JICA は公務員改革や国家能力向上プログラムには支援しないのか。是非、能力向上省への財政・技術支援をお願いしたい。

日時: 2008 年 2 月 29 日 15:00-16:00

場所: Treasury, Ministry of Finance and Economic Development (MoFED)

出席者: Ato Getachew Negera, Head, Treasury Department, MoFED

面談者: 山本(記録)

- EWTEC が水資源省の一部組織として研修費用を民間や NGO に対し課金する場合、その金額、集めた研修参加費の使用法・計画、どのような資金管理を行うのか、などを記した書類を準備し、水資源省から財務・経済開発省に対し提出することが必要。提出された書類を受けて、財務・経済開発省では法務局とその法的適用性を検討し、布告 (proclamation) という形で承認をすることになる。
- これまでに前例は殆んどないと理解した方がよい。各省庁が国民(NGO、民間)から料金を徴収すること避けるべきと言う考え方がある。Road Authority でも利用者に対し課金をし、その資金を自分達の事業収入として、道路建設・舗装に利用しようとしたが、その歳入は財務・経済開発省に一度戻され、再度 Road Authority に戻す、という形となった。
- EWTEC が水セクターの人材育成を行い、政府職員から民間人に対しても研修を行う、というその目的、研修参加費を課金する理由付けは非常に正当なので、財務省としても合意をする可能性は非常に高い。
- ただし、認識しておいた方がよいのは、政府職員は無料で、民間企業に対しては有料、となった場合、それを聞いた民間企業は研修参加をせずに、研修を受けた政府職員に転職を働きかけ、費用の節約を図る可能性が大きいということ。これはエチオピアでよく見られる「戦略」なので、有料化については非常に詳細な調査をして臨むべきであるとアドバイスしたい。
- 今後、本格的に課金方法や金額が決まったら、財務・経済開発省法務局の Ato Washun Habate、財務省二国間担当 Ato Haile Mechel に会って協議をして欲しい。

日時: 2008 年 3 月 1 日 15:00-16:00

場所: Ag コンサルタント

出席者: Mr.Shiferaw Lulu, Mr.Teshome Mandefro

面談者: 上村(記録)

調査の背景と目的を説明後下記の質問を行った。

Q1.Ag コンサルタントの概要

A1.Ag コンサルタントは 1997 年に設立された水理地質専門のコンサルタントである。会社の組織は大きく、①上下水道部、②水利・水理地質部、③灌漑排水部、④水力発電部の4部門に分かれている。

Q2.技術者の専門分野及び受注先

A2.Ag コンサルタントが有している技術者は、土木、構造建築、給水・衛生、電気機械、環境、水理地質、GIS、地質工学、営業、財務、社会経済の分野に及んでいる。主な発注者としては、JICA、日本のコンサルタント(国際航業、協和コンサル)、州水資源局、大使館、NGO 等となっている。

Q3.所有ソフト

A3.会社は業務に必要な様々なソフトを所有している。具体的には、Auto CAD、Water CAD、Global Mapper、Arc View、Aquatest 等であり、これらを使用して EWTEC での講義も実施した。

Q4.EWTEC でどのような研修を期待するか。

A4.上級コースである、地下水モデル、リモートセンシング、GIS 等の高度なソフトを活用した研修が受けられるのであれば研修に参加する意味がある。

TAM Geo-Engineering PLC

Q1.会社の概要

A1.当社は Ag コンサルタントが 2002 年 5 月に設立した井戸掘削専門業者であり、約 20 名の掘削関連技術者を要している。

Q2.具体的な技術者の分野

A2.水理地質技師、地質技師、給水技師、電気機械技師、主任掘削技師、掘削工、掘削補助、電気工、機械工等の分野の専門家を要している。

Q3.所有機材

A3.日本製(利根)掘削機(300m)とアメリカの掘削機 2 台を所有している。これまでの実績では上記機械を使用した場合、100mクラスでは 2 日、条件の厳しい地質でも最大 5 日で掘削工事を完了している。

Q4.掘削実績について

A4.日本の無償資金協力案件で、アーバン利根から 179 本の井戸建設を受注した。この他東亜利根より、134 本、国際航業より 11 本、協和コンサルタントより 8 本の井戸建設を受注するなど日本関係者からの業務が多くなっている。

Q5.EWTEC に期待する研修

A5.理論的、より実践的な研修を希望する。具体的には、①井戸掘削技術、②井戸掘削機の維持管理、③電気機械、④地下水検層及び揚水試験、⑤井戸改修、等の研修である。これらの研修対象者としては、経験の少ない技術者と理論的な研修を受けたことの無い、中堅技術者が対象となる。なお、研修期間に関しては、長期は不可能である。

日時: 2008 年 3 月 3 日 8:45-9:15 (再確認)

場所: MoWR

出席者: Ato Eyob Degu, Director of Administration Dept.

面談者: 山本(記録)

- 2008 年 2 月に正規職員が 839 名、契約職員(プロジェクト職員)が 90 名、の総計 929 名。うち 373 名が大学卒業の「プロフェッショナル」、466 名が高校修了証以下の学歴の「非プロフェッショナル」
- 給与グレードにあるサブ・プロフェッショナルというのはテクニシャンで、高校修了者。プロフェッショナルという

のは大卒の技術者のこと。

- 今年度末または来年度より業績に基づいた給与制度が導入される。結果主義なので、業績を上司とともに年度末に評価をして、給与の判断も行なわれることになる。基本的には、それぞれの職位につき、必要な教育、業務経験を明らかにする→もし空席が出たら内部公募を行い、空席を埋める→年初に 1 年間の業績目標を上司と共に作成→年度末にその目標に基づいて業績評価→給与査定、という流れになる。
- 基本的には、ポスト数は増やさないが、もし必要があればその必要性を説明した文書を準備し、公務員庁に申請する。

入手書類

- ✓ 給与グレード表

日時: 2008 年 3 月 3 日 8:45-9:15 (再確認)

場所: MoWR

出席者: Ato Tashoma, Director, Planning

Ato. Mamo Belayneh, Team Leader, Planning and Budget

面談者: 山本(記録)

- UAP 修正の予定はなし。
- 2002 年に策定された Sector Development Program 2002 については修正予定で、マルタ氏が担当。

入手書類

- ✓ 2006、2007 年度の予算

日時: 2008 年 3 月 3 日 15:30-17:45

場所: Woreda Awash

出席者: Mesde Yutima 他 6 名

面談者: 上村(記録)

調査の背景と目的を説明後下記の質問を行った。

Q1.Afar 州における Woreda の役割について

A1.Afar 州には現在 31 の Woreda 事務所が設置されているが、県水事務所(ZWO)はない。また、それぞれの Woreda には管理事務所が独立した場所に設置されており、主に予算や管理を主体に活動している。Awash には①水事務所、②保健事務所、③教育事務所、④婦人事務所、⑤能力開発事務所、⑥業務調整事務所、⑦財務事務所、⑧農業・牧畜事務所があるが、これらの中で、①、②、③、⑧の事務所の活動が主である。

Q2.Woreda 水事務所の陣容と業務

A2.水事務所には技術系 7 名と事務系 7 名の合計 14 名が勤務している。技術系は、①機械、②電気機械、③給水と衛生、④灌漑、⑤農業機械の分野の人材が配備されている。なお、これらの技術系の職員の内、5 名が TVTC の卒業生である。しかしながら、殆どの人材が 3 年以下の経験しかなく、また、予算不足、関連機材の不足等で活動は限定されている。

Q3.EWTEC の研修にこれまで何名を出したか。

A3.1 名の機械工を参加させた。

Q4.EWTEC の研修を受けた者の評価はどうか。

A4.同様な研修機関が存在しないこともあり、極めて有効な研修である。

Q5.今後どのような研修を希望するか。

A5.①地下水調査と管理、②井戸掘削、③井戸掘削機械整備、④電気機械整備、⑤給水技術、⑥水質管理、⑦ハンドポンプ設置、⑧ハンドダッグウェル、⑨社会開発、⑩プロジェクト管理を希望する。ローブポンプなどの適正技術を希望する。ただし、現場での作業レベルがそれ程高くないことから、初級コースで十分である。また、研修期間は3ヶ月で十分である。



Woreda の管理事務所の看板



管理事務所の建物



水事務所の看板



水事務所の建物



要望調査の様子



同左

日時: 2008年3月4日 9:30-11:00
場所: TVTC(Luci)
出席者: Tamrat Fetene
面談者: 上村

調査の背景と目的を説明後下記の質問を行った。

Q1.TVTCの組織と陣容他

A1.現在 Luci の TVTC には 600 名の生徒が在籍しており、彼らは、Water Supply and Sanitation、Small Scale Irrigation、Electric Course の3コースに分かれている。設立は 2002 年 3 月である。これらはどれも 3 年間のコースであり、これに対応する教師は 37 名となっている。なお、教師の勤続年数は平均 3 年である。また、卒業生の殆どは Woreda に就職している。

Q2.教材他

A2.カリキュラムガイドは水資源省から詳細な内容が届いている。しかしながら、教科書と参考書が殆ど配備されていない。また、訓練用機材も極めて少なく、教育に支障が出ている。

Q3.具体的にどのような機材が不足しているか。

A3.下記の機材が教育訓練には必要である。

- 22 水質分析用機材
- 23 電気伝導度計
- 24 水位計
- 25 灌漑用実験機材
- 26 教科書と参考書
- 27 電気機械関連機材と道具
- 28 ポンプ関連(ソーラー、風力、電動、エンジン、ロープ)
- 29 発電機とエアーコンプレサー
- 30 溶接機
- 31 事務用機材(コピー機、コンピューター、プリンター)と家具(机、椅子)
- 32 プレゼンテーション用機材
- 33 ミニバス等の移動用車両
- 34 衛生用機材(パイプ、継ぎ手等)
- 35 建設用機材(コンクリートミキサー、タイルカッター)
- 36 測量用機材

Q4.EWTEC の研修に対して希望する研修内容

A4.下記のコースの研修を希望する。ただし、これらは実習を重視した内容である。

- ⑲ 地下水調査方法と監理
- ⑳ 電気機械の維持管理
- 21 給水技術
- 22 井戸改修
- 23 水質管理
- 24 ロープポンプ
- 25 手掘井戸建設
- 26 プロジェクト管理手法
- 27 衛生
- 28 灌漑

Q.5. 研修時期他

A5.研修期間は夏季休暇の 3 ヶ月間を希望する。また、コースのレベルは中級コースを対象として欲しい。教師の給料が増額され、モチベーションが高くなった。

調査所感

Luci の TVTC は 1997 年に設立されているが、校舎の老朽化が激しく、天井の落下、配線の切断、窓の破損が進んでいる。また、機械コースに設置されている機材は殆ど使用した形跡は無く、ごみが散乱している。図書室にはカリキュラムガイドや参考書が保管されているがその絶対数が少ない。ここで勤務している教師の平均勤続年数は 3 年となっているが、実務経験が少ない。実務経験があれば、教育の一環として、校舎の修復や生徒の実習の一環として、校舎内の舗道の整備や緑化等知恵絞った職業訓練も可能であるが、彼等は予算が少なく、教育用機材の不足を嘆くばかりであり、解決策を模索している様子は無い。



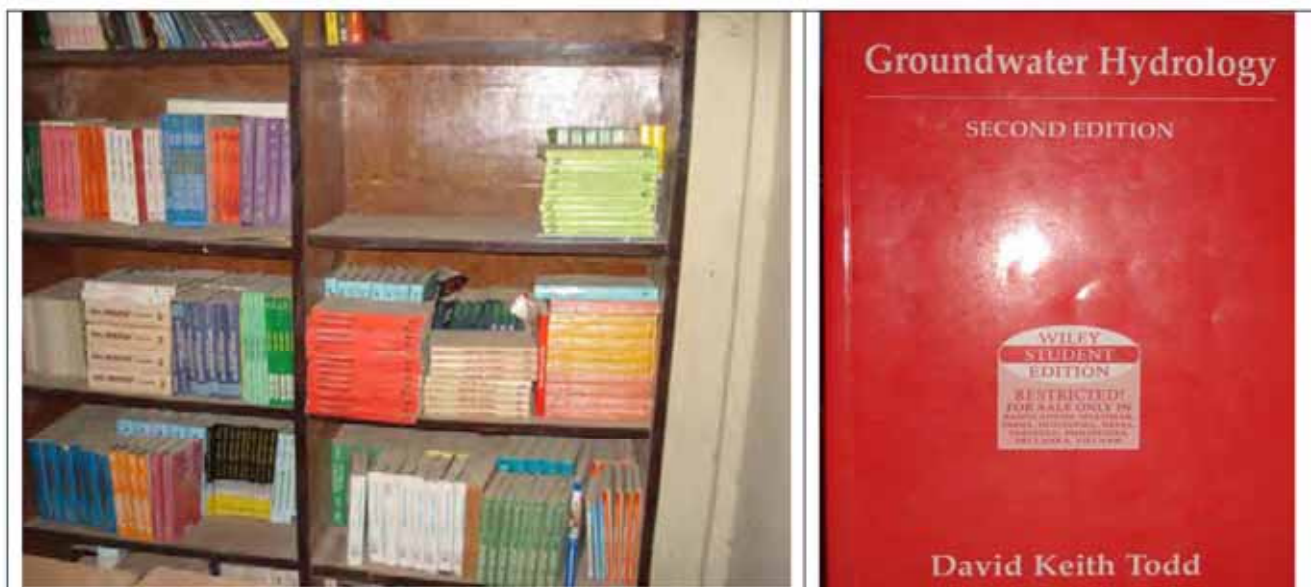
訓練校の様子



教師への聞き取り調査



満員の教室での数学の授業風景



図書室に保管されている教科書と参考書。絶対数が不足している。



敷地に設置されている実習用ハンドポンプ

機械実習室はごみが散乱し使用した形跡は無い。

付属資料 6 - ①

Mini-Workshop with the EWTEC Training Staff Members

Date and Time: 9:00 – 12:00, 4th March 2008
Venue: EWTEC Classroom
Participants: 6 EWTEC staff members
Mr. Endris Mohammed, Course Coordinator (DMMT) and Instructor
Mr. Mulugeta Kenfu, Course Coordinator (DT) and Instructor
Mr. Abraham Mahari , Course Coordinator (EEMT)
Mr. Molla Fetene, Instructor (GI)
Mr. Melaku Nesibu, Instructor/Electrician
Mr. Getachew W Michael, Chief Mechanic
Observer: Mr. Masahiko Ikemoto, EWTEC 2nd Phase Expert (Training Managent)
Advisor: Mr Mituro Uemura, Training Consultant
Moderator: Yoshie Yamamoto, Evaluation/ Organizational Management Consultant
Agenda:
9:00 – 9:20 Introduction of the Workshop and Participants' introduction
9:20 – 9:50 Want Analysis (What do we want EWTEC to be?)
9:50–10:30 Strength and Weakness of EWTEC
10:30–10:40 Coffee Break
10:40–11:55 Training Needs and Courses
11:55–12:00 Comments from Mr. Uemura

I WANT EWTEC TO:

- ✓ Be able to formulate operational guidelines (i.e. drilling).
- ✓ Be a model training centre for Ethiopia and other African countries.
- ✓ Be a Centre of Excellence.
- ✓ Be a research and development centre.
- ✓ Be an advanced training centre.
- ✓ Be a good model centre.
- ✓ Be a model training centre in Ethiopia.
- ✓ Conduct a research on the capacity of different types of rigs for Ethiopian groundwater development.
- ✓ Take a leading role in water research.
- ✓ Be a data centre for groundwater development.
- ✓ Be a research and training university for water sector.
- ✓ Have competent staffs.
- ✓ Have well equipped workshops, training facilities.
- ✓ Be a strong institution for water sector.

- ✓ Conduct a research on design and production of hand pumps, wind pumps, solar pumps, motorized pumps and small capacity drilling rigs.
- ✓ Offer more practical training (practical 60% and theoretical 40%).
- ✓ Dream good.
- ✓ Have hopes.

STRENGTH OF EWTEC

- ✓ Drilling technology course is given only at EWTEC
- ✓ Practical Training in geophysical survey is given only at EWTEC
- ✓ Practical training on groundwater modeling is given only at EWTEC.
- ✓ International courses on GIS & Remote sensing is given only at EWTEC
- ✓ Groundwater Management in relation to project execution is given only at EWTEC
- ✓ Wide range of courses given at EWTEC (i.e. drilling, maintenance, groundwater investigation, local rope pump fabrication)
- ✓ Good experiences in conducting training
- ✓ Training courses are interesting and important with practical component
- ✓ Information sharing among the instructors
- ✓ Good grasp of training needs of the regional water bureaus
- ✓ Training evaluation by ex-trainees and their bosses
- ✓ Training courses arranged based on training needs assessment
- ✓ Trained more than 2,000 trainees from regional water bureau and water works construction enterprises
- ✓ Existing training facilities
- ✓ Our commitment to work with EWTEC

WEAKNESS OF EWTEC

- ✓ No vision, mission, mandate given to EWTEC
- ✓ No recognition from the Ministry of Water Resources
- ✓ Weak linkage with the Departments of the Ministry of Water Resources
- ✓ Absence of leadership
- ✓ Lack of management
- ✓ EWTEC staffs have no right to plan or to generate new ideas
- ✓ Weak management
- ✓ Weak communication with JICA
- ✓ No clear and open relationships between EWTEC staff and Japanese
- ✓ Little communication with Japanese experts
- ✓ No discussion with staff
- ✓ No meetings
- ✓ Limited sharing of information from the management and the Japanese experts
- ✓ Instructors and others are not paid enough

- ✓ Poor salary payment of instructors and coordinators
- ✓ Very small salary
- ✓ No incentive system
- ✓ No short or long-term training plan
- ✓ Not enough classrooms
- ✓ Not enough reference materials at the library
- ✓ Not good dormitory
- ✓ Instructors and coordinators not involved in research activities
- ✓ Research and development programs run by JICA are not participatory for EWTEC staff
- ✓ Not equipped with
- ✓ No sustainable research programme
- ✓ No advanced courses on DMMT, DT and EMT
- ✓ Not providing training for private sector and NGOs
- ✓ Not enough training equipment
- ✓ Poor health clinic services
- ✓ No hospital plans/ insurance for courses involved in drilling
- ✓ No development/ restructuring for the last 10 years
- ✓ Limited opportunities open to staffs to learn new technology
- ✓ Serious lack of educational materials (books, equipment, software)
- ✓ Serious lack of teaching materials
- ✓ Not proper workshop
- ✓ Limited number of instructors with BScs or MSc degree

WHO ARE EWTEC's CLIENTS?

- ✓ Regional Water Bureaus (Geologist, Mechanics, Technicians, Senior Technician)
- ✓ Regional Water Works Construction Enterprises
- ✓ Federal Enterprises
- ✓ Private Sector
- ✓ NGOS
- ✓ Individuals who want to work in the water sector
- ✓ Geologists
- ✓ Hydro-geologist
- ✓ Geophysicist
- ✓ Electricians
- ✓ Mechanics
- ✓ Technicians
- ✓ Head of Technical Workshop

WHAT TRAINING COURSES DO WE WANT TO PROVIDE?

- ✓ *Groundwater Management*
 - How to design sustainable well
 - How to improve well site selection
 - GIS database analysis
 - How to evaluate groundwater
 - Geochemical data acquiring and application
 - GIS data acquisition and application
 - Research and study of various basins of Ethiopia
 - Remote sensing for environment assessment
 - Infrared remote sensing for geological mapping

- ✓ *DMMT/EMMT*
 - Mechatronics course
 - Designing small capacity rigs for shallow well
 - Motor rewinding technology
 - Research and production of small scale technologies
 - Electrical maintenance
 - Maintenance management
 - Hydraulic system of rig
 - Air compressor
 - Design and production of hand pumps and wind pumps
 - Submersible pumps – design and application
 - Design and production of hand pumps and wind pumps
 - Drilling technology planning and management
 - Cementing techniques
 - ODEX drilling
 - Reverse circulation drilling
 - Drilling fluids preparation and application
 - Fishing tools and application
 - Automation and control systems
 - Introduction of PLC system

TRAINING DURATION

- ✓ Too short (to cover the existing training curriculum)
- ✓ EMT should be 5 months course (to cover the existing training curriculum)
- ✓ DMMT should be 4 months course (to cover the existing training curriculum)
- ✓ DMMT should be 3-6 months (to cover the existing training curriculum)

SELECTION OF TRAINEES

Training coordinators/ instructors felt that selection of trainees at Regional Water Bureaus pose difficulties in effective training. It was pointed out that there are quite a few instances when trainees do not have any relevant work responsibilities, skills and knowledge. Nepotism and ad-hoc selection of trainees were raised as one of the causes behind inappropriate selection of trainees.

- ✓ Selection has to be done by MoWR
- ✓ Selection criteria should include: educational background, work experience related to the course and age
- ✓ Trainees should have equivalent work experiences
- ✓ Select trainees who have work responsibilities applicable to the training course
- ✓ More consideration of work experiences
- ✓ Regional Water Bureaus need to follow the criteria
- ✓ Sending appropriate person to appropriate courses

⇒ Proposed solution 1

MoWR shall organize a workshop for Regional Water Bureaus about the training and importance of selecting appropriate participants for EWTEC training.

⇒ Proposed solution 2

Promote the idea and objectives of EWTEC

⇒ Proposed solution 3

Obtain authorization from the Minister to handle direct communication with Regional Water Bureaus/ Zones/ Woreda Water Desk in requesting of nomination of trainees.

Workshop with Regional Water Bureaus

13th March 2008

- 9:30am Opening remark by Ato Abera Mekonnen: He reminded the participants that active participation in this workshop is quite important as EWTEC benefits all in the regions. Introduction of participants was initiated.
- 9:38am Presentation by Mr. Yuji Maruo, JICA Technical Advisor, on 'Activities and Achievements of EWTEC since its establishment in 1998.'
 - 10th anniversary this year.
 - Conducted social development course for Woreda during the Phase I.
 - Phase II had the 1,127 trainees, much larger than the first 5 years of the Phase I.
 - Afridev spare-parts were introduced for local production and endurance test was conducted.
 - Introduced GIS and remote sensing courses.
 - Conducted rope pump production training for local artisans. Training – Order for production of 10 rope pumps – licensing for products that meet standards set by the EWTEC.
 - Shared Butajir-Zuwai hydro-geological map: The most important finding was very good aquifers in the area of acute dryness. Constructed an observation well. In the close proximity of Koshe town, there is a rich aquifer – important finding for the Southern Region.
 - JICA's inputs in terms of long-term and short-term experts were introduced. Procurement of equipments was done with over 3 million US dollars during the first Phase I.
- 10:20 Presentation by Ato. Markos Tefera, Head, EWTEC
 - Construction of additional facilities from current 40 to 250.
- 10:30 Question and Answer Sessions
 - We've seen the progressive development over the last 10 years. Facility constraints should be tackled. How could RWB assist EWTEC?
 - Achievement of UAP is essential. Accommodation of trainees should be increased. Is there any way to increase? → (Ato. Markos Tefera) MoWR has already requested for budget allocation for expansion of the classrooms and dormitories. If it's approved, it will be expanded. → (Mr. Yakushi) JICA will assist the MoWR's efforts to secure the funds.
 - Is there any plan to upgrade EWTEC to the college level (diploma level)? All the qualified people we have at the regions are the ones that have been trained at EWTEC. → (Ato. Markos Tefera) It is not possible at the moment. → (Ato Abera Mekonnen) It was requested by MoWR but was not taken up by the Ministry of Education. → (Dr. Kamata) Duration of training is a key. Our training courses are not for lengthy period of time like

diploma for 2 years. → (Mr. Maruo) Our training courses should not be too long as we aim at improving efficiency of current workforce in the water sector. We should be looking at accreditation of our certificates rather than making EWTEC as an education centre.

- Any opportunities to widen course line-ups? → (Ato. Markos Tefera) EWTEC will conduct a needs assessment in the regions and determine the courses/ course line-up while looking at budgetary allocation both from MoWR and JICA.
- What is the role of JICA in the future? → (Mr. Yakushi) For quality assurance we would like to support curriculum/ teaching materials development, capacity building of instructors, establishment of monitoring and evaluation cycle. → (Ato Abera Mekonnen) For the last 10 years it's been mainly done by JICA. In the future, we will like to own the centre.
- Will you make a training need assessment? → (Mr. Yakushi) We've done a small survey and we will share with you through our presentations. We will conduct more detailed training needs assessment later on. → (Dr. Kamata) We have conducted an impact assessment during the final evaluation. → (EWTEC Mr. Murugeta) We have priorities, but we never really had an opportunity to share. → EWTEC has already done quite a few and data. They do not want to send participants to be trained when they do not have any equipment (i.e drilling rigs). → Feedback have been given, but I didn't receive a copy of the impact assessment. We should build on it and create consensus among the regions.

- 11:20 Presentation by Mr. Yakushi, JICA Assistant Resident Representatives, on Training Needs

- Shared the results of the sample survey on government organizations.
- Consultant: Difficult to see the gap in HR needs
- TVTC instructors (only 2 water related courses): We conducted a survey and found that there was an issue on lack of quality standardization. Gaps in terms of numbers and specialization have been reported. Retention rate and the length of instructors' years of service is not favorable to provide enabling environment for learning.
- Continuous training is necessary for TVTC instructors.

- 11:40 Presentation by Mr. Uemura, Training Consultant of JICA Project Formulation Study Team

- 11:50 Questions and Answers

- What kind of training to be developed for construction foremen at the woredas who get involved in spring development?
- How about training for hand-pumps technician?
- Instructors need to get involved in practical works on groundwater investigation, explorations, how do we get organized?
- Local artisans' training is quite important. What is the arrangement? Even if EWTEC

can not provide training directly, could we provide funding to the training being conducted by the RWB/ zones/ Woredas for the training on actual training on construction of water facilities?

- There has to be practical training to construct pumps and springs. TVTC instructors are not equipped to provide practical training.
- Leakage detection for the urban water supply should be included.
- To start off, current information is enough. However for further development, it is essential to include RWB in detailing out the courses.
- For RWV, it is crucial to include a training on management of tenders.
- For TVTC instructors, EMMT course is missing and should be included.

→ (Mr. Yakushi) We need to prioritize targets and training courses as we can not possibly provide all the training for everyone. EWTEC will not provide funding to Woredas and others for implementation of training. Clarifications and strategy development is necessary.

→ (Mr. Maruo) We need to provide practical training during the apprenticeship period. We could provide practical training to the instructors who lack working experiences.

→ (Mr. Murugeta) Even to provide technical and practical training, it is necessary to consider difficulties in logistics during the winter time. For instance groundwater investigation course is closely interlinked with others.

→ (Mr. Yakushi) Comments from the RWB will be welcomed and discussed with the MoWR. Please provide them as you like. Your comments will certainly be noted.

→ (Ato Abera Mekonnen) We are trying to meet the needs of the Universal Access Program and not to meet the general needs.

→ (Dr. Kamata) EMMT is already under-consideration.

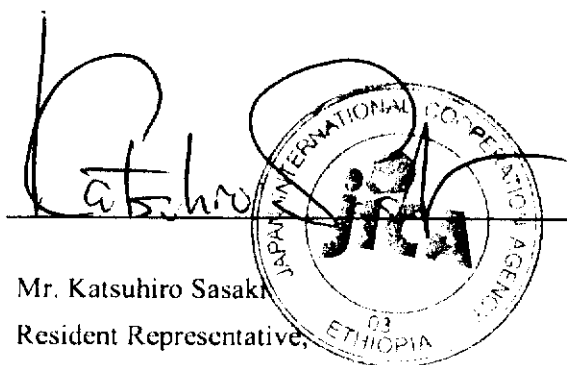
- 12:20 Closing remark by Ato Abera Mekonnen

RECORD OF DISCUSSIONS BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY AND
THE MINISTRY OF WATER RESOURCES OF
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
ON JAPANESE TECHNICAL COOPERATION
FOR
THE ETHIOPIAN WATER TECHNOLOGY CENTRE PROJECT PHASE-III
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

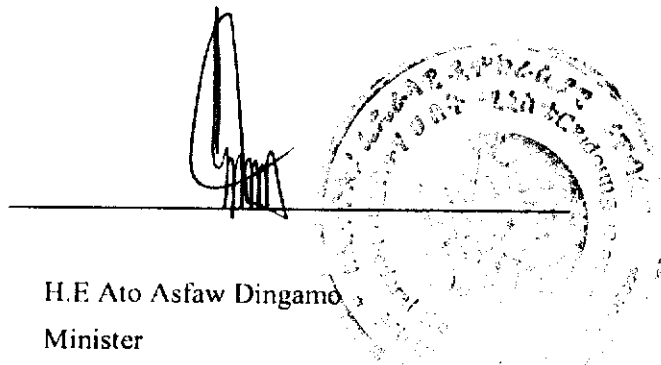
The Resident Representative of Japan International Cooperation Agency (hereinafter referred to as "JICA") in the Federal Republic of Ethiopia had a series of discussion with Ethiopian authorities on desirable measures to be taken by both JICA and Ethiopian Governments for the successful implementation of the Groundwater Development and Water Supply Training Project Phase-III in the Federal Democratic Republic of Ethiopia (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed recommend to their respective Governments the matters referred to in the document attached hereto.

Addis Ababa, 16th October, 2008



Mr. Katsuhiro Sasakura
Resident Representative,
Japan International Cooperation Agency,
Ethiopia Office



H.E Ato Asfaw Dingamo
Minister
Ministry of Water Resources
Federal Democratic Republic of Ethiopia

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN JICA AND ETHIOPIAN GOVERNMENT

1. The Government of the Federal Democratic Republic of Ethiopia will implement the Project in cooperation with JICA.
2. The Project will be implemented in accordance with the Master Plan which is given in ANNEX I.

II. MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

In accordance with the laws and regulations in force in Japan, the Government of Japan will take, at its own expense, the following measures through the Japan International Cooperation Agency (hereinafter referred to as "JICA") according to the normal procedures of its technical cooperation scheme.

1. DISPATCH OF JAPANESE EXPERTS

JICA will provide the services of the Japanese experts as listed in ANNEX II.

2. PROVISION OF MACHINERY AND EQUIPMENT

JICA will provide machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in ANNEX III. The Equipment will become the property of the Government of the Federal Democratic Republic of Ethiopia upon being delivered C.I.F.(cost, insurance and freight) to the Ethiopian authorities concerned at the borders and/or airports of disembarkation.

3. TRAINING OF ETHIOPIAN PERSONNEL IN JAPAN

JICA will receive the Ethiopian personnel connected with the Project for technical training in Japan. The training shall be conducted based on the request by the Ethiopian Government.

III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

1. The Government of the Federal Democratic Republic of Ethiopia will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through full and active involvement in the Project by all related authorities, beneficiary groups and institutions.
2. The Government of the Federal Democratic Republic of Ethiopia will ensure that the technologies

and knowledge acquired by the Ethiopian nationals as a result of the Japanese technical cooperation will contribute to the economic and social development of the Government of the Federal Democratic Republic of Ethiopia.

3. The Government of the Federal Democratic Republic of Ethiopia will grant in the Federal Democratic Republic of Ethiopia privileges, exemptions and benefits as listed in ANNEX IV no less favorable than those granted to experts of third countries or international organizations performing similar missions to the Japanese experts in the Federal Democratic of Ethiopia
4. The Government of the Federal Democratic Republic of Ethiopia will ensure that the Equipment referred to in II-2 above and all equipment donated during phase 1 and phase 2 of the Project will be well managed and utilized exclusively and effectively for the implementation of the Project in consultation with the Japanese experts referred to in II-1.
5. The Government of the Federal Democratic Republic of Ethiopia will take necessary measures to ensure that the knowledge and experience acquired by the Ethiopian personnel from technical training to be organized in Japan will be utilized effectively in the implementation of the Project.
6. In accordance with the laws and regulations in the Federal Democratic Republic of Ethiopia, the Government of the Federal Democratic Republic of Ethiopia will take necessary measures to provide at its own expense for the project:
 - (1) Services of the Ethiopian counterpart personnel and administrative personnel as listed in ANNEX V;
 - (2) Land, buildings and facilities as listed in ANNEX VI;
 - (3) Supply or replace at its own expense machinery, equipment, instruments, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided by JICA under II-2 above;
7. In accordance with the laws and regulations in force in the Federal Democratic Republic of Ethiopia, the Government of the Federal Democratic Republic of Ethiopia will take necessary measures to meet;
 - (1) Expenses necessary for transportation within the Federal Democratic Republic of Ethiopia of the Equipment referred to in II-2 above as well as for the installation, operation and maintenance thereof;
 - (2) Customs duties, internal taxes and any other charges imposed in the Federal Democratic Republic of Ethiopia on the Equipment referred to in II-2 above;
 - (3) Running expenses necessary for the implementation of the Project.

IV. ADMINISTRATION OF THE PROJECT

1. The chief engineer of the Ministry of Water Resources (hereinafter referred to as "MoWR") as the Project Director, will bear overall responsibility for the administration and implementation of the Project until the new organizational structure of the MoWR and Ethiopian Water Technology Center (hereinafter referred to as "EWTEC") put in place. The final position of the Project Director, however, will be determined in the future on the basis of the new organizational structure.
2. The person who is assigned by the MoWR, as the Project Manager, will be responsible for the managerial, technical matters and the smooth implementation of the Project with close relation with regional governments and other authorities concerned.
3. The Japanese Chief Advisor will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.
4. The Japanese experts will provide necessary technical guidance and advice to the Ethiopian counterpart personnel on technical matters pertaining to the implementation of the Project.
5. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee will be established whose functions and composition are described in ANNEX VII.
6. The Administration structure will be modified after the determination of organizational structure of EWTEC as a new department.

V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by JICA and the Ethiopian authorities concerned, at the last six (6) months of the cooperation term in order to examine the level of achievement.

VI. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Federal Democratic Republic of Ethiopia undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Federal Democratic Republic of Ethiopia except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between JICA and the authorities concerned in the Government of the Federal Democratic Republic of Ethiopia on any major issues arising from, or in connection with this Attached Document.

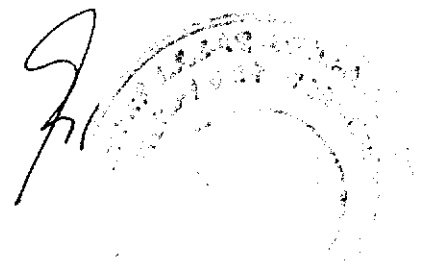
VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

For the purpose of promoting support for the Project among the people of the Federal Democratic Republic of Ethiopia, the Government of the Federal Democratic Republic of Ethiopia will take appropriate measures to make the Project widely known to the people of the Federal Democratic Republic of Ethiopia.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be five (5) years from December 2008..

ANNEX I	MASTER PLAN
ANNEX II	LIST OF JAPANESE EXPERTS
ANNEX III	LIST OF MACHINERY AND EQUIPMENT
ANNEX IV	PRIVILEGES, EXEPTIONS AND BENEFITS FOR JAPANESE EXPERTS
ANNEX V	LIST OF ETHIOPIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL
ANNEX VI	LIST OF LAND, BUILDINGS AND FACILITIES
ANNEX VII	JOINT COORDINATING COMMITTEE



ANNEX I MASTER PLAN

1. Overall Goal

The number of human resources who deal with groundwater/water supply management for sustainable water supply construction and maintenance increases in Ethiopia.

2. Project Purpose

Capacity of the EWTEC as a core training centre for water supply technicians and engineers of Ethiopia is established.

3. Output of the Project

- (1) Mechanisms to sustain constant quality improvements in EWTEC's training activities are fully established.
- (2) Technical knowledge and skills on water supply and management are improved for technicians and engineers from the Regional Water Bureaus, woredas, private sector and NGOs, and TVETC instructors.
- (3) Capacities are developed to provide technical instructions of course coordinators, instructors, mechanics and drillers who conduct training at EWTEC.
- (4) Sustainable institutional management capacity of EWTEC is strengthened.

4. Activities of the Project

- (1) Establishment of mechanisms to sustain constant quality improvements on EWTEC's training activities
 - 1-1. Conduct of monitoring and evaluation for each training course to make necessary improvement
 - 1-1-1. Development and regular implementation of proficiency tests to each training participants
 - 1-1-2. Development and regular implementation of evaluation for each training program and instructor by training participants.
 - 1-1-3. Implementation of assessment of above proficiency tests and evaluations to make necessary improvement.
 - 1-2. Conduct of regular monitoring and evaluation of curriculum and teaching materials
 - 1-2.1. Establishment of training technical committee (TTC) for each training field.
 - 1-2.2. Regular (annually) implementation of evaluation of curriculum, modules and teaching materials by TTC.
 - 1-2.3. Making necessary review and modification of training curriculum and teaching materials.
 - 1-2.4. Implementation of training needs assessment by TTC to develop training curriculum, modules and teaching materials.
 - 1-3. Conduct of regular (annually) improvement of deployment plan of instructors
 - 1-3-1. Renew the next years' deployment plan based on the above evaluation (1-2.2).

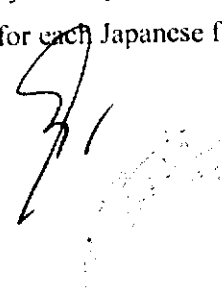
- 1-3-2. Select external instructors suitable for the above deployment plan (1-3.1) , based on the above evaluation (1-1).
- 1-4. Conduct of regular (annually) monitoring and evaluation of EWTEC activities, in cooperation with relevant stakeholders.
 - 1-4.1. Establishment of M&E committee composed of representatives of beneficially organizations (i.e RWB, Woreda, private sector, NGOs, TVETC) and donors.
 - 1-4.2. Conduct of regular (annually) M&E committee meeting to confirm the achievements and make necessary improvement.
- (2) Improve technical knowledge and skills on water supply and management of technicians and engineers from the Regional Water Bureaus, woredas, private sector and NGOs, and TVTC instructors.
 - 2-1 Conduct training for Regional Water Bureaus
 - 2-2 Conduct training for Woreda Water Office
 - 2-3 Conduct training for technicians and engineers of the Private Sector and NGOs
 - 2-4 Conduct training for TVETC instructors
- (3) Develop capacities to provide technical instructions of course coordinators, instructors, mechanics and drillers who conduct training at EWTEC
 - 3-1 Provide pedagogical training through On the Job Training (OJT).
 - 3-2 Provide instructions on specialized technical subjects through OJT
 - 3-3 Improve practical skills and knowledge through field activities.
 - 3-4 Improvement in maintaining training equipment and machineries
 - 3-5 Strengthen advanced knowledge and pedagogical skill through implementation/participation of international training
- (4) Strengthen sustainable institutional management capacity of EWTEC
 - 4-1 Support articulation of EWTEC's mandate, vision, mission and strategies to reach a consensus among relevant stakeholders (i.e RWB, donors, NGOs).
 - 4-2 Support development of Medium-to-Long-term Plan
 - 4-3 Support developing capacities in planning budget and diversity funding sources in cooperation with relevant stakeholders (i.e other donors, RWB, Woreda and private sector).
 - 4-4 Support development of capacities to establish strong collaborations with donors (i.e WASH pooled fund).
 - 4-5 Develop and manage of database on training participants.
 - 4-6 Implement PR and knowledge management activities through publicizing EWTEC annual report, home page and other necessary activities.

ANNEX II LIST OF JAPANESE EXPERTS

1. Project Experts

- (1)** Chief Advisor
- (2)** Project Coordinator
- (3)** Other experts with different specialties

Note: Specialization, number and terms of assignment of JICA Project Experts will be decided in consideration of the progress of the Project through mutual consultations for each Japanese fiscal year.



ANNEX III LIST OF MACHINERY AND EQUIPMENT

Materials and equipment mutually agreed upon as necessary will be provided.

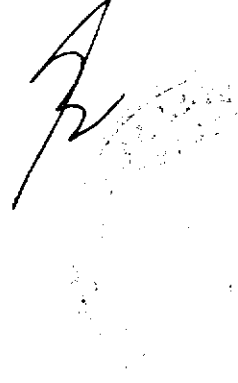
Notes:

Contents, specifications and quantity of the equipment will be decided through mutual consultation within the allocated budget of the Japanese fiscal years.

A handwritten signature in black ink, appearing to be a stylized 'S' or 'J' followed by a flourish.A handwritten mark in black ink, resembling a stylized 'X' or a checkmark.

ANNEX IV PRIVILEGES, EXEMPTIONS AND BENEFITS FOR JAPANESE EXPERTS

1. Exemption from income tax and other charges of any kind of imposed on or in connection with the living allowances remitted from abroad.
2. Exemption from import tax, export duties and any other charges in respect of personal and household effects of the Japanese experts and their families.
3. To issue, upon application, entry visa for the Japanese experts and their families free of charge.
4. To issue identification card to the Japanese experts and their families to secure the cooperation of all governmental organization necessary for the performance of the duties of the experts.
5. Exemption from customs duties for import and export of professional equipment by the Japanese experts in connection with the activities of the Project.



ANNEX V LIST OF ETHIOPIAN COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Project Director

The Chief Engineer, MoWR

2. Project Manager

Head of Department of Rural Water Supply and Sanitation Service Department, MoWR

3. The Head of the EWTEC

4. Counterpart Personnel

- (1) Course Coordinator for Drilling Mechanical Engineering
- (2) Chief Mechanic for Drilling Mechanical Engineering
- (3) Mechanic for Drilling Mechanical Engineering
- (4) Course Coordinator for Electro-Mechanical
- (5) Technician for Electro-Mechanical
- (6) Course Coordinator for Water Supply
- (7) Assistant Course Coordinator for Water Supply
- (8) Course Coordinator for Drilling Technology
- (9) Chief Driller for Drilling Technology
- (10) Driller for Drilling Technology
- (11) Course Coordinator for Hydro-geology
- (12) Assistant Course Coordinator for Hydro-geology
- (13) Training Administrator
- (14) Database Management Officer (2)
- (15) Budget and Planning Officer

6. Administrative Personnel

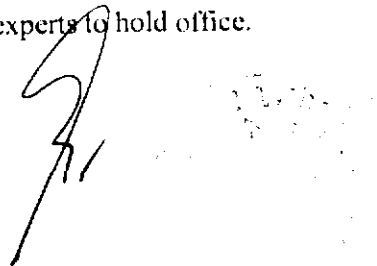
- (1) Senior Administrator
- (2) Administrator
- (3) Accountant
- (4) Cashier
- (5) Drivers
- (6) Cleaners
- (7) Security Guards
- (8) Other necessary staff

✕ List of counterpart and administrative personnel will be modified after the determination of organizational structure of MoWR and EWTEC.



ANNEX VI LIST OF LAND, BUILDINGS AND FACILITIES

1. Land, building and facilities necessary for the implementation of the Project
2. Buildings and facilities necessary for the installation and storage of the equipment provided by the Government of Japan.
3. Suitable office rooms and any other facilities necessary for Japanese experts to hold office.

A handwritten signature in black ink is written over a faint, circular official stamp. The signature is stylized and appears to be a name. The stamp is mostly illegible due to the signature and fading.A handwritten mark, possibly a signature or initials, consisting of a stylized 'S' or 'Z' shape with a diagonal line through it.

ANNEX VII JOINT COORDINATING COMMITTEE (JCC)

1. Function

A Joint Coordinating Committee will be created, which will meet at least once a year and whenever the need arises.

The functions of the Joint Coordinating Committee are as follows:

- (1) To supervise the annual work plan of the Project in line with the Plan of Operation and Project Design Matrix that will be formulated based on the Record of Discussions.
- (2) To review the annual and overall progress of the Project, and to evaluate the accomplishment of annual targets and achievement of the objectives.
- (3) To find out proper ways and means for the solution of major issues arising from or in connection with the Project.

2. Members of the Committee

(1) Chairperson

Chief Engineer of the MoWR

(2) Members

a. Ethiopian side

- Project Manager
- Representative of specific regional governments, if necessary
- Other personnel concerned appointed by Chairperson

b. Japanese side

- Chief Advisor
- Project Coordinator
- Japanese project experts
- Representative of the JICA Ethiopia office
- Other persons concerned, to be appointed by JICA Ethiopia office, if necessary

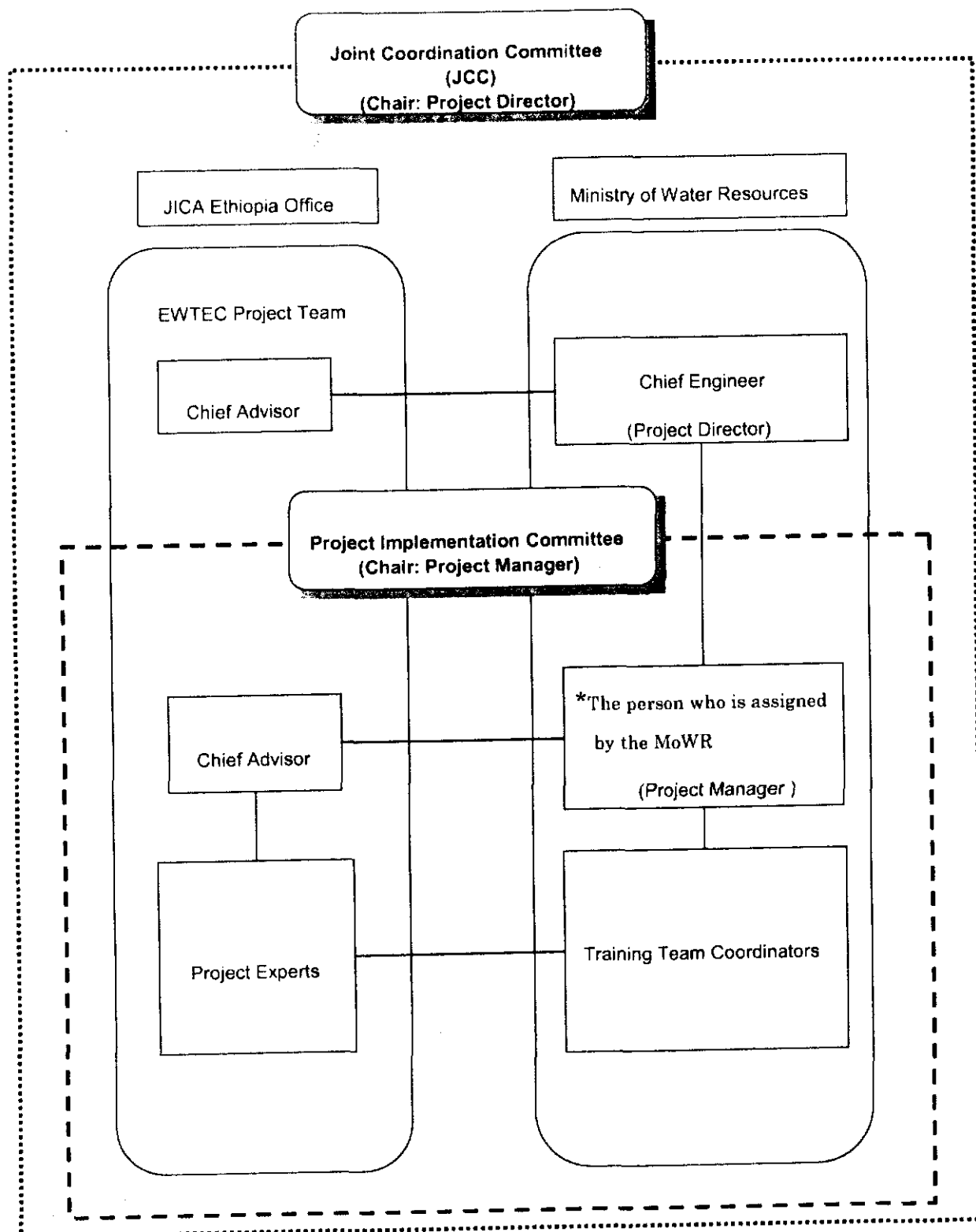
Note:

- When the chairperson cannot organize the Committee meeting, the deputy chairperson can act for him/her instead.
- Official(s) of the Embassy of Japan may attend the Committee meetings as observer(s).

※ The chair person and other members of JCC will be modified after the determination of organizational structure of the MoWR and EWTEC.



Organizational Structure of Project (Tentative)



- - - - - PIC

..... JCC

* Project Manager shall be assigned by the MoWR

MINUTES OF MEETINGS BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE FEDERAL DEMOCRATIC
REPUBLIC OF ETHIOPIA
ON JAPANESE TECHNICAL COOPERATION
FOR
THE ETHIOPIAN WATER TECHNOLOGY CENTRE PROJECT PHASE-III
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

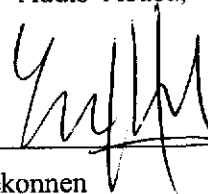
The Japan International Cooperation Agency (hereinafter referred to as "JICA") and the Ethiopian authorities concerned had a series of discussions for the purpose of working out the details of the technical cooperation concerning the Groundwater Development and Water Supply Training Project Phase-III in the Federal Democratic Republic of Ethiopia (hereinafter referred to as "the Project").

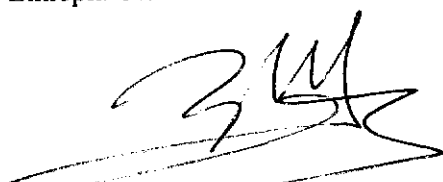
As a result of discussions, both sides came to understanding concerning the matters referred to in the document attached hereto.

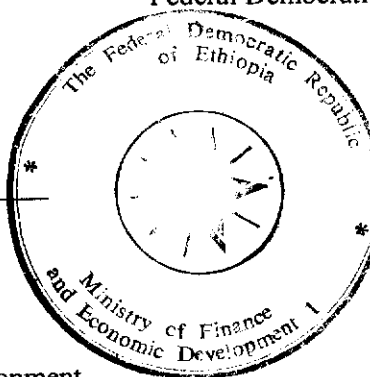
Addis Ababa, 16TH October 2008


Mr. Katsuhiro Sasaki
Resident Representative
Japan International Cooperation Agency
Ethiopia Office




Mr. Abera Mekonnen
Chief Engineer
Ministry of Water Resources
Federal Democratic Republic of Ethiopia


Mr. Hailmichael Kinfu
Head
Bilateral Cooperation Department
Ministry of Finance and Economic Development
Federal Democratic Republic of Ethiopia



ATTACHED DOCUMENT

For the formulation of the master plan of the Project, both sides confirmed the followings as the major items of the plan. This plan was examined based on the request from Ethiopian side.

I . Implementing Agency

Both sides agreed that Ministry of Water Resources (hereinafter referred as “MoWR”) would be responsible and implementing agency of the Project.

II . Project Design Matrix (PDM)

Both sides agreed to use the Project Design Matrix (PDM) shown in Appendix I as a tool for monitoring, evaluation and management of the activities of the Project. The attached PDM that was drawn up at the planning stage is subject to modification based on the mutual consultations between JICA and MoWR when necessity arises during the Project.

III . Plan of Operation

The Plan of Operation (P/O) of the Project is shown in Appendix II. The understanding of both sides that is reflecting to the P/O is described as below. P/O shall be revised and amended through discussion between both sides when necessity arises during the Project.

IV . Administration of the Project

With reference to article IV of R/D, JICA and MoWR agreed that under the overall responsibility of the Project Director, the coordination for the administration and implementation of the Project will be carried out by the Project Manager and Japanese experts. The Organization Chart of the Project is shown in Appendix III. However, the structure of the Project shall be modified after EWTEC becomes a part of the new department referred in article V .

V . Expansion of physical capacity of EWTEC

MoWR proceeds to expand physical capacity of EWTEC using the counter part fund of Japanese grant aid. Both side agreed that construction of new class rooms and dormitory building must be completed by the end of March 2010 provide^d if Ministry of Finance and Economic Development and the Embassy of Japan approved the request.

VI . Position of EWTEC

MoWR promised that EWTEC will be institutionalized as a part of new department with permanent status as a result of ongoing “Business Process Engineering”, and utilizes EWTEC as a core center for capacity development in the ground water sector in Ethiopia. Accordingly, MoWR takes initiatives to secure other funding resources including WASH Capacity Building Pool Fund for effective and sustainable activities of EWTEC.

VII. Others

Other issues shall be followed in the minutes of meeting signed on 24th of March 2008 between JICA and the authorities concerned of the government of the Federal Democratic Republic of Ethiopia.

Appendix I Project Design Matrix

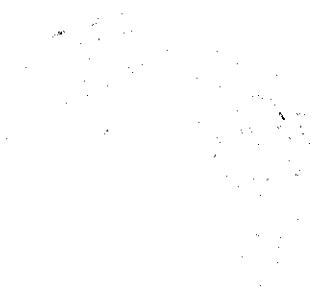
Appendix II Plan of Operation

Appendix III Organization Chart of the Project

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9/1/08



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 in Ethiopia

Date Prepared : 16th October, 2008

OVERALL GOAL		OBJECTIVELY VERIFIABLE INDICATORS		MEANS OF VERIFICATION		IMPORTANT ASSUMPTIONS	
The number of human resources who deal with groundwater/water supply management for sustainable water supply construction and maintenance		Approximately 6500 technicians among RWB, WWO, TVETC instructors, private sector and NGOs complete EWTEC trainings		PASDEP Annual Report, MoWR's annual report Statistical reports published by the Office of the Statistics Annual reports from international agencies			
PROJECT PURPOSE		1 EWTEC Certificates are acknowledged and treated as occupational certification in the water sector. 2 EWTEC's Officers have sufficient knowledge to assess needs, plan, coordinate, conduct and evaluate training activities		Interviews, Questionnaire Survey, Project records Interviews, Questionnaire Survey, Project records		1 EWTEC trainees will continue to work on water supply development and management work. 2 Budget allocation for development of water supply facilities and maintenance will be sustained and the work will be 3 No serious natural disasters occur that adversely affects water resources in the country 4 Water sector policy of the Ethiopian government will not drastically change on development and management of water supply services.	
OUTPUTS		1 Mechanisms to sustain constant quality improvements in EWTEC's training activities are fully established. 2 Technical knowledge and skills on water supply and management are improved for technicians and engineers from the Regional Water Bureaus, woredas, private sector and NGOs, and TVETC instructors. 3 Capacities are developed to provide technical instructions of course coordinators, instructors, mechanics and drillers who conduct training at EWTEC 4 Sustainable institutional management capacity of EWTEC is strengthened.		1 Interviews, Questionnaire Survey, Project records 2 Interviews, Questionnaire Survey, Project records 3 Interviews, Questionnaire Survey, Project records 4 Interviews, Questionnaire Survey, Project records 1 Project records 2 Questionnaire survey, interviews 3 Project records 4 Project records 1 Project records, Evaluation by JICA Experts 2 Interviews, Questionnaire Survey, Project records 1 Interviews, Questionnaire Survey, Project records 2 Project records 3 Project records 4 Interviews, Questionnaire Survey, Project records 5 Project records 6 Project records 7 Project records		1 All the trained personnel of EWTEC continues to work at EWTEC. 2 EWTEC's mandate as a training institution is sustained. 3 WASH Pooled Fund and other donors' capacity building efforts in the Water Sector will continue.	

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Project period : December 2008 ~ 2013 (5 Years)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
66	5	6	7	8	9	10
67	8	9	10	11	12	13
68	1	2	3	4	5	6
69	7	8	9	10	11	12
70	4	5	6	7	8	9
71	3	4	5	6	7	8
72	2	3	4	5	6	7
73	1	2	3	4	5	6
74	0	1	2	3	4	5
75	9	10	11	12	13	14
76	6	7	8	9	10	11
77	5	6	7	8	9	10
78	4	5	6	7	8	9
79	3	4	5	6	7	8
80	2	3	4	5	6	7
81	1	2	3	4	5	6
82	0	1	2	3	4	5
83	9	10	11	12	13	14
84	6	7	8	9	10	11
85	5	6	7	8	9	10
86	4	5	6	7	8	9
87	3	4	5	6	7	8
88	2	3	4	5	6	7
89	1	2	3	4	5	6
90	0	1	2	3	4	5
91	9	10	11	12	13	14
92	6	7	8	9	10	11
93	5	6	7	8	9	10
94	4	5	6	7	8	9
95	3	4	5	6	7	8
96	2	3	4	5	6	7
97	1	2	3	4	5	6
98	0	1	2	3	4	5
99	9	10	11	12	13	14
100	6	7	8	9	10	11
101	5	6	7	8	9	10
102	4	5	6	7	8	9
103	3	4	5	6	7	8
104	2	3	4	5	6	7
105	1	2	3	4	5	6
106	0	1	2	3	4	5
107	9	10	11	12	13	14
108	6	7	8	9	10	11
109	5	6	7	8	9	10
110	4	5	6	7	8	9
111	3	4	5	6	7	8
112	2	3	4	5	6	7
113	1	2	3	4	5	6
114	0	1	2	3	4	5
115	9	10	11	12	13	14
116	6	7	8	9	10	11
117	5	6	7	8	9	10
118	4	5	6	7	8	9
119	3	4	5	6	7	8
120	2	3	4	5	6	7
121	1	2	3	4	5	6
122	0	1	2	3	4	5
123	9	10	11	12	13	14
124	6	7	8	9	10	11
125	5	6	7	8	9	10
126	4	5	6	7	8	9
127	3	4	5	6	7	8
128	2	3	4	5	6	7
129	1	2	3	4	5	6
130	0	1	2	3	4	5
131	9	10	11	12	13	14
132	6	7	8	9	10	11
133	5	6	7	8	9	10
134						

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Project period : December 2008 ~ 2013 (5 Years)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
3-4 Improvement in maintaining training equipment and machineries	5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3
3-5 Strength advanced knowledge and pedagogical skill through implementation/participation of international training						
4. Sustainable institutional management capacity of EWTEC is strengthened.						
4-1 Support articulation of EWTEC's mandate, vision, mission and strategies to reach a consensus among relevant stakeholders (i.e						
4-2 Support development of Medium-to-Long-term Plan						
4-3 Support developing capacities in planning budget and diversity funding sources in cooperation with relevant stakeholders(i.e other						
4-4 Support development of capacities to establish strong collaborations with donors (i.e WASH pooled fund).						
4-5 Develop and manage of database on training participants.						
4-6 Implement ETR and knowledge management activities through publicizing EWTEC annual report, home page and other necessary						

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Organization Chart of the Project

