



## **Construction Sector Transparency Initiative – Ethiopia (CoST – Ethiopia)**

# **Assurance Report on Disclosed Project and Contract Information of Arjo Dedessa Dam Construction Project**

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## Abbreviations

AP (QAP)	(Quality) Assurance Professional
BOQ	Bill of Quantities
CoST	Construction Sector Transparency Initiative
EC	Ethiopian Calendar
EFY/EBY	Ethiopian Fiscal Year/Ethiopian Budget Year [July – June]
ETB	Ethiopian Birr
FDRE	Federal Democratic Republic of Ethiopia
GC	Gregorian Calendar
Ha/ha	Hectare
HDP	Hydropower Development Program
IDP	Irrigation development Program
I & D	Irrigation & Drainage
MCM	Million Cubic Meter
MoWIE	Ministry of Water, Irrigation and Energy
MPI	Material Property Information
MW	Mega Watt
NMSG-EC	National Multi Stakeholder Groups – Executive Committee
OWWDSE	Oromia Water Works Design and Supervision Enterprise
OWWCE	Oromia Water Works Construction Enterprise
PC	Payment Certificate
PE	Procuring Entity
VAT	Value Added Tax
VO	Variation Order
USD	United States Dollar
WSDP	Water Sector Development Program
WSSDP	Water Supply and Sewerage Development Program
WWDSE	Water Works Design and Supervision Enterprise
WWCE	Water Works Construction Enterprise

## Preface

This Assurance Report has been written following the verification and analysis of the information provided by the Procuring Entity, Ministry of Water, Irrigation, and Energy [MoWIE]. The information has further been verified from the consultant and the contractor for completeness and accuracy in accordance with the construction sector transparency initiative guidelines.

The report consists of nine chapters and four appendices. After the executive summary and summary of key findings, the first chapter introduces the general role of construction sector and its vulnerability for mismanagement and corruption. The second chapter summarises the background of the project together with a review of the country's water sector development program with emphasis on irrigation works. The third chapter deals with the objective of the assignment followed by chapter four that narrates the data collection approach. The lists of documents obtained from the Procuring Entity, consultant, and contractor are provided in this chapter. Chapter five provides the summary of disclosed information for the three contracts of the project; design review service contract, supervision and contract administration service contract, and civil works construction contract. In this chapter, all the core information related to the procurement and implementation stages of the project are described. Chapter six and chapter seven deal respectively with the completeness and accuracy of the disclosed information. Chapter eight discusses the contract specific issues on the three contracts of the project and provides the observed shortcomings on the procurement and implementation phases of the project. The analysis has been made based on the verified information together with the standards and provisions of the procurement and contract agreement. Chapter nine provides recommendations based on the observed causes of concern as a way of addressing the observed problems and improving the performance of the project. The last chapter lists the annexes of the report for easy reference.

Abbreviations used throughout the study report have been shown in the next pages. Dates stated in the report are Gregorian Calendar (GC) except some dates that are explicitly provided in EC (Ethiopian Calendar).

Finally, the Assurance Professional would like to express its gratitude and acknowledgements for all participants that directly or indirectly contribute to this study.

## Executive Summary

Arjo Dedessa Irrigation Dam Project is located in the Dedessa River Basin, in East Wellega, Illubabor and Jima administrative Zones of Oromia Regional State. It falls between Latitude 942816 N and 988828 N and Longitude 244388 E and 201325 E. The main dam is located across river Dedessa at about 1.5 km above its confluence with Wama River. The right bank of the dam comes under the Wama Maribo Kebele of Limu Seka Woreda of Jima Zone.

The project is designed (reviewed), supervised, and constructed by the regional government enterprises, Oromia Water Works Design and Supervision Enterprise and Oromia Water Works Construction Enterprise (OWWDSE & OWWCE) through direct award of the contracts. Initial contract prices for the construction works may not be the market prices with the understanding that the contract price would be revised after the completion of design review by OWWDSE who entered into contract at similar time with the works contractor.

The focus of this study includes review of the procurement procedures for design review service, supervision service, and works contract with further focus on the implementation of the project with respect to the works and supervision service contracts. The assigned Assurance Professional carries out the services of verifying the completeness and accuracy of the information disclosure by the Procuring Entity.

The design review consultancy service agreement was signed on 31 January 2011 with a contract price of ETB 44,692,191.92 and a service completion period of 11 months. The supervision and contract administration consultancy service agreement was signed on 31 January 2011 with a contract price of ETB 11,596,017.00 and amended on 01 December 2012 with a revised contract price of ETB 33,356,119.38 and a service completion period of 18 months for the extension. The initial contract price of the project is ETB 755,461,980.81 with a completion period of 18 months. The contract price was revised to ETB 1,297,919,271.91 (increased by 172%) and the completion period was extended by a further 24 months. Up to June 2014, the project progress is reported to be around 24% of the revised contract amount and the revised completion period will end after a month, end of July 2014.

From the findings of the study, the Procuring Entity is advised to consider competitive procurement approaches and all project participants need to manage the timely and practical completion of the project. The project is under delay whose completion period is almost finished while executing only 24% of the revised work volume. The project participants are required to solve the problems hindering the progress of the works and the contractor is required to enhance its performance to complete the project within a reasonable extended time.

Except for some documents, the disclosure of the information by the Procuring Entity has been verified from other sources of the consultant and the Assurance Professional believes that the disclosure is complete and accurate.

## Summary of Key Findings

### I. Design (Review) Service Contract

The design review service has been contracted out to the regional government enterprise on 31 January 2011 and the service completion date was revised to be on 31 December 2013. The consultant prepared revised designs and bill of quantities to amend the civil works contract before December 2012 and the final detailed design and study reports were submitted to the Procuring Entity as of June 2014.

The principal agreement for construction, contract administration and supervision were signed before the design review with the understanding that there will be change to the volume of works when the design review is completed. In light of this arrangement, any delays or cost increment arising during the construction phase of the project may not be related to the design review consultant performance.

### II. Supervision and Contract Administration Service Contract

The consultancy service period of the supervision and contract administration was 18 months in the principal agreement. The consultant service contract was amended that extends the service completion period by 18 months starting from the signing date of the amended contract, 01 December 2012. The gap between the principal agreement and amended contract agreement was not included in the amendment and the consultant was not paid for duration between the original service completion date and the date of contract amendment.

Only 24% of the project as per the revised work volume has been completed at the end of this revised completion date and the consultant recommended 24 months of extension of time for the Procuring Entity's decision as the contract requires specific approval for determination and approval of claims. From the progress report of June 2014 prepared by the consultant, the Assurance Professional noticed that the plan was to achieve 45.86% of the revised contract amount at the completion date of the amended contract that contradicts the contract completion period of the amended contract.

All of the project participants could not disclose a master work schedule which was required to monitor the progress of the works. The consultant provided to the Assurance Professional the 2004 & 2005 EC budget year schedules that do not show the completion of the project by the end of June 2014.

The consultant progress report narrates all concerns of the project covering the arrangement, performance, and limitations of the consultant itself, the civil work contractor, and the subcontractors. The supervision service contract agreement also provides clear requirements and contents of the monthly and quarterly progress reports which is assumed to guide the consultant to prepare such well described progress reports. The Assurance Professional, however, recommends the consultant to attach major correspondence letters of the particular monthly or quarterly progress report for completeness of the reports.

The progress report and the payment certificate indicate similar amounts of works executed so far which shows the correct valuation of the consultant on the contractor's payment request. The Procuring Entity, the consultant and the contractor couldn't avail variation orders; but, extension of time requests by the contractor and the consultant determination for the same indicates that there was variation order that the consultant recommended two months of extension of time for the variation.

The consultant, as a professional advisor of the project, need to prepare a report on the strategy for practical completion of the works justifying and substantiating the contractor's claims as per the contract provisions and clearly indicating the performance problems so that the Procuring Entity can take measures as per the recommendation of the consultant.

### **III. Civil Works (Construction) Contract**

The civil works construction contract requires the contractor to provide performance bond and advance payment guarantee bond in the form of a letter from the Oromia Finance and Economy Development Bureau which is good to bind the contract with such guarantees for such government enterprises as a way of accountability assurance on the project completion. However, in cases of contract failures, it might be complicated whether the Oromia Finance and Economy Development Bureau can legally be liable for the guaranteed amount considering the roles and responsibilities of the Bureau.

The initial contract price was determined by committees which makes a revised cost of the dam construction by 172% of the initial contract price. However, the 2002 water sector development program already included a plan to build the dam project which was to be reviewed timely and construction was to be started with already available or reviewed designs. The project was to be completed by end of July 2012 which was revised to be completed by the end of July 2014. According to the schedule and June 2014 progress report, the project was completed to its 23.98% of the revised contract amount while 100% of the completion time has elapsed. The contractor's performance plan was to execute 45.86% which was to be 100% of the revised contract amount by the end of the revised completion period.

As the revised work volume was 172% of the initial contract amount and if the initial completion period of the contract was comparably reasonable for the initial contract amount, the extension by 24 months could be seen as reasonable. The amended contract performance duration of 42 months was explicitly stated in the amended contract to start from the signing date of the principal agreement which may show 18 months for the principal contract, 6 months for the delay of signing of the amended contract, and the other 18 months for the additional work volume of revised quantity. This is also indicated in the supervision consultancy service contract agreement even though the middle six months duration was not included in the service contract amendment.

In light of the above situation, the contractor's claim of "discrepancy between work volume and completion date on the amended agreement for 12 months" and "interruption due to delay in signing the amended contract" could be said as already accounted for in the amended contract. The only justifiable claim could be for the variation (two months) and "unexpected" rainy season which could not be foreseen by the consultant and the contractor in planning the work with time line. Furthermore, the rain effect on the



construction may not be similar in three years as the works that would be affected by the rainy season could be executed and reduced time by time.

The contractor requested of 20 months while the rain season is five months and only three years has already elapsed which makes 15 months if all critical activities are affected by the same. The contractor requesting 42 months of extension time should be reviewed in such a way that ***time extensions are only justified only when the effect of variations and compensation events actually delayed the critical activities of the project.*** The consultant shall also determine such extension of time claims or cost claims as per the provisions of the contract without changing the contract conditions as agreed between the Procuring Entity and the contractor.

The amended contract states that a provision of Clause 37.1 in the Special Conditions of Contract stipulates “the contract price shall be modified after the dam design finalization” as a reason to support of the contract amendment. However, the provision of this clause only states “This contract is an Admeasurements Contract. Subject to quantity change” which doesn’t show the citation included in the contract amendment.

The progress of the works at the end of June 2014 (end of revised completion period) was only 24% of the revised contract amount which is 52% achievement from the plan. The target of the project was to commission the sugar cane development project by the end of year 2007 EC which will delay the target unless the project participants manage the project with a crushed work programme. The consultant recommendation of two years of extension of time indicates that the target will not be met even if it is assumed that the project would be completed within the recommended extension of time.

Price escalation payments were allowed by the contract provisions of Clause 47.1 under the Specific Conditions of Contract which states “The contract will be subject to price adjustment for the specific materials (fuel, reinforcement bar, cement, and any other material cost which is greater than 6% of the contract price) in the form of rise and fall and invoices of the base price shall be attached in the contract”. However, invoice for the base prices was not attached in the contract and the contractor does not request any price escalation payments for the last three years.

## Introduction

The construction sector plays a vital role in supporting social and economic development of a country and makes a major contribution to the economic growth and poverty reduction of a nation. However, mismanagement and corruption during the planning and implementation of construction projects can undermine the expected social and economic benefits.

The Construction Sector Transparency Initiative (CoST) is a multi-stakeholder initiative designed to increase transparency and accountability in the construction sector. The aim of CoST is to enhance the transparency of the Procuring Entity (PEs) and construction companies by disclosing to the public information of the construction projects at all stages of the project cycle, from initial identification of the project to the final completion.

It is, however, recognized that the disclosure of this information on its own may not be sufficient to achieve greater accountability. This is because some of the information is likely to be complex and may not be intelligible to the general public. An independent Assurance Professional (AP) is therefore appointed by the CoST National Multi Stakeholder Group Executive Committee (NMSG - EC) who will be responsible for assessing the adequacy and reliability of the disclosed project information and audit processes, highlighting any causes for concern that the information reveals. Through periodic reporting, the Assurance Professional will provide an interpretative role in helping to make data disclosures intelligible to the stakeholders.

A number of projects from the building, water, and road/transport sectors have been identified by the NMSG of CoST-Ethiopia from which this report is prepared for one of the water sector project, the Arjo Dedessa Irrigation Dam Construction Project, and it is prepared by the Assurance Professional, Kasiem Seid.

## Background of the Project

Ethiopia is naturally endowed with water resources that could easily satisfy its domestic requirements for irrigation and hydropower, if sufficient financial resources were made available. The country has about 3.7 million hectares (Ha) of potentially irrigable land, over which 75,000 Ha of large-scale and 72,000 Ha of small-scale irrigation schemes had been developed by 1996.

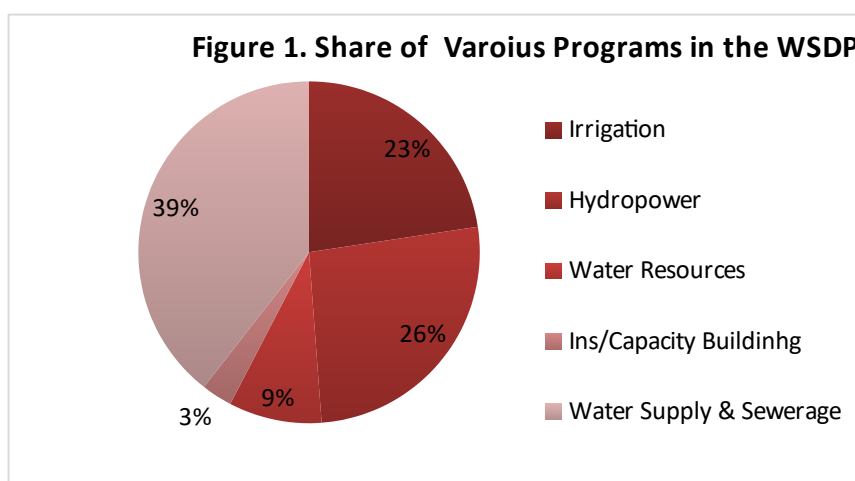
The Ministry of Water Resources (currently named as Ministry of Water, Irrigation, and Energy, MoWIE) had prepared a **Water Sector Development Program (WSDP) in 2002** whose planning horizon is fifteen years divided into three five years development plans as short – term (2002-2006), medium – term (2007-2012), and long – term (2013-2016) schemes. This program had been prepared in accordance with the Ethiopian Water Sector Policy of the year 2001.

The WSDP consists of three components: Water Supply and Sewerage Development Program (WSSDP), Irrigation Development Program (IDP), and Hydropower Development Program (HDP). The irrigation development program schemes scheduled for implementation during the entire program horizon of 2002–2016 include the following subdivisions:

- During the short-term, the large-scale projects of Omo Ratti (for 8,700 Ha of new coverage) and most (72 per cent) of the Koga project (for 4,344 Ha) will be implemented.
- During the medium-term, 4 large-scale and 2 medium-scale project will be implemented, for a combined area of 34,236 ha; they include Alwero/Abobo (for 10,400 Ha), Gode West and a small part of Gode South (9,000 Ha), Koga (1,656 Ha), Megech (10,018 Ha), Nagi Beach (2,070 Ha), and Azena/Ayo (1,092 Ha).
- During the long-term, 11 projects will be implemented that comprise 10 large-scale and 1 medium-scale scheme and cover a new area of 71,963 Ha; with an additional 21,518 Ha of large-scale schemes under the first phase of the Eastern Nile Cooperation Program.

Altogether, a total of 274,612 Ha of farmland will be developed under new irrigation schemes and from this plan, **147,474 Ha will be developed under the Federal Government’s Large- and Medium-Scale Irrigation Development Plan whereas 127,138 Ha will be developed under the Regional Small-Scale Irrigation Development Plan.** Combined with existing irrigation networks, the countrywide total area of irrigated farmland will be approximately 471,862 Ha by the end of the WSDP.

The IDP investment needs are classified by level of responsibility; Federal and Regional, as described above. **The Federal investment plan for the short, medium and long terms would require a total investment of USD 1,114.3 million over 15 years, of which USD 664 million would be in foreign currency.** The investment needs over different planning horizons are: USD 114.4 million in the short-term, USD 260.3 million in the medium-term, and USD 734.4 million in the long-term. The following pie chart diagram (Fig. 1) shows that the share of the IDP investment is 23% of the total water sector development program.



Arjo Dedessa Irrigation Dam Project is one of the irrigation projects included in the WSDP, whose details are shown below as per the pre-feasibility study of the IDP projects [WSDP, volume II, 2002]:

Name of Project – Arjo Dedessa  
 River Basin – Dedessa  
 Region – Oromia  
 Net Area – 2,780 Ha  
 Investment Cost – 46.5 Million USD  
 Investment Cost per Ha – 16,726.62 USD

According to the federal investment schedule<sup>1</sup> for medium and large scale irrigation development projects [WSDP, volume II, 2002], Arjo Dedessa Dam falls into the category of **projects under study and partial implementation** for which budget allocation schedule has been as shown below:

Year 2005 – 1.2 Million USD [1.2 Million USD x 8.66<sup>2</sup> Birr per USD = 10.39 Million ETB]  
 Year 2006 – 1.2 Million USD [1.2 Million USD x 8.73<sup>2</sup> Birr per USD = 10.48 Million ETB]

Year 2008 – 3.1 Million USD [3.1 Million USD x 8.88<sup>2</sup> Birr per USD = 27.53 Million ETB]  
Year 2009 – 3.2 Million USD [3.2 Million USD x 8.884<sup>2</sup> Birr per USD = 28.43 Million ETB]

Year 2015 – 17.4 Million USD [17.4 Million USDx20.00 Birr per USD = 348 Million ETB]  
Year 2016 – 20.4 Million USD [20.4 Million USDx21.00 Birr per USD = 428.4 Million ETB]

**Total Investment = 46.5 Million USD [or approximately ETB 853,230,000.00]**

Arjo Dedessa Dam is located in East Wollega, Illubabor and Jima Administrative zones of Oromia National Regional State. It falls between Latitude 942816 and 988828 N and Longitude 244388 and 201325 E. The main dam is located across river Dedessa at about 1.5 km above its confluence with Wama River. The right bank of the dam comes under the Wama Maribo Kebele of Limu Seka Woreda under Jima Zone.

The cultivable area of 32,220 Ha is located in the banks of the river, Dedessa, whose right bank command area extends to five Kebeles of Jima Arjo Woreda and one Kebele of Nunu Qumba Woreda and three kebeles of Leqa Dulecha in East Wollega Zone. The left bank command area covers some Kebeles of Bedele Woreda, one Kebele of Gechi Woreda and four kebeles of Dabo Hanna Woreda under Illubabor Zone.

- 1- *The Investment Schedule is according to ADF's Koga Irrigation and Water Shade management Project Appraisal Report – February 2001*
- 2- *Average Currency Rates has been taken from <http://www.freecurrencyrates.com> [20 and 21 ETB per USD has been taken for 2015/16]*

The design of the dam project was undertaken by the Federal Government Enterprise, Water Works Design and Supervision Enterprise (WWDSE), where the dam was designed for combined Irrigation and Hydropower Development. The name of the project is **Arjo- Dedessa Sugar Cane Development Irrigation Study** of which the Arjo – Dedessa Dam and its Appurtenant Structures (Lot I) project is the sub project which is the focus of this disclosure report.

The design was then revised modifying the purpose of the dam to be for irrigation of 50,000 Ha of land for sugar cane development. The design review service consultancy agreement and the contract administration and construction supervision service agreement was signed between the Federal Democratic Republic of Ethiopia (FDRE) Sugar Corporation and the Oromia Water Works Design and Supervision Enterprise (OWWDSE). Similarly, the civil works construction agreement was signed between the FDRE Sugar Corporation and the Oromia Water Works Construction Enterprise (OWWCE), a regional government enterprise for construction service.

A letter from the FDRE Sugar Corporation to the Ministry of Water and Energy dated 26 June 2011 reveals that these agreements for construction of the dam project (Lot I) has been transferred to the Ministry of Water and Energy as a client (Procuring Entity) following the decision by His Excellency, the Prime Minister of Ethiopia without modifying the contract provisions except changing the client and

transferring the obligations for financing and administering the dam construction project by the Ministry office.

Hence, there would be no procurement procedure except changing the agreements from the FDRE Sugar Corporation to the Ministry office. The Sugar Corporation will be the end user of the dam project through administering the irrigation development of the Arjo- Dedessa Sugar Cane Development Irrigation project. The costs of the dam construction project would be covered by the new Procuring Entity (MoWIE) starting from advance payments for design review, supervision, and construction services.

## Objective of the Assignment

As described in the introduction part of this report, the Procuring Entities (PEs) are required to release project information on the selected projects. In order to ensure that the information released by the Procuring Entities is both accurate and available in a form that can easily be understood by stakeholders, it is required to be verified and analyzed by experts of Assurance Professionals (AP) who are appointed by the National Multi – Stakeholder Group Executive Committee (NMSG-EC).

The Assurance Professionals will carry out these activities and produce reports that will assist the NMSG-EC and other stakeholders **to evaluate the level of transparency and governance of the relevant projects**. The Assurance Professionals task has two phases; in the first phase, the AP shall collect information and verify that the Material Project Information (MPI) is both complete and accurate and in the second phase, the AP will analyze the disclosed data and interpret it so that the report will be more easily understood by the general public.

In general, the AP has to verify the source of the reports and has to confirm that the information is complete, accurate, and it is the latest version available by the time the report has been prepared.

## Data Collection

Having obtained assignment letter From CoST-Ethiopia to the Procuring Entity, the Assurance Professional has tried to collect the documents for the disclosure. The AP has contacted Ato Ali Aman (Irrigation and Drainage Project Engineer) and Ato Teshome Atnafe (Director of Irrigation and Drainage Directorate) who have arranged documents available at the PE office.

The Assurance professional has contacted the consultant (both design and supervision departments) and contractor following the permission by the Procuring Entity to cooperate on information verification. The consultant staffs have cooperated and tried to arrange the required information both in soft and hard copies. The contractor, on the other hand requested letter from the Procuring Entity to provide information in hard copy who then agreed to provide hard copies after the clarification of the Procuring Entity's Project Engineer.

The consultant and contractor were informed that information obtained from them will be used mainly for the verification of the PEs document disclosure and in some cases, for completion of documents that the PE couldn't avail during the study period.

## Available Documents

The following documents have been availed by the PE that are categorized in their time of availability:

### Easily Availed Documents

- Employer – Design Review Consultant Contract Agreement (January 2011)
- Employer – Contractor Works Contract Agreement Volume I (January 2011) including BOQ; Civil Works Construction
- Contract Amendment No 1 – Employer – Contractor Works Contract Agreement (December 2012)
- Employer – Supervision Consultant Contract Agreement (January 2011)
- Contract Amendment No 1 – Supervision Consultant Contract Agreement
- Payment Certificate (Civil Works) No 15; June 26, 2014
- Quarterly & Monthly Progress Report Combined; June, 2014 (prepared by the Consultant)

### Documents Obtained with Extra Effort

*Soft / Hard copies from the Procuring Entity /PE/*

- Final Feasibility Study (report) by WWDSE, June 2009

*Soft / Hard copies from the Design Review Consultant /OWWDSE/*

- Engineering Cost Estimate, March 2014
- Design Report, March 2014
- Other Sectoral Studies or Reports, during 2013 – 2014

*Soft / Hard copies from the Supervision Consultant /OWWDSE/*

- 2004 & 2005 EFY Schedule (i.e. 2004 & 2005 Budget Year Schedule)
- Correspondence on Extension of Time Claim
- Selected Monthly Progress Reports – Soft Copy
- Revised Project Cost

### Unavailable Documents

Incomplete and unavailable documents for this disclosure report include the following:

- Procurement information; information for justifying direct award of contracts
- Proposal evaluation documents for services and works such as financial proposals submitted by the consultant and contractor prior to agreement
- Reviewed final feasibility study for the dam and appurtenant structures

- Agreements, payment invoices, etc for reconnaissance and pre-feasibility studies
- Reconnaissance and pre-feasibility studies (which were used to prepare Water Sector Development Program, WSDP)
- Payment Invoice for Consultant (Design Review and Supervision Consultant)
- Minutes of meetings regarding critical issues and decisions as made during high officials project visits
- Master Work Programme (Schedule)

NB: - These documents were not obtained either for lack of interest to disclose or for mishandling of records and documents by the Procuring Entity, consultant, and contractor.

## Summary of Disclosed Information

The project under study is designed, supervised, and constructed by the regional government enterprises (OWWDSE & OWWCE) through direct award of the contracts by the FDRE Sugar Corporation and transferred to another Procuring Entity, MoWIE.

Contract prices for the construction works may not be the market prices as the unit rates were prepared by a committee to start the project while the design review was being undertaken simultaneously. The Assurance Professional, however, does not get sufficient information except those stated on the background for contract amendment and further discussions with the consultant and contractor officers.

## Contracts Included in the Disclosure

The contracts included in this disclosure report include:

- A. Design Review Service Contract,
- B. Supervision and Contract Administration Service Contract, and
- C. Civil Works Construction Contract

## Disclosed Information by Project Phase

For the purpose of this disclosure report, the project phase includes procurement and contract implementation phases as the dam project status is 24% by the time this report has been prepared, i.e. contract closing information is not covered in this report.

The procurement of Design Review Service and Contract Administration and Construction Supervision Service for Arjo Dedessa Dam project has been made by direct award to OWWDSE and the procurement of Civil Works Construction has been made in a similar manner to OWWCE. The delivery method of the project is design bid build and the type of contract for civil works construction is unit rate contract where prices were prepared by a committee stating that the bill of quantity is subjected to revisions.

## Procurement Information

### **Design Review Consultancy Service Contract**

The design review consultancy service contract has been signed on 31 January 2011 with OWWDSE for a contact price ETB 44,692,191.92 (or other sum as may be payable under the provision of the contract). The period of completion of the project services is 11 (eleven) months after the date of commencement of the services subject to extensions in accordance with the agreement. The consultant was required to commence the services immediately after signing of the contract in a condition that access to the project site is ready to commence the works.

The design review study includes the following activities as provided in the activity schedule of the service contract agreement:

- Surveying work; Dam and Appurtenant structures design review
- Hydrology and hydrogeology study; Geo-technique & material engineering study
- Soil survey investigation and land stability study
- Detail design works for 25,000 Ha in phase I (13, 665 ha first & 11,335 Ha next)
- Detail design works for the remaining 25,000 Ha in phase II
- Detail design of main canal and main drainage with their pertinent structures
- Detail design of farm road; Electro mechanical detail design
- Sugar cane agriculture and land development; Live stock development study
- Sociology; socio-economic study; Environmental impact assessment study
- Organization and management study; Economic and financial analysis
- Report submissions (Inception report and feasibility study report)

### **Supervision and Contract Administration Consultancy Service Contract**

The supervision and contract administration consultancy service contract has been signed on 31 January 2011 with OWWDSE for a total sum of ETB 11,596,017.00 including 15% VAT. The date of commencement of the services is 15 (fifteen) days after signing of the contract and performance duration was 18 (eighteen) months.

The supervision consultant activities are categorized as follows:

- Review of contract design, specification, drawings, and bill of quantities
- Preparation of working drawings
- Checking and approval of contractor's (shop) drawings
- Technical support from head office of the consultant firm
- Site supervision of work and management of the contract
- Commissioning of the project

It is stated in the contract agreement that contract management and site supervision of construction of civil works will extend over the entire construction period and the dates of starting and completion period of various activities will probably vary according to the contractor's final approved work program or actual progress of the works.



### **Civil Works Construction Contract**

The civil works construction contract has been signed on 31 January 2011 with the OWWCE for a contract price of ETB 755,461,980.81 including 15% VAT. The contract period of this construction was 540 calendar days (18 months) and the start date of the project is 15 days after signing of the contract agreement. Among the contract documents, it was noted that the bill of quantities is subject to changes and the drawings would be supplied (to the contractor) after the review of the designs whose agreement was signed at the same time of this construction works contract agreement.

The works contract include the construction of main dam, saddle dam, coffer dam, spill way, irrigation outlet, river diversions, pressure relief wells, etc collectively named as the “Works” (LOT I – Dam Construction and Appurtenant Structure Works).

The advance payment that would be provided by the Procuring Entity is 30% of the contract price and the contractor has to submit **advance payment guarantee bond and performance bond in the form of a letter from the Oromia Finance and Economy Development Bureau**. Advance request letter written by the OWWCE on 05 January 2011 indicates that the agreement signed with the FDRE Sugar Corporation was on 28 December 2010 for the same contract price.

## **Contract Implementation Information**

### **Design Review Consultancy Service Contract**

The design review consultant study and report was finalized and submitted to the Procuring Entity. Working drawings and bill of quantities were submitted and the supervision consultancy service contract and works contract were amended accordingly.

The contract was extended to 31 December 2013 as the contract provides an entitlement for extension on the time of completion of the consultancy services for reasons of impeding delays attributable to the Procuring Entity. Advance payment of 30% of the contract price, ETB 13,404,687.58 has been requested on 22 February 2011 and paid accordingly. Payment certificates No 4, 5, 6, and 7 has been requested by the consultant on 26 March 2014 for 65% of the contract price (ETB 29,049,989.75 and it was paid on 04 June 2014.

The design review consultancy service is generally aimed at irrigating a total of 50,000 Ha of land in which, on 26 March 2014, it was reported that 2,069 Ha of land had been made ready for immediate development and final study of pump station, pipes, and final design was under finalization.

The aim of the design review (feasibility study and detailed design) is at the establishment of an integrated new sugar cane plant with daily cane crushing capacity of 28,000 TCD, by

developing 50,000 net hectares of integrated land to meet the target. In general, the specific objective of the feasibility study and detailed design of the project include:

- To implement series of study steps to determine whether the project appears technically, economically, and environmentally feasible
- To plan, study, and design efficient irrigation development systems that could be easy to manage

The report was required to be submitted in the form of “bankable” document for financing the project. The ultimate target of the project study and construction is to be commissioned for sugar production in 2007 EC (2015).

### **Supervision and Contract Administration Consultancy Service Contract**

The supervision consultant agreement has been amended as Contract Amendment No 1 signed on 01 December 2012 with a revised contract price of ETB 33,356,119.38. The service period of the amended contract is 24 (twenty four) months starting from the contract signing date. This contract amendment does not include the previously given service and all payments effected up to the amendment signing date.

The potential reasons of the contract amendment are stated as the change of the volume of the works because of the design revision required extension of time and additional cost for the service based on the existing market condition. The agreement further provides the background of the initial contract pricing and reasons for the cost variation as:

- The rates quoted in the principal contract were underestimated as the cost of expenditures of fuel and other inputs did not consider the market conditions
- The total contractual period was underestimated with only 18 (eighteen) months
- Additional manpower was required with a different professional than the principal agreement for best follow up of the supervision work

In summary, for the above reasons and for the significant change on the overall project work volume, contract amendment was required by revising the contract price, period of performance, and some contract provisions.

The contract includes a provision that the consultant has to produce a monthly progress report with the possible exception of the rainy seasons if there is, effectively, a cessation of construction (that are likely to occur in the first years of the construction), and subject to the agreement of the client.

The contents of the monthly and quarterly progress reports is well detailed in the agreement which includes expected outturn cost, predicted completion date, cessations needed by others (than the contractor), summary of weather conditions, potential disputes, etc.

### **Civil Works Construction Contract**

The civil works contract has been amended on 26 December 2012 whose contract price was increased from ETB 755,461,980.81 to ETB 1,298,919,271.91 (increase by 172%). The background of the initial contract price and reasons for the cost variation were summarized in the amendment as:

- The initial quantity and cost estimate for the dam project was established by a committee before the design revision which created significant gaps in the volume of works and some activities which were part of the dam were not included
- The previous unit rates were set by the committees without considering the existing market conditions and the contract duration planned to complete the project was only 18 months
- There were new items of works in the revised bill of quantities which require new unit rates and prices

In summary, for a similar reason to the supervision contract agreement amendment, the contract amendment was required by revising the contract price, period of performance, and some contract provisions. The contract amendment was initiated by the revision of the design and following the contractor's request for cost variation on excess quantities of works and on new activities to revise some of the unit rates in the initial contract agreement. The revised contract amendment incorporates necessary changes in the previous contract agreement with respect to contract completion period, contract price, and payments after the revision. Review on some of the unit rates in the initial contract document has been made and new unit rates have been considered for new items of works.

The revised contract amendment unit rate revision is not applicable to the already executed works and the completion period of the works is revised to be 42 months starting from the signing date of the original contract agreement, i.e. 24 months of extension has been considered under this revision on the 18 months of period of completion of the works.

The project was to be completed by end of July 2012 which was revised to be completed by the end of July 2014. According to the schedule and progress report of June 2014, the progress of the project was 23.98% of the revised contract volume while 100% of the completion time has elapsed. The contractor's performance plan was to execute 45.86% which doesn't consider the revised completion date.

According to the same progress report; the causes of slow progress and major problems on the project performance include:

- Lack of proactive planning and action by the contractor for implementing of sequential and complementary activities; lack of coordinated plan on material, labour, logistics, machinery, and cash flow provision

- Capacity gap in implementing critical activities; on machinery utilization; e.g. unbalanced number and type between complementary machineries - dump trucks versus compactors and graders, etc
- Shortage of fuel supply for the machineries and vehicles; critical shortage and failure of machineries, esp. concrete mixer truck, automated concrete batching plant; insufficient supply of construction materials such as formwork, reinforcement bars, sand, etc

The Procuring Entity further provided the Assurance Professional that the following reasons are also delaying the projects in the general sense:

- Change of design and subsequent changes in the quantity and cost; which lead to temporal project suspension;
- Limited capacity of the local governmental contractor;
- Long rainy season in then project area which is not considered during the initial planning; and
- Variation of works

For the year 2006 EC (September 2013 – August 2014), it was reported that the rain had started early May and continued almost regularly which hindered clay fill and compaction work in addition to access problems to construction material, borrow and quarry areas. The contractor has prepared a crush work program to work 24 hours a day and 7 days per week to complete the critical activities of coffer dam and diversion conduits by the end of June 2014. The contractor, however, succeeded to complete the diversion conduits while the cofferdam and other activities were not completed.

By the time this report has been prepared, no variation order has been issued by the consultant (in terms of official variation order) and the contractor does not request any price escalation payments. The contractor has been paid a cumulative payment of ETB 203,631,323.95 up to Payment Certificate Number 15 of June 2014. From this payment certificate, the Assurance Professional observes that the total measured works is valued as ETB 269,017,665.97 (23.68% of the revised contract amount) which is comparable to the progress of the work that was reported. Similarly, the supervision consultant has been paid a cumulative payment of ETB 22,627,052.46 up to Payment Certificate Number 6 of June 2014.

The contractor has submitted extension of time claim for the following three reasons:

- Interruption due to delay of signing of amended contract agreement (as related to design modifications) and payment delay ..... 8 (eight months)
- Discrepancy between work volume and completion date on the amendment agreement ..... 12 (twelve months)
- Prolonged rainy months within the vicinity of the project .... 20 (twenty months)
- Scope change due to variation works on the conduit ..... 2 (two months)

The contractor indicated that 42 (forty two months) of delay has occurred on the project and requested 36 (thirty six) months of extension to be approved by the consultant.

***The consultant objected the request of 42 months of extension of time as it is meant that all the 42 months of the time so far elapsed is claimed to be delayed while the contractor has executed nearly 24% of the revised work volume.*** The consultant further stated that lack of providing necessary man power, machinery, and construction materials timely by the contractor have their own contribution for the delay in which the performance of the contractor could be more than 24% had there not be such problems of the contractor.

However, after assessing the “essential features of the delay contributing factors”, the consultant forwarded its determination and recommendation to the Procuring Entity as shown below:

- As the project is located in the western part of the country in which the annual rainfall duration lasts in average for five months (June – October), there has been a probability of delay during this period which makes impossible to construct earth dams with such moisture content ..... 15 (fifteen) months in three years
- Scope change due to variation works on the conduits entitles the contractor ..... 2 (two) months of extension
- Interruption due to delay of signing of the amendment agreement ..... 3 (three) months

The consultant further stated that the extension shall be realistic and achievable than ambitious to complete the remaining 76% of the works while working seven months effective non rainy season. The consultant recommended 24 months having 14 months of effective working time as extension of time. The consultant asserted that the time extension should bind according to the General Conditions of Contract Clause 44.4 and clause 63 by which no compensation event occurs and the contractor is requested to submit revised work program to complete the remaining works.

A letter from the consultant to the Procuring Entity written on 19 June 2014 (Subject: Correction of Completion Date) stated that the contractor didn't notice the period of completion of the amended contract of 42 months count from the original contract signing date. The consultant further state that they have no objection and fully agree on the correction of the project completion date if the contractor's request is accepted as 42 days starting from signing of the amended contract agreement.

The project has been visited by the Minister, State Minister, and other representatives from the Procuring Entity (MoWIE); by Chief Executive Officers of the consultant and contractor firms; Delegate from the Parliament (House of Peoples Representative); Representative from the FDRE Sugar Corporation; Heads of adjacent Administrative Zones and Woredas of Oromia Regions who have conducted joint and separate meetings and discussed on outstanding issues for the improvement of the progress of the works which indicates the concerns of higher officials administering the project.

## **Contract Closing Information**

As the project is at 24% of the revised work quantity, no information disclosure has been considered under this part.

## **Completeness of the Disclosed Information**

In general, the procurement of the services and works has been made by direct award to the regional government consulting enterprise (Oromia Water Works Design and Supervision Enterprise, OWWDSE) and to the regional government construction enterprise (Oromia Water Works Construction Enterprise, OWWCE) respectively. The Assurance Professional does not get sufficient record and information on the procurement of the services and works to these governmental companies. It was stated in some parts of the contract agreement and reports that the Procuring Entity has been changed from the FDRE Sugar Corporation to the Ministry of Water Irrigation and Energy and the procurement details with the previous Procuring Entity was not disclosed. In light of this situation, the disclosure on procurement of the services and works can be said as reasonably incomplete, if there is any on part of the previous Procuring Entity (Sugar Corporation).

## **CoST – Ethiopia Disclosure Requirements**

- The information on first design submission and performance (by WWDSE) was not disclosed by the Procuring Entity. Also, it was found difficult to get information regarding procurement issues as to the selection of the design review consultant.
- The disclosure on supervision consultant procurement, agreement, and implementation has been made available to the Assurance Professional except for information on the selection of the consultant and payment invoices for supervision consultancy service.
- The disclosure on the civil works contract agreement and implementation has been made available to the Assurance Professional except master work schedule and minutes of meetings.

## **Completeness against PE's Disclosed Information through its Website**

The Procuring Entity does not start disclosing information through its web site for transparency purpose on CoST principle. The Procuring Entity's (Ministry of Water, Irrigation, and Energy) website, <http://www.mowr.gov.et>, contains general information such as news, services, procurement (notices), etc where policies, projects studies and other information can also be obtained from the website.

## **Completeness against the Disclosed Information of this Report**

As far as the project procurement and implementation strategy is concerned, the disclosure of this report regarding the Arjo Dedessa Dam Construction Project can reasonably be taken as complete.

All general information required has been tried to be disclosed within the framework of the study period with the exceptions stated in the report.

## **Accuracy of the Disclosed Information**

In general, the disclosed information on the project is accurate. However, discrepancies or differing issues observed by the Assurance Professional are discussed as specific issues or causes of concern in the next section of this report. The Assurance Professional has verified information provided by the Procuring Entity from other sources of the supervision consultant and civil works contractor. Further information such as water sector development program, related policies, etc has been obtained from the website of the Procuring Entity for verification of accuracy and completeness of the disclosures.

## **Project/Contract Specific Issues**

The project for the purpose of this disclosure report includes the design review consultancy service contract, supervision and contract administration consultancy service contract, and the civil works construction contract. The project information so far discussed in this report draws the following specific issues which are believed to be considered by the Procuring Entity to ensure the best use of public money.

Even though the design review consultant and supervision consultant (OWWDSE) and the civil works contractor (OWWCE) are regional government enterprises, direct award of the service and construction contracts does not fulfill the directive for procurement of public works and may not result in getting a competitive service output with reasonable price. The design submissions and construction works are not performed to the timeline schedule which may require the Procuring Entity's revision on procurement of such works.

Also, as a single public body on the federal water sector projects of the country, the Procuring Entity (Ministry of Water, Irrigation and Energy) has to consider encouraging widespread completion of the local/international consulting and construction firms that may help in getting required output of the public expenditure within time and budget.

## **Design Review Service Contract**

The disclosures on design review consultant performance indicate that design submissions were delayed. Study reports and final design report submissions were submitted to the Procuring Entity at the end of June 2014. The design review service period was 11 months starting from 31 January 2011 and it was extended up to 31 December 2013.

Based on the design revisions, amended contract for supervision consultant and civil work contractor has been signed respectively on 01 December 2012 and on 26 December 2012. This indicates that the design review consultant provided a revised design and bill of quantities as per the service period but didn't submit the detailed studies and designs after the preparation of these submissions for more than one and half years.

It is to be recalled that the principal agreements for construction and supervision and contract administration service were signed before the design review submission with the understanding that there will be change to the volume of works when the design review is completed. In light of this arrangement, any delays or cost increment arising during the construction phase of the project may not be related to the design review consultant performance.

As discussed in chapter two of this report, a total investment cost of 46.5 USD or approximately ETB 853,230,000.00 was estimated in the WSDP of the year 2002 for a development of 2,780 Ha of irrigable land. The first design by the WWDSE was aimed at developing 13,655 Ha of irrigable land together with developing a 40 MW hydropower from the dam project. The design review, however, aimed at developing 50,000 Ha of irrigable land for sugar cane development with an estimated revised cost of construction of the dam ETB 1,298,919,271.91 including 15% VAT.

### **Supervision and Contract Administration Service Contract**

The consultancy service period of the supervision and contract administration was 18 months in the principal agreement. The consultant service contract was amended that extends the service completion period by 18 months starting from the signing date of the amended contract, 01 December 2012. The gap between the principal agreement and amended contract agreement was not included in the amendment and the consultant was not paid for duration between the original service completion date and the date of contract amendment.

Only 24% of the revised work volume of the project has been completed at the end of the revised completion date and the consultant recommended 24 months of extension of time for the Procuring Entity's decision (as the contract requires specific approval for determination and approval of claims). From the progress report of June 2014 prepared by the consultant, the Assurance Professional noticed that the plan was to achieve 45.86% of the revised contract amount at the completion date of the amended contract that contradicts the revised completion period of the amended contract.

All of the project participants could not disclose a master work schedule which was required to monitor the progress of the works. The consultant provided to the Assurance Professional the 2004 & 2005 EC budget year schedules that do not show the completion of the project by the end of June 2014.

The consultant progress report narrates all concerns of the project covering the arrangement, performance, and limitations of the consultant itself, the civil work contractor, and the subcontractors. The supervision service contract agreement also provides clear requirements and contents of the monthly and quarterly progress reports which is assumed to guide the consultant to prepare such well described progress reports. The Assurance Professional, however, recommends



the consultant to attach major correspondence letters of the particular monthly or quarterly progress report for completeness of the reports.

The progress report and the payment certificate indicate similar amounts of works executed so far which shows the correct valuation of the contractor's payment request. The Procuring Entity, the consultant and the contractor couldn't avail variation orders; but, extension of time requests by the contractor and the consultant determination for the same claim indicates that there was variation order that the consultant recommended two months of extension of time.

The consultant, as a professional advisor of the project, need to prepare a report on the strategy for practical completion of the works justifying and substantiating the contractor's claims and clearly indicating the projects performance problems so that the Procuring Entity can take measures as per the recommendation of the consultant.

## **Civil Works Construction Contract**

The civil works construction contract requires the contractor to provide performance bond and advance payment guarantee bond in the form of a letter from the Oromia Finance and Economy development Bureau which is good to bind the contract with such guarantees for such government enterprises as a way of accountability assurance on the project completion. However, in cases of contract failures, it might be complicated whether the Oromia Finance and Economy Development Bureau can legally be liable for the guaranteed amount considering the roles and responsibilities of the Bureau.

The initial contract price was determined by committees which makes a revised cost of the dam construction by 172% of the initial contract price. However, the 2002 water sector development program already included a plan to build the dam project which was to be reviewed timely and construction was to be started with already available or reviewed designs.

The project was to be completed by end of July 2012 which was revised to be completed by the end of July 2014. According to the schedule and progress report of June 2014, the project was completed to its 23.98% of the revised contract amount while 100% of the completion time has elapsed. The contractor's performance plan was to execute 45.86% which doesn't consider the revised completion date.

As the revised work volume was 172% of the initial contract amount and if the initial completion period of the contract was comparably reasonable for the initial contract amount, the extension by 24 months could be seen as reasonable. The amended contract performance duration of 42 months was explicitly stated in the amended contract to start from the signing date of the principal agreement which may show 18 months for the principal contract, 6 months for the delay of signing of the amended contract, and the other 18 months for the additional work volume of revised

quantity. This is also indicated in the supervision consultancy service contract agreement even though the middle six months duration was not included in the service contract amendment.

In light of the above situation, the contractor's claim of "discrepancy between work volume and completion date on the amended agreement for 12 months" and "interruption due to delay in signing the amended contract" could be said as already accounted for in the amended contract. The only justifiable claim could be for the variation (two months) and "unexpected" rainy season which could not be foreseen by the consultant and the contractor in planning the work with time line. Furthermore, the rain effect on the construction may not be similar in three years as the works that would be affected by the rainy season could be executed and reduced time by time.

The contractor requested of 20 months of extension of time while the rain season is five months and only three years has already elapsed which makes 15 months if all critical activities are affected by the same. The contractor requesting 42 months of extension time should be reviewed in such a way that time extensions are only justified only when the effect of variations and compensation events actually delayed the critical activities of the project. The consultant shall also determine such extension of time claims or cost claims as per the provisions of the contract without changing the contract conditions as agreed between the Procuring Entity and the contractor.

The amended contract states that a provision of Clause 37.1 in the Special Conditions of Contract stipulates "the contract price shall be modified after the dam design finalization" as a reason to support of the contract amendment. However, the provision of this clause only states "This contract is an Admeasurements Contract. Subject to quantity change" which doesn't show the citation included in the contract amendment.

The progress of the works at the end of June 2014 (end of revised completion period) was only 24% of the revised contract amount which is 52% achievement from the plan. The target of the project was to commission the sugar cane development project by the end of year 2007 EC which will delay the target unless the project participants manage the project with a crushed work programme. The consultant recommendation of two years of extension of time indicates that the target will not be met even if it is assumed that the project would be completed within the recommended extension of time.

Price escalation payments were allowed by the contract provisions of Clause 47.1 under the Specific Conditions of Contract which states "The contract will be subject to price adjustment for the specific materials (fuel, reinforcement bar, cement, and any other material cost which is greater than 6% of the contract price) in the form of rise and fall and invoices of the base price shall be attached in the contract". However, invoice for the base prices was not attached in the contract and the contractor does not request any price escalation payments for the last three years.

## Recommendations on Key Findings & Further Review

- The Procuring Entity, consultant, and contractor involved in the project from the study to the implantation of the project shall maintain project information, designs, studies, reports, and project records to keep the project information for further studies and upgrading of the project in one central library. The PE and consultant involved in design reviews need to base their design and study reviews on prior designs, studies and reports to make the review process efficient.

As an example, the WSDP (2002) provided an estimate of 2,780 Ha of irrigable land for Arjo Dedessa Dam project allocating a budget of 46.5 Million USD from year 2005 to 2016. The design made by the WWDSE submitted its design in 2010 with 13,655 Ha of irrigable land and 40MW hydroelectric power development. The design review by OWWDSE provides a different design of the dam for 50,000 Ha of irrigation with a further expansion of 30,000 irrigation land from the same dam project.

- Along with the Procuring Entity's program to build the capacities of the regional government enterprises (consultant and contractor), it may be need to consider other competitive approaches which could guarantee the timely completion of projects within budget which will also meet the government directive for open tender requirement. The revenue forgone because of the delay of the project (either for design related problem or for the capacity problems on part of the contractor or consultant) need to be compared to the savings, if any, on the project cost these enterprises could ensure.
- The consultant need to determine extension of time or any revised completion date as per contract entitlement as far as the project is executed on contractual arrangement where the consultant provides contract administration service. The revision of completion period can be as per the contractor entitlement for extension of time or as per a revised agreement between the employer (Procuring Entity) and the contractor.
- Revised work program for the extended completion period or any revised completion period shall be submitted by the contractor and approved by the consultant. The general work schedule need be prepared for the practical completion (contract period) of the project where any other budgetary or quarterly schedule could be based on these agreed revised completion dates.
- The consultant needs to formalize variation orders in a form that shows the cost and time implications of the variation order and in conformity with the contract limitations on the consultant to issue such variations.
- A practical completion date of the project need assessed by the Procuring Entity, consultant and contractor to monitor the performance of the contractor. The time elapsed up to July 2014 is 100% of the revised completion period while only 24% of the revised volume of works has been completed.
- The Procuring Entity need to give sufficient service time for design consultants in such a way that reasonably accurate bill of quantities, studies, and design submissions can be managed from the consultant. This will help to fix practicable period of performance and to manage and

monitor the agreed completion period and cost of the project. Also, it would have been better to plan and commence design (review) services ahead of the start of construction work.

- The consultant acting as contract administrator need to formalize any revised completion in the form the contract provided by justifying the reasons of delay by the consultant, contractor or the Procuring Entity itself. In general, the project delay should be justified by properly addressing who takes responsibility for each causes of delay.
- The Procuring Entity need to administer the contracts it has entered into as per the agreed terms and conditions of contract. The design review consultant agreement delay; gap between the principal and amended contracts of the supervision consultant; and delays of the contractor need be extended or proper application of the contract provisions (deducting liquidated damages, etc) shall be applied.
- The Consultant need to monitor the progress of the works as per the contract timeline and master work program and take proper measures for delays on a timely basis. The monthly and quarterly progress reports of the consultant cover all causes of concern on the part of the consultant, contractor, and subcontractors and the consultant is recommended to attach major correspondences for completeness of these reports.

**Arjo – Dedessa Irrigation Dam (Project and Contract Information I - IV)**

**I. DISCLOSURE OF PROJECT INFORMATION**

REIMINARY PROJECT INFORMATION	No	ITEM OF DISCLOSURE	PROJECT IN GENERAL
	1	Date of Disclosure	25 JULY 2014
	2	Project Owner	Ministry of Water, Irrigation, and Energy [MoWIE]
	3	Project Name	Arjo – Dedessa Sugar Development Irrigation Project / Arjo –Dedessa Dam and its Appurtenant Construction Project (Lot 1)
	4	Sector, subsector	Water Sector; Irrigation Subsector
	5	Source for further Information	Ato Teshome Atnafe Ato Ali Aman <a href="http://www.mowr.gov.et">http://www.mowr.gov.et</a>
	6	Project Location	✓ Oromia Region; West Wellega Zone ✓ Between Jimma, Illubabura, and West Wellega zone
	7	Purpose	✓ Initially designed with the intention of producing 40MW electric power and to develop a 13,655 ha of land for sugar cane planting ✓ After review design, it aimed at the establishment of an irrigated new sugar plant with a daily cane crushing capacity of 28,000 TCD by developing 50,000 net ha irrigated land for FDRE Sugar Corporation
	8	Project Description	
	9	Original Project Scope	✓ The dam has a height of 47m and 502m side by side length
	10	Project Components	1. Design Review Contract (including sectoral studies, EIA, Socio-economic Studies) 2. Supervision Contract (including Contract Administration) 3. Works / Construction Contract
11	Environmental Impact	Studied; No coverage in progress reports of the supervision consultant	

12	Land & Settlement Impact	Studied; No coverage in progress reports of the supervision consultant
13	Estimated Budget of the project with Breakdown of Components	<ol style="list-style-type: none"> <li>1. Design Review Contract – ETB 44,692,291.92</li> <li>2. Supervision Contract – ETB 11,596,017</li> <li>3. Works / Construction Contract – ETB 755,461,980.84</li> </ol>
14	Funding Sources	<ol style="list-style-type: none"> <li>1. Design Review Contract – Gov of Ethiopia</li> <li>2. Supervision Contract – Gov of Ethiopia</li> <li>3. Works / Construction Contract – Gov of Ethiopia</li> </ol>
15	Project Budget Approval Date	Not Disclosed
16	Project Start Date (planned, actual)	Start Date of First Design and Planning could be in 2005 as per WSDP 2002; Design Review agreement and civil works construction agreements were signed in January 2011
17	Planned/ Original Duration for Completing the Whole Project	<ol style="list-style-type: none"> <li>1. Design Review Contract – 11 Months</li> <li>2. Supervision Contract – 18 Months,</li> <li>3. Works / Construction Contract – 18 Months; extended by 24 months</li> </ol>
18	Planned / Original Cost of the Project	<p><i>(sum cost components in item no 13)</i></p> <p><b>Total Estimated Budget – ETB 811,750,289.70</b></p>
<p>REMARK: The project duration since the start of the project (including the revision) is 42 months and only 24% of the revised work volume has been executed within this revised completion period.</p>		

<b>II. DISCLOSURE OF PROCUREMENT INFORMATION</b>					
<b>PROCUREMENT INFORMATION</b>	<b>No</b>	<b>ITEM OF DISCLOSURE</b>	<b>DESIGN</b>	<b>SUERVISION</b>	<b>CONSTRUCTION</b>
	1	Date of Disclosure	25 JULY 2014	25 JULY 2014	25 JULY 2014
	2	Contract Title	Contract Agreement for Design Review and Revision, Feasibility Study and Detail Design of Arjo Dedessa Sugar Development Irrigation Project	Contract Agreement for Consultancy Service for Contract Administration and Construction Supervision of Arjo dam & Appurtenant Structures (Lot 1)	Contract Agreement for Construction of Arjo Dedessa Dam & Appurtenant Works
	3	Location	Same location as stated in project information	Same location as stated in project information	Same location as stated in project information
	4	Procuring Entity	Ministry of Water, Irrigation, and Energy [MoWIE]	Ministry of Water, Irrigation, and Energy [MoWIE]	Ministry of Water, Irrigation, and Energy [MoWIE]
	5	Source for Further Information	Ato Teshome Atnafe Ato Ali Aman <a href="http://www.mowr.gov.et">http://www.mowr.gov.et</a>	Ato Teshome Atnafe Ato Ali Aman <a href="http://www.mowr.gov.et">http://www.mowr.gov.et</a>	Ato Teshome Atnafe Ato Ali Aman <a href="http://www.mowr.gov.et">http://www.mowr.gov.et</a>
	6	Date of Procurement Notice	NA	NA	NA
	7	Floating Period of the Procurement Notice	NA	NA	NA
	8	Media used for Procurement Notice	NA	NA	NA
	9	Method of Procurement	Direct Procurement	Direct Procurement	Direct Procurement
	10	Type of Procurement	NCB	NCB	NCB
	11	Procurement Procedure	RFP	RFP	RFP
	12	Evaluation Criteria	Negotiation	Negotiation	Negotiation

13	Type of Contract & Project Delivery Method	Contract – Unit Price Delivery Method – Design Bid Build	Contract – Unit Price Delivery Method – Design Bid Build	Contract – Unit Price Delivery Method – Design Bid Build
14	Type & Amount of bid Security	NA	NA	NA
15	Content of any Complaint lodged	NA	NA	NA
16	Engineer’s Estimate	NA	NA	ETB 1,298,919,272.91 Source – Consultant
17	Date of Bid Opening	NA	NA	NA
18	Number of Bidders: Participated, Rejected and Declined to submit	NA	NA	NA
19	Awarded Firm/ Contracting Firm	Oromia Water Works Design and Supervision Enterprise / OWWDSE	Oromia Water Works Design and Supervision Enterprise / OWWDSE	Oromia Water Works Construction Enterprise / OWWCE
20	Date of Contract Award	Not Disclosed; if it is different with the contract signing date	Not Disclosed; if it is different with the contract signing date	Not Disclosed; if it is different with the contract signing date
21	Award Price / Original Contract Price	ETB 44,692,291.92 including 15% VAT	ETB 11,596,017.02 including 15% VAT	ETB 755,461,980.84 including 15% VAT
22	Unit Contract Price (price/km, price/sq. meter)	NA	NA	ETB 15,109.245 per ha (excluding 15% VAT) <b><i>Net Irrigable Area = 50,000 ha [but the design is further reviewed and cost almost doubled]</i></b>
23	Contract Security type and Amount	NA	NA	10% Performance Bond
24	Date of Contract Signing	31 JANUARY 2011	31 JANUARY 2011	31 JANUARY 2011
25	Contract Scope	Rendering Design Review and Related Studies for Arjo Dedessa to Irrigate 50,000 ha of land	Rendering Supervision and Contract administration Services for Arjo Dedessa Dam to Irrigate 50,000 ha of land	Construction of Arjo Dedessa Dam and its Appurtenant Structures to Irrigate 50,000 ha of land



26	Description of Contract & Contract Components	Design Review and Revision, Feasibility Study and Detail Design of Arjo Dedessa Sugar Development Irrigation Project	Consultancy Service for Contract Administration and Construction Supervision of Arjo dam & Appurtenant Structures (Lot 1)	Construction of Arjo Dedessa Dam & Appurtenant Works
27	Contract Administration entity	MoWIE	MoWIE	OWWDSE
27	Contract Duration / Initial	11 Months	18 months	18 Months
29	Contract Start Date	31 JANUARY 2011	31 JANUARY 2011	31 JANUARY 2011
30	Intended Completion Date	01 JANUARY 2012	30 AUGUST 2013	30 AUGUST 2013
<p>REMARK:</p> <p>The Supervision Consultant Contract was amended;  Amendment No 01 – on 01 DECEMBER 2012 with a contract amount of ETB 33,356,119.38 for a duration of 24 months starting from 01 DECEMBER 2012</p> <p>The Works Contractor Contract was amended;  Amendment No 01 – on 26 DECEMBER 2012 with a cumulative contract amount of ETB 1,298,919,272.91 for a duration of 42 months starting from the original contract signing date</p>				

### III. CONTRACT IMPLEMENTATION INFORMATION

3 CONTRACT IMPLEMENTATION INFORMATION	No	ITEM OF DISCLOSURE	DESIGN	SUPERVISION	CONSTRUCTION
	1	Contract Status (ongoing (% progress), terminated, completed)	Completed	Ongoing; as per contract amendment	Ongoing; <b>23.98% as per the amended contract /</b> as of June 2014
	2	Completion Date (Revised, projected, Actual)		Revised Completion – 30 June 2014	Revised Completion – 30 July 2014  Source – Report and Revised Schedule
	3	Changes to Contract Duration with Reason		1. 24 months additional time for contract amendment	1. 24 months additional time for contract amendment 2. 24 months of extension of time is recommended by the consultant – pending PE’s approval
	4	Amount of Liquidated Damage if applied (Penalty for delay)	NA	NA	NA
	5	Contract Price (Revised, projected, Actual)		ETB 33,356,119.38 Revised as per the contract amendment	Revised Contract Price – <b>ETB 1,298,919,271.90</b>
	6	Changes to Contract Price with reason		Contract amendment – ETB 21,760,102.38 [From 11,596,017 to 33,356,119.38 ]	Contract amendment – ETB 543,457,291.1 [From 755,461,980.84 to 1,298,919,271.90]
	7	Scope at Completion		NA	NA
	8	Changes to Contract Scope with reason			

9	Total Payment Effected		Interim Payments (6 total) – ETB 22,627,052.46 cumulative amount	Interim Payments (15 total) – ETB 203,631,323.95 cumulative amount
10	Warranty Type and Description			
11	Details of Termination if applied	NA	NA	NA
12	Safety Measures (accident & death)			
13	Quality of Work			
14	Disputed Issues & Award details	NA	NA	NA
REMARK:				

**IV. DISCLOSURE OF INFORMATION AT COMPLETION**

<b>4. PROJECT INFORMATION AT COMPLETION</b>	<b>No</b>	<b>ITEM OF DISCLOSURE</b>	<b>PROJECT IN GENERAL</b>
	1	Date of disclosure	NA
	2	Project owner	NA
	3	Project name	NA
	4	Sector, subsector	NA
	5	Source for further information	NA
	6	Project Location	NA
	7	Purpose	NA
	8	Project description	NA
REMARK:  THE PROJECT IS AT 23.98% COMPLETION AS PER THE CONTRACT AMENDMENT.			

**ARJO DEDESSA DAM ASSURANCE REPROT ANNEX 10.2**  
**Comparison of Revised and Initial Work Volume**

Part No	Description	Initial BOQ Amount	Total Executed Amount to date (Birr)			Activities Amount (Birr)	Grand Total Amount (Birr)
			Paid	Unpaid	Total		
1	Generals	19,250,000.00	25,553,729.96	10,252,739.91	35,806,469.87	70,099,953.51	105,906,423.38
2	Main Dam	395,398,212.10	24,933,885.16	5,451,532.81	30,385,417.97	474,534,216.20	504,919,634.17
3	Saddle Dam (I & II)	63,045,857.83	617,100.00	1,507,554.91	2,124,654.91	53,859,956.83	55,984,611.74
4	River Diversion Work	12,488,940.41	620,374.84	379,333.81	999,708.65	55,695,084.81	56,694,793.46
5	Spill Way	71,659,403.00	338,800.00	1,155,925.77	1,494,725.77	155,996,938.09	157,491,663.86
6	Right Bank Outlet				-	36,256,257.88	36,256,257.88
7	Left Bank irrigation Outlet	11,467,627.25			-	39,742,874.7	39,742,874.67
8	Grouting in Main dam, Saddle dams				-	90,737,844.44	90,737,844.44
9	Hydro Mechanical equipment				-	64,865,850.00	64,865,850.00
10	Constrcution of access road over the dam crest	83,613,421.00			-	1,105,047.30	1,105,047.30
11	Temporary river canal and steel bridge			7,270,952.32	7,270,952.32	914,564.58	8,185,516.90
12	Constrcution of double box culvert				-	6,604,502.13	6,604,502.13
13	Reservoir area hot spring				-	1,000,000.00	1,000,000.00
<b>Total Cost</b>		<b>656,923,461.59</b>	<b>52,063,889.96</b>	<b>26,018,039.53</b>	<b>78,081,929.49</b>	<b>1,051,413,090.44</b>	<b>1,129,495,019.93</b>
<b>Add 15% VAT</b>		<b>98,538,519.24</b>		<b>3,902,705.93</b>	<b>11,712,289.42</b>	<b>157,711,963.57</b>	<b>169,424,252.99</b>
<b>Total Sum</b>		<b>755,461,980.83</b>	<b>52,063,889.96</b>	<b>29,920,745.46</b>	<b>89,794,218.91</b>	<b>1,209,125,054.01</b>	<b>1,298,919,272.92</b>