

VALIDATION REPORT

World Bank

Humbo Ethiopia Assisted Natural Regeneration Project

Revision 01

2009. 12. 07

Report No. GR09W0008D

JACO CDM., LTD

Validation Report

Date of first issue: June 23, 2009	
Approved by: Yasunori SHIMOI CEO, President of JACO CDM	Project No.: 2712
Client: World Bank	Client ref.:

Summary:

JACO CDM., Ltd has been ordered by the World Bank to perform the validation of A/R project "Humbo Ethiopia Assisted Natural Regeneration Project" (hereinafter the Project).

This validation report summarizes the findings of the validation.

The validation consisted of the following three steps:

- i) desk review of the project design, the baseline and the monitoring plan etc.,
- ii) follow-up interviews with project stakeholders
- iii) the resolution of outstanding issues and issuance of the final validation report and the opinion.

The responses to 4 Corrective Action Requests and 35 Clarifications to the original PDD (August 18, 2008) were satisfactorily provided by the Project participants and the original PDD was revised. Total net anthropogenic removals (tCER) from the project are estimated to be on average of 29,343 tCO₂ per year over the selected 30 year crediting period. The net anthropogenic removal forecast has been checked and is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

Adequate training and monitoring procedures have been implemented.

In summary it is JACO CDM's opinion, that the A/R project Humbo Ethiopia Assisted Natural Regeneration Project in Ethiopia as described in the PDD version 3 meets all relevant UNFCCC requirements for A/R project activities under the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology AR-AMS0003 version 04.

Hence, JACO CDM requests the registration of the project as an A/R CDM project activity.

Report No.: GR09W0008D		
Report title: Validation Report Humbo Ethiopia Assisted Natural Regeneration Project		
Work carried out by: Teruo FUKUDA, Osamu KOBAYASHI		
Work verified by: Yoshihiro OTSUKA, Shigekazu OKA Noriyuki KOBAYASHI (Expert)		
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Abbreviations

AGB	Above-ground Biomass
A/R	Afforestation Reforestation
BEF	Biomass Expansion Factor
CAR	Corrective Action Request
CBD	Convention on Biological Diversity
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CERs	Certified Emission Reduction
CL	Clarification Request
COP	Conference of Parties
DBH	Diameter at Breast Height
dm	Dry Matter
DNA	Designated National Authority
DOE	Designated Operating Entity
EPA	Environmental Protection Authority
ERs	Emission Reductions
EIA	Environmental Impact Assessment
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GHG	Green House Gas(es)
GIS	Geographical Information Systems
GPG	Good Practice Guidance
GPS	Global Positioning System
IPCC	Intergovernmental Panel on Climate Change
JACO CDM	JACO CDM Co., Ltd
KP	Kyoto Protocol
ICERs	Long-term Certified Emission Reductions
LoA	Letter of Approval
LULUCF	Land use, land-use change and forestry
MoARD	Ministry of Agriculture and Rural Development
ODA	Official Development Assistance
PDD	Project Design Document
PP	Project Participant
PRA	Participatory Rural Appraisal
QA	Quality Assurance
QC	Quality Control
SNNPRS	Southern Nations Nationalities and Peoples Region
SOPs	Standard Operating Procedures
SV	Stem Volume
TARAM	Tool for Afforestation and Reforestation Approved Methodologies
tCERs	Temporary Certified Emission Reductions
UNFCCC	United Nations Framework Convention on Climate Change
WB	The World Bank
WD	Wood Density
WV	World Vision
WVA	World Vision Australia
WVE	World Vision Ethiopia

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Appendix A: Validation Protocol

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Appointment Certificate

1. INTRODUCTION

1.1. Objective

World Bank has commissioned JACO CDM to validate the A/R project “Humbo Ethiopia Assisted Natural Regeneration Project” (hereinafter called “the Project”).

The validation serves as design verification and is a requirement for all CDM projects. The purpose of a validation is to have an independent third party assess the project design. In particular, the project’s baseline, the monitoring plan (MP), and the project’s compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria.

Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of temporary or long-term certified emission reductions (tCERs/ICERs).

UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities as agreed in the Bonn Agreement and the Marrakech Accords.

1.2. Scope

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, sections A to F of the CDM modalities and procedures as agreed in the Marrakech Accords, the modalities and procedures for A/R project activities under CDM as agreed at COP 9 and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology. The validation team has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of t/ICERs.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

The validation was conducted by the following validation team through the assessment of the PDD and the additional documents listed in the Chapter 6 “References”, also by the interviews with persons listed in the same Chapter.

The result of validation team activity was reviewed by the internal verifiers.

Validation Team

Teruo FUKUDA	JACO CDM	Team Leader
Osamu KOBAYASHI	JACO CDM	Team Member

Technical Expert

Makino YAMADA	Waseda University
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Internal Verifiers

Yoshihiro OTSUKA	General Manager of JACO CDM
Shigekazu OKA	Audit Department of JACO CDM
Noriyuki KOBAYASHI	Professor of Law School of Nihon University, Technical Advisor to JACO CDM for AR project

1.3. Project Description

The proposed afforestation / reforestation activity, the Humbo Ethiopia Assisted Natural Regeneration project, involves the restoration of indigenous tree species in a mountainous region of South Western Ethiopia. The project contributes to climate change mitigation objectives by contributing to the GHG removals by sinks through assisted natural regeneration project.

The latest estimates show that Ethiopia has less than 2.7% of its original high forest. It is reported that about 40,000 hectares or 0.8% of total forest cover has lost between 1995 and 2000 (GPG for

LULUCF 2003¹, table 3A.1.1). The loss of forest cover has adverse affect on livelihoods of communities and as well as biodiversity. It is reported that Ethiopia has some 119 species on the IUCN Red List of threatened species, and eight of which are considered critically endangered. This project seeks to establish biodiverse native forest and support income and employment generation activities through assisted natural regeneration of the Humbo area.

The project activities contribute to sustainable development in the following ways.

1. Regeneration of native forest, utilizing the farmer managed natural regeneration (FMNR) and traditional forest establishment techniques.
2. Enhancement of GHG removals by sinks in the project area.
3. Promotion of native vegetation and biodiversity in the project area, which can be utilized as a refuge for local and migratory species and to improve the connectivity of fragmented forest resources.
4. Reduction in soil erosion and flooding and help maintain supply of the subterranean streams to support the region's water supply.
5. Provision of income stream for communities through sustainable harvesting of forest resources.

To achieve these goals, this project seeks to undertake the following activities:

- Restoration of approximately 2728 hectares of biodiverse natural forest in the Humbo Woreda, using indigenous and naturalized species.
- Community management of public land with multiple objectives of promoting natural resource management, poverty alleviation and biodiversity enhancement
- Development of a model of community land use that would enhance GHG removals by sinks from regenerating native vegetation, which can be replicable in other regions of Ethiopia.
- Formation of seven community cooperative societies and securing legal title to manage the proposed regeneration area, and adopting a constitution and by-laws to manage the project.
- Establishment of institutional structure with right to the Certified Emissions Reductions (CERs) generated from the site.
- Establishment of a system to monitor the carbon stocks and recording and reporting on the changes in carbon stocks.
- Establishment of a system to monitor the environmental and social issues relevant to the project.

The implementation of farmer managed natural regeneration (FMNR) will be done over a period of three to five years. Species endemic to the area are used to restore the forest. These will include *Acacia spp.*, *Aningeria adolfifericii*, *Podocarpus facutus*, *Olea africana*, *Cordia Africana*, *Croton macrostachytus*, *Erthrina spp.*, *Ficus spp*, *Hagenia abyssinica*, among others. The naturalized species such as *Gravilea robusta* and *Eucalyptus globulus* are also considered for planting in blocks and on the perimeter of the sites.

No genetically modified organisms or invasive alien species are used in this project

The Humbo Assisted regeneration project seeks to establish seven community cooperative societies, which have legal ownership to 2728 hectares of community land. These groups intend to manage the areas for the purposes of carbon removal using the Farmer Managed Natural Regeneration techniques (explained in PDD section A.5.4) environmental benefits (biodiversity, water quality, and habitat) and income producing activities for the local population. Bye-laws agreed upon at project inception will form the rules for community cooperative societies to manage the project. The cooperative societies will comprise representatives from World Vision, the ARDFCO, local community and gender categories.

2. METHODOLOGY

The validation consists of the following three phases:

¹ IPCC 2003. Good Practice Guidance for Land Use, Land-Use Change and Forestry. Kanagawa, Japan, Institute for Global Environmental strategies (IGES) for the Intergovernmental Panel on Climate Change.

- I a desk review of the project design documentation
- II follow-up interviews with project stakeholders
- III the resolution of outstanding issues and the issuance of the final validation report and opinion.

In order to ensure transparency, a validation protocol was customized for the project, according to the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of three tables. The different columns in these tables are described in Figure 1.

The validation protocol is enclosed in Appendix A to this report.

Findings established during the validation can either be seen as a non-fulfillment of validation protocol criteria or where a risk to the fulfillment of project objectives is identified. Corrective Action Requests (CAR) is issued, where:

- i) Mistakes have been made with a direct influence on project results;
- ii) Validation protocol requirements have not been met; or
- iii) There is a risk that the project would not be accepted as a CDM project or that emission reductions will not be certified.

The validation team may also use the term Clarification, which would be where:

- iv) Additional information is needed to fully clarify an issue.

validation Protocol Table 1: Mandatory Requirements			
Requirement	Reference	Conclusion	Cross reference
<i>The requirements the project must meet.</i>	<i>Gives reference to the legislation or agreement where the requirement is found.</i>	<i>This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non-compliance with stated requirements. The corrective action requests are numbered and presented to the client in the Validation report.</i>	<i>Used to refer to the relevant checklist questions in Table 2 to show how the specific requirement is validated. This is to ensure a transparent Validation process.</i>

Validation Protocol Table 2: Requirement checklist				
Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
<i>The various requirements in Table 1 are linked</i>	<i>Gives reference to documents</i>	<i>Explains how conformance with the</i>	<i>The section is used to elaborate and</i>	<i>This is either acceptable based on evidence provided</i>

to checklist questions the project should meet. The checklist is organized in seven different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	where the answer to the checklist question or item is found.	checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	(OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification is used when the validation team has identified a need for further clarification.
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Validation Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Validation conclusion
If the conclusions from the draft Validation are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	Reference to the checklist question number in Table 2 where the Corrective Action Request or Clarification Request is explained.	The responses given by the Client or other project participants during the communications with the validation team should be summarized in this section.	This section should summarize the validation team's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".

Figure 1 Validation protocol tables

2.1. Review of Documents

The Project Design Document submitted by the project participants and additional background documents related to the project design and baseline were reviewed. Documents reviewed are listed in Chapter 6 "References".

The validation findings stated hereafter are based on the PDD version 01, dated 18 August 2008.

2.2. Follow-up Interviews

In the period of March 30, 2009 to April 05, 2009 the validation team performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. DNA of Ethiopia, representatives of WB, WVE and WVA, also representatives of local government and community member's staff at project site and representative of the cooperatives were interviewed. The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organisation	Interview topics
DNA (EPA)	<ul style="list-style-type: none"> ➤ DNA's approval of the Project ➤ Authorization of project participants ➤ Sustainable development policy ➤ EIA and socio-economic impacts

	<ul style="list-style-type: none"> ➤ Laws and Regulations ➤ Land use right and CER
MoARD	<ul style="list-style-type: none"> ➤ Laws and Regulations ➤ Land use right and CER
World Vision Ethiopia (Project participant) & World Vision Australia	<ul style="list-style-type: none"> ➤ Project overview ➤ PDD <ul style="list-style-type: none"> - General (incl. Definition of Forest, Boundary, Project Participants, Cooperatives, Public funding, etc.) - Baseline & Additionality - Monitoring Methodology - GHG removal - Environmental Impacts - Socio-economic Impacts - Stakeholders comments ➤ Evidences ➤ Schedule
World Bank Carbon Finance Unit	<ul style="list-style-type: none"> ➤ Ditto
Local Government	<ul style="list-style-type: none"> ➤ Relation with the PP and local government ➤ Laws/ bye-laws ➤ Land use right and CER ➤ Any grievances in the communities and mitigation measures ➤ Difficulties necessary to be cleared
Cooperatives	<ul style="list-style-type: none"> ➤ Organization and Activity ➤ Purpose and expecting benefits ➤ Concerns about potential negative impacts ➤ Procedures for handling unresolved conflicts ➤ Environmental and Biodiversity impacts

2.3. Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarification and any other outstanding issues which needed to be clarified for JACO CDM's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by JACO CDM were resolved during communications between the Client and JACO CDM.

To guarantee the transparency of the validation process, the concerns raised and responses given are summarized in chapter 3 below and documented in more detail in the validation protocol in Appendix A

Since modifications to the Project design document were necessary to resolve JACO CDM's concerns, the Client decided to revise the documentation. After revised PDD was submitted and reviewed, JACO CDM issued the final validation report and opinion.

2.4. Internal Quality Control and Assurance

The draft validation report including the initial validation findings underwent a technical review before submitted to the project participants. The final validation report will undergo the assessment by JACO CDM's Certification Determination Committee to ensure independence, impartiality, transparency, credibility and indiscrimination of assessments.

Two-third of the committee members are selected from outside of JACO CDM.

Meeting was held on 2009.06.16.

3. VALIDATION FINDINGS

In the following sections the findings of the validation are stated. The validation findings for each validation subject are presented as follows:

- 1) The findings from the desk review of the original project design document and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Validation Protocol in Appendix A.
- 2) Where JACO CDM had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 6 Corrective Action Requests, 9 Clarifications.
- 3) Where Clarification or Corrective Action Requests have been issued, the exchanges between the Client and JACO CDM to resolve these Clarification or Corrective Action Requests are summarised.
- 4) The conclusions for each validation subject are presented.

The validation findings relate to the project design as documented and described in the original project design documentation.

3.1. Participation Requirements

3.1.1. Discussion

The project participants are World Vision Ethiopia and International Bank for Reconstruction and Development as a trustee of BioCarbon Fund. Host Party is Federal Republic of Ethiopia and the other Party is Government of Canada.

Ethiopia and Canada have ratified the Kyoto Protocol and installed Designated National Authorities (DNAs) .

The project was initiated by the World Vision Australia and in the PDD version 01, World Vision Australia who initiated the project and invested to the project was also listed as a project participant. **(CL 2)**

The project needs to be approved in the sense that it contributes to the sustainable development of the host Party, and each project participant shall be authorized by each DNA. **(CAR 1)**

3.1.2. Findings

Corrective Action Request 1

Approval letters of the project by the DNA of the host party and the DNA of Canada are required.

Response:

Approval letter of DNA of Ethiopia dated October 09, 2007² was provided to validation team by the project participant. The letter confirms the project is in line with the national development objectives of Ethiopia and contributes to the sustainable development of the country. This letter also authorises World Vision Ethiopia as participating the project voluntarily.

Approval letter of DNA of Canada dated June 22, 2009 was provided to the validation team by the project participant. The letter confirms that Canada participates voluntarily in the project and recognises that the International Bank for Reconstruction and Development as a Trustee for BioCarbon Fund, is the focal point for the project activity with respect to all communications with the CDM EB.

Corrective Action Request 2

A letter of modalities of communications is required at the registration of the project.

Response:

² The approval letter is dated 28-01-2000 according to the Ethiopian Calendar. In the Gregorian calendar this date is October 09, 2007.

A letter of modalities of communication dated May 07, 2009 was provided to the validation team.

Clarification Request 2

Please confirm which Party will authorize the World Vision Australia.

Response:

The World Vision Australia is not a project participant and is deleted from the list of PDD A.3.

3.1.3. Conclusion

CAR 1 and CAR 2 were closed.

CL2 was clarified. The PDD was revised.

The project complies with the requirements.

3.2 Project Design

3.2.1 Discussion

(1) General Description

The proposed afforestation / reforestation activity, the Humbo Ethiopia Assisted Natural Regeneration project, involves the restoration of indigenous tree species in a mountainous region of South Western Ethiopia. The project contributes to climate change mitigation objectives by contributing to the GHG removals by sinks through assisted natural regeneration project.

The location of the project is suitably indicated in the PDD and the location information of the planting area with coordinates data was included in the PDD annex 8. At the on-site assessment, the validation team checked several coordinates and confirmed they are correctly indicating the boundaries.

No public funding is involved except for an assistance in capacity building for CDM before project implementation.

(2) Eligibility of Land

Since the aerial photographs of the project area is not available, the eligibility of land was assessed based on the Decision/ CMP.1, Annex 1. (c) and EB 35 Annex 18. The procedures are based on the decision of above Annex "Procedures to demonstrate the eligibility of lands for afforestation and reforestation CDM project activities (version 01)"

The Ethiopian DNA has determined that a forest is defined as land with trees that has:

- A minimum area of 0.05 ha;
- A minimum tree crown cover of 20 %;
- A minimum average tree height above 2m

The land eligibility was demonstrated by PRA which was carried out on 31st March to 2nd April, 2008 and other field survey report.

According to the PRA report, before 1974 the Humbo forest was characterized by thick and dense forest with height greater than 7m. After 1975, due to the shift to communist government, the access to forest was made open to the public. As a consequence trees were harvested for personal use and for sale and forests were cleared. Since then degradation and erosion of land had continued till 2006 by above anthropogenic pressure. (/2b/)

This situation is also explained in other documents. (/2f/, /2i/)

Based on above information, it is concluded that the project area does not contain forest at the project start date (December 1st, 2006). Also, it is concluded that the project area was not a forest on December 31st, 1989.

(3) Technology

As for the species, native species are applied to 2228 ha among 2728 ha of total project area utilizing FMNR³ (Farmer Managed Natural Regeneration) technique and traditional forest establishment technique. For other project area (500ha out of 2728 ha) naturalized species (*Grevillea robusta* and *Eucalyptus globulus*) are planted.

The annual rainfall of the project area is 700 – 1000mm and FMNR technique is suitable to this project area.

(4) Contribution to sustainable development

The project is natural regeneration project of using native species by FMNR and naturalized species. The project promotes native vegetation and biodiversity. Also, this project contributes to reduction in soil erosion and provision of income stream for communities.

(5) Duration of the project

The beginning of crediting period is December 1, 2006.

The crediting period is defined as 30 years, fixed period.

3.2.2. Findings

Clarification Request 1

Please provide information about followings:

- (1) Present situation of the project (after starting date of December 1, 2006.),
Progress of the project,
Organization for implementing the project, especially communities,
- (2) World Vision's experience in community capacity building in Ethiopia and other countries in Sub-Sahara Africa.
- (3) Please provide the planning documents of the project, if any.

Response:

- (1) Situation was explained by WVE.

Outlines are as bellow.

On December 1, 2006, the project started. This is the date that World Bank confirmed to the project participant of Ethiopia that the project can commence. This is indicated in the e-mail of the Carbon Finance Unit of World Bank. (/20c/)

Jun 27, 2007: SNNPRS Certificate for land was issued for each of 7 cooperatives and the each project area has been closed. (/15/)

Organization of the community cooperative

Based on Bye-law of cooperatives, following organization are established.

- General Assembly
- Executive committee (7)
- 4 Committees (each 3)

- (2), (3) Design documents and Annual report of World Vision, etc. were provided. (/5/- /10/)

Clarification Request 3

UTM grid zone ID shall be indicated.

Response:

UTM grid zone ID was added to PDD Map C-1 and Annex 8.

Clarification Request 4

Additional explanation is necessary about following points:

- Indigenous species and other naturalized species
- What are major species? (In the PDD, supplemental planting, buffer zone planting and live fence & erosion control species are listed.)

Response:

³ FMNR technique: Ex. http://www.leisa.info/index.php?url=show-blob-html.tpl&p%5Bo_id%5D=113390&p%5Ba_id%5D=211&p%5Ba_seq%5D=1
This technique works best where annual rainfall is in excess of 650mm.

Following explanation is provided in the revised PDD Table C-3.

- (1) Grouping of species category such as major species. (Table C-3)
- (2) Species selected for each strata (total 5 strata).

Clarification Request 5

In PDD A.5.4., Description of referenced methodology should include version number (In this project, AR-AM0003 Ver.04 is applied.)

Response:

Version number is 04. PDD was amended.

Clarification Request 6

- As for A.5.6, please explain the outline of sub-sampling (how many people out of how many inhabitants contacted, what were asked, investigated, how were the results etc)
- Please explain outline of the planning of fuel wood plantation, alternate community grazing areas.

Response:

- Outline is explained in Annex 7("Social Aspects Study"). However, some of the explanation is limited to the extent of issues found by social impact assessment.
Conclusion and /or mitigation measures taken are added to Annex 7.

Clarification Request 7

Please provide data, and/or explanation on the following items.

- Provide the proclamation No. 456/2005 and No.53/2003.
- Please explain about the holding rights of the project site before and after project implementation.
- Provide the holding certificate.
- In this connection, please confirm about the meaning of the sentence "Those who possess community holdings". Does this mean that those who possess the holding certificate have the right to all products produced from land including CERs?

Who has the authority about the ownership of CERs in Ethiopia?

Response:

- 53/2003 and 456/2005 were provided by WVE.
- Before the project implementation (before issue of the holding certificate of cooperatives), the project site was common land and was belonging to anybody. After holding certificates, the holding rights and use rights belong to each cooperative were defined clearly.
All the project areas belong to the cooperatives.
- Holding certificates for 7 communities were provided.
- According to the proclamation, No.53/2003 published by SNNPRS, the CERs are considered as natural resources (definition 27) and natural resources is included in the "Possessory right" (definition 5)

Clarification Request 8

- Please provide the UN report 'Forest fires in Ethiopia', the evidences in the form of affidavits and written testimony by village leaders, and "Field survey assessment report" if any.
- Table A-3:
Please provide the calculation excel sheets for Table A-3 (yield calculation) and background information such as followings:
 - Tree species and their coverage % in the project area
 - Detailed baseline information (biomass information) including grass biomass before project implementation.

Response:

UN report was provided.

Affidavits and written testimony by village leaders are part of PRA.

"Field survey assessment report" means PRA report. Full PRA report was provided. (Annex 6)

The "TARAM"⁴ data (excel sheets) was provided. (Annex 13)

Stand model 1 is representing natural multi-species trees and Stand model 2 is representing naturalized species (*Grevilla robusta* and *Eucalyptus globulus*). For the growth calculation of these models, the expert input by Dr. Deribe Gurmu is applied.

Grass biomass before project implementation is based on the IPCC LULUCF and indicated in the PDD C.7.

Clarification Request 9

Please explain what was started, and provide the evidence of the starting date of the project.

Response:

Progress report and its covering E-mail by which the starting date can be confirmed were provided. (/20c/)

3.2.3. Conclusion

(1) Project starting date

As for CL1 and CL9, the validation team confirmed, with the following documents, that December 01, 2006 is the starting date of the project.

(i) World Vision's Annual Progress Report for fiscal year 2006 (December 2005 to November 2006)⁵ (/8/)

The annual progress report dated November, 2006 describes real actions implemented until the end of November 2006 to start the project. These included:

- Site identification
- Delineation of project boundaries (inc. consensus building with communities)
- Stakeholder workshop from April 10 to 12 (/17b/)
- Training on forests management, sampling methods, and biomass data collection
- Assesment of forest destruction process during 1976 – 2006 with PRA
- Socio-economic assessment on vulnerable social groups and individuals
- Baseline biomass estimation
- Soil test
- Seedling production
- Establishment of cooperatives to protect project site

The report indicates with these real actions implemented, the project preparation was completed by the end of November, 2006.

(ii) Email communication that confirms start of the project on December 1, 2006 (/20c/)

The email communication between project participants (BioCarbon Fund of the World Bank and World Vision Ethiopia) confirms start of the project on December 1, 2006 as a follow-up of the real actions implemented by the end of November, 2006.

(2) Compliance with the decision of paragraph 64 of EB21 "starting date of an A/R CDM project activity"

As indicated in the PDD B.1, "December 1, 2006" is the starting date of the proposed project activity and at the same time it is the beginning of the first crediting period.

The first verification of the project will be carried out after the project registration as per the monitoring plan of E.1 of the PDD. Therefore, the project complies with the conditions of the decision 64 of EB21 and it can accrue tCERs as of the starting date indicated in the PDD.

CL1 and CL9 were clarified.

CL3 to CL6, CL8 were clarified.

⁴ TARAM: Tool for Afforestation and Reforestation Approved Methodologies developed by BioCarbon Fund.

⁵ Forests and CO2 Flows: World Vision Ethiopia reported on November, 2006. December 1, 2006 is the beginning of the fiscal year of 2007.

As for CL7 “holding rights of CERs”, by the on-site assessment interviews, the validation team confirmed with EPA, the Ministry of Agriculture and Rural Development and the Humbo Wareda Bureau for Agriculture and Development that the products from the land includes CERs and they belongs to those who possesses user rights issued based on proclamations Federal 456/2005 and SNNPR 53/2003. (/54/ - /58/). CL7 was clarified.

The project complies with the requirements.

3.3. Baseline and Additionality

3.3.1. Discussion

(1) Applicability of the methodology, carbon pools and stratification

➤ Applicability

As indicated in the PRA (/2b/), the land of the project is subject to further degradation and the project aims to reforest through assisted natural regeneration, tree planting and control of pre-project grazing and fuel wood collection activities.

Based on the desk review and on-site assessment, the validation team confirmed the project satisfies the applicability conditions of AR-AM0003 version04 as follows.

- a) The project activity can lead to a shift of pre-project activities outside the project boundary, e.g.a displacement of grazing and fuel wood collection.
- b) Lands to be reforested are severely degraded and the lands are still degrading (/2b/).
- c) Anthropogenic pressures do not permit the encroachment of natural tree vegetation that leads to the establishment of forests. (/2b/)
- d) Lands will be reforested through promotion of natural regeneration and direct planting (partially). (/1/)
- e) Site preparation does not cause significant longer term net decrease of soil carbon stocks or increase of non-CO2 emissions from soil. (/1/)
- f) Carbon stocks in soil organic carbon, litter and dead wood can be expected to decrease more due to soil erosion and human intervention in the absence of the project activity, relative to the project scenario. (/1/, /23/)
- g) Flooding irrigation is not applied. (/1/)
- h) Soil drainage and disturbance are insignificant. (/1/)
- i) The amount of nitrogen-fixing species (NFS) is not significant (less than 5 %). (/1/)
- j) The project is implemented on land where there are no other on-going or planned A/ R activities.

➤ carbon pools

The carbon pools are above and below ground biomass. This is in accordance with the AR-AM0003 version 04.

➤ Stratification

Baseline stratification and Project activity stratification: The procedures to decide strata were discussed. (CL. 10)

(2) Baseline:

As described in 3.2.1 (2) above, the land had been degraded after 1975, due to the shift to communist government, the access to forest was made open to the public and since then degradation and erosion of land had continued till 2006 due to anthropogenic pressure.

Therefore, the baseline scenario is the continuation of the pre-project land use. (CL.14)

(3) Additionality: Starting date of the project and barrier analysis

- Prior consideration of the project was discussed. (CL.11)
World Vision Australia had been studying the project to be implemented as CDM project from the very beginning and the continuing real action has been taken as indicated in the World Vision's annual reports. (/20c/, /5/ -/10/)

➤ Barrier analysis:

Based on the Tool for the Demonstration and Assessment of additionality in A/R CDM Project Activities, the Barrier Analysis is performed. (CL.12, CL.13)

According to the original PDD, investment barriers, limited capacity of local institutions barriers and barriers due to prevailing practice is explained.

Other barriers which had been the obstacles for the project implementation were discussed. (CL.13)

3.3.2. Findings

Corrective Action Request 3

Version No of the methodology is to be added.

Response:

Version No. was added to the PDD. (version 04)

Clarification Request 10

•PDD. C.4

-step 1 a) b) How the soil type etc. were considered, please explain.

- Table C-1: Growth data for each tree species (or each tree species group) and justification of Table C-1 representing many varieties of species by 1 species.

- Please explain about the procedure to decide 4 (5) strata.

• Annex 3

Please explain how the 18 plots were derived from the precision requirement of 10% precision level. If relevant document, report it exists, please provide.

- Number of plots for baseline survey: please provide the evidence for deciding the number of plots.

Response:

- Based on the expert judgment, the many varieties of native species are expressed as Stand model 1. The difference of soil type in the project area is small and not reflected for stratification.

- Procedures to decide strata are explained in the PDD.

Based on the terrain, elevation and location of the sites, 4 strata are categorized.

- PDD Annex 3 was revised and the explanation is added based on the source book for LULUCF page 15-16. (/19a/)

- The procedures of sample plot design are based on the source book for LULUCF page 15-16. (/19a/)

Clarification Request 11

Although not explicitly stated in A/R PDD guideline, it is preferable that the timeline of events and actions taken to achieve CDM registration be indicated in PDD with the description of evidence. (Ref. B.5. of PDD guideline: EB41 Annex 12)

Please provide the information/evidence regarding the project implementation decision as CDM. (Ref: C.6. of A/R PDD guideline: EB42 Annex12)

Response

Timeline is indicated in the PDD.

In July 2004, the World Vision Australia (WVA) started to study this project as a CDM as indicated in the e-mail communication within the WVA. (/20a/)

In July 2005, Carbon Finance Document (CFD) was completed by World Bank.

In November 2005, Project Concept Note (PCN) was completed by World Bank

As indicated above, the project had been seriously considered as CDM project from the beginning. (/20a/-/20c/, /26/, /27/)

Clarification Request 12

- Please provide the evidence that the income per capita is less than 100\$

- Table C-3: Explanation is to be added about Table C-3.

Response:

- Evidence is Included in ref.21 of PDD. Table C-3 was deleted, instead, explanation added.

Clarification Request 13

- Last part in the paragraph below Table C-3: "This can be evidenced through statements from local financial institutions" Please provide above statements. This sentence is important to show the investment barrier.
- Please explain about other barriers of the additionality tool (EB35 annex 17) not indicated in the PDD.
Sub-step 3b: please add the explanation for other 2 alternatives, too.
- Please explain the difference between this project and the GTZ project at Dodola indicated in Section G. (2) and justify that this project is a first of its kind. (p77)
- Is there any evidence (such as governmental, and/or 3rd Party Rep, governmental statistics) which ascertain the project is the first-of-its-kind project?

Response:

- As an evidence for investment barriers, a statement by United Bank S.C. Ethiopia, dated May 8, 2009 was provided. (Declaration of local banks of Ethiopia) (/2h/)
- Lack of organization of local communities, Institutional barriers (legislation relating to forest or land-use) were added to the PDD.
- The Dodola project is a project to protect an existing Juniper forest and is not a restoration project. An explanation was added to the PDD.
There is no evidence such as governmental statistics, etc. According to WVE's own investigation, there has been no other project implemented with the objective of establishing a forest through assisted natural regeneration.

Clarification Request 14

1st paragraph of PDD C.7: please provide the evidence of a progression of land clearing and degradation within this region with escalation since the 1970s other than Annex 6 if any.

Response:

CBD report is available from www.cbd.int/doc/word/et/et-nr-03-en.doc

3.3.3. Conclusion

CAR 3 was closed.

CL 10: There is no published data available to predict growth of natural multi-species forests in the project area. It is generally difficult to find such data and in this situation, it is appropriate to estimate yield Stand Model 1 of the project by the application of existing information for similar climate zone and vegetation type as reported in the GPG LULUCF (IPCC 2003) and adjusted for the local circumstances by the expert opinion. CL.10 is clarified.

CL.11: The project was triggered by World Vision Australia (WVA) as indicated in PDD C.6 and relevant e-mail communications in WVA. (/20a/) CL11 is clarified.

CL.12 was clarified.

CL.13: The validation team clarified barriers as follows.

a) Investment barrier: The investment barrier was confirmed by the statement by United Bank S.C. Ethiopia.

b) Institutional barriers/ barriers relating land tenure/ barriers related to local tradition:

The aim of the project is achieved by closing the project area for the forest regeneration purpose.

There are the proclamations regarding the land use rights. (Federal proclamation No. 456/2005 and Rural proclamation No. 53/2003)

However, to close the particular project forest areas to achieve the natural forest regeneration, additional legislation such as official land use certificate is necessary.

In this project case, due to the fact that this project is specifically identified as CDM project, the government was willing to allocate user rights to the community through 7 registered cooperatives.

(/14/, /15/)

By this provision, the project areas were closed and can be used for the natural forest regeneration purpose. Therefore, there is an institutional barrier.

c) Technological barriers:

The project applies FMNR technique. For the community people, it is difficult to absorb the technology without sufficient training. WVA and WVE have been providing trainings to various levels including local government staffs, cooperative leaders/ members negatively affected groups. Extensive workshops/ training (25 times) were carried out during 2007 and 2008. This indicates that there is a technological barrier.

d) Barriers related to prevailing practice:

This project is the first of its kind in applying FMNR technique in this region. Management technologies for the 1st AR CDM project in the country are important issue. For this purpose, training for management was included as a part of program in above workshops/ training. This means that there are barriers due to prevailing practice.

e) Lack of organization of local communities

There had not been any such organizations to implement the natural regeneration project. The local communities were not familiar with the procedures to establish such organization. Above workshops and training included this issue.

To achieve the goal of the AR CDM project activity, a bye-law was established for each of 7 cooperatives. The bye-law defines objectives, activities, membership, rights & responsibility of members, organization structure, internal committees, etc. (/16/)

Before the project implementation, there had not been such organization, hence the lack of organization is considered as a barrier.

Based on above, CL.13 was clarified.

CL.14 was clarified.

The project activity satisfies the additionality condition indicated in the "Tool for the Demonstration and Assessment of Additionality in A/R CDM project activities". (/33/)

The project complies with the requirements.

3.4. Estimate of GHG Removals

3.4.1. Discussion

The calculation formula of the PDD is based on the formula of AR-AM0003 version 04. Calculation of removals of GHG and leakage were assessed.

(1) Baseline net GHG removals by sinks

Grass: above and below ground biomass is estimated using IPCC default data.

The grasses will disappear along with the project implementation.

The project implementation takes 4 years and the grass

Trees: The trees are left standing. The project participants conducted the forest biomass assessment to the project area. The assessment was done for the 4 strata identified by the procedures specified for the stratification. Based on the procedures of the sourcebook for LULUCF, the preliminary sample plots are taken. (PDD Annex 3 (/1c/), /19a/)

Mean carbon stock for each stratum is 3.503 to 8.85 tC/ha and these data is far smaller than such data as montane moist of 191 tC/ha and montane dry of 40 tC/ha. (/38/, table 3A.1.2)

Based on this consideration, PDD asserts that it is considered that carbon stocks in the living biomass of pre-existing tree vegetation are not significant and that AR-AM0003 version 04 § 7.1 (a) * can be applied. The validation team considers this assertion is appropriate.

[*: AR-AM0003 version 04 § 7.1 (a): Carbon stocks changes in the living biomass of tree vegetation are not included in the ex ante calculation of actual carbon stock changes, regardless if the pre-existing non-tree and tree vegetation is left standing or is harvested.]

(2) Actual net GHG removals by sinks

The trees for the project are native species (Stand model 1) and naturalized species (Stand

model 2). For stand model 1, based on the IPCC GPG

Relation between table D-3 and Annex 13 STM 1 was discussed. **(CL15)**

The influence by the mixed plantation to the yield data for STM 2 (30 m³/ha/yr—6 tdm/ha/yr, 10-12m³/ha/yr —3tdm/ha.yr) was discussed. **(CL15)**

(3) Leakage

The evidence for EGL was discussed. **(CL16)**

3.4.2. Findings

Corrective Action Request 4

- LK_{vehicle} is not considered in AR-AM0003 Ver.04. Therefore, the description about leakage by vehicle is not necessary. (page 37 & 38) Shall be deleted.
- Activity displacement: Zero activity displacement shall be demonstrated following the procedure prescribed in the applied methodology, for instance,
 - As for grazing, $Na_{BL} < Na_{AR,t}$,
 - As for LK_{fuelwood}, $FG_{BL} < FG_{AR,t}$ or LK_{fuelwood} < 2% of actual net GHG removal, shall be demonstrated, together with the data used for the evaluation. Same comments apply to derivation of 0 leakage due to fencing.

Response

LK_{vehicle} related descriptions were deleted.

TARAM data demonstrates the procedure.

Leakage from Grazing:

(1) The number of animals using the project area Na_{BL} was calculated by counting the total number of animals.

(2) The cut and carry system of fodder production results in an increased number of animals, hence Description about fuel wood collection was revised and information was added as Annex 11.

(/29/)

In addition to that, EGL is 11,383 ha according to the local government statistics. This accommodates 17, 075 animals. The current population of EGL is 8,684 ox/cow/bulls and 2288 goats. (PDD annex 11) Based on this data, it is calculated as $Na_{BL} < Na_{AR,t}$, hence the leakage from grazing can be ignored based on AR-AM0003 version 04.

Leakage from fuelwood collection

Pre-project annual volume of fuel wood gathering in the project area was 4.3t/ha, while post project fuel wood collection data from 4 cooperatives was 5.13 t/ha in average. (/2g/)

Therefore, $FG_{BL} < FG_{AR,t}$

In this case, leakage due to displacement of fuel wood collection can be set as 0 based on AR-AM0003 version04.

It was explained that the leakage related to fencing was excluded at EB42 decision.

The explanation was added regarding the leakage due to grazing and fuel wood collection in the PDD and Annnex 11.

Clarification Request 15

(1) Please explain about the derivation of

-25,594 tonCO₂ in the year 2007 of Table D-1.

(2) PDD D.1.

a. 1st paragraph, GPG-LULUCF: Please inform the relevant section of GPG indicating these recommendations.

b. 2nd, 3rd paragraph: Please provide the detail explanation about the followings

(i) first stand model of mix of native species: the contents of mix of the IPCC GPG and its justification

(ii) Expert input by Dr. Deribe Gurmu

(iii) 2nd stand model: Please justify the assumption of MAI when inter-planted.

- (iv) Please inform the distribution and % of first stand and second stand.
- (v) Please explain about the schedule of pruning, thinning, harvesting schedule and assumed mortality.
- (vi) Please explain what and how the data / parameters are applied to the annual carbon stock change calculation, taking into account the AR-AM0003 version 04 section 7.1 and 7.2
- (vii) Please provide the calculation excel sheet of annual carbon stock change in each stratum.
(Similar question of No.10.)

Response

- (1) TARAM data was provided.
Brief explanation about [-25,594 tCO₂/yr] is as follows.
1st year:
Grass: $2.3 \times (1 + 2.8) \times 0.5 \times 44/12 \times 2728 = 43711 \text{ tCO}_2$
(The grasses will disappear along with the implementation of the regeneration project.
1st year the project will be implemented to 2228ha will, 2nd year 200ha, 3rd year 200ha and the last year 100ha.) (ref. Annex 13 (2), (/2j/))
Stand model 1 (native species; 2228ha):
 $1.9 \times (1 + 0.27) \times 0.5 \times 44/12 \times (2728 - 500) = 9856 \text{ tCO}_2$
 $9856 - 35700 = -25844 \text{ tCO}_2 \doteq -25594 \text{ (PDD)}$
Stand model 2 (plantation: 500ha):
There is no GHG absorption in the 1st year.
The detail is indicated in the TARAM.
- (2) PDD D.1
 - a. 1st paragraph:
Relevant section of GPG is indicated in the Annex 13 (1) (/2i/).
 - b. 2nd, 3rd paragraph:
 - (i) IPCC GPG for LULUCF table 3A.1.2, 3A.1.3, 3A.1.5 and 3A.1.6 is applied. In addition to these, by the expert input by Dr. Deribe Gurmu, a mean annual increment of 6t dm/ha/yr was assumed in the calculation of Stand model 1. Considering 2 thinning of 25m³/ha at the age of 12 and 22 the yield data (sigmoid function) of above ground biomass was derived as D-3 of PDD. (/2k/)
 - (ii) Yield data is based on the FAO data. (/38/, /39/)

Based on this the influence by the mix plants (Eucalyptus : Grevillea = 50 :50) are taken into account conservatively such as follows.

Eucalyptus: FAO data is 30m³/ha/yr. This project is 6 tdm/ha/yr.

Grevillea: FAO data is 10-12m³/ha/yr. This project is 3 tdm/ha/yr.
 - (iii) Considering the harmful impacts to the soil by single stands Eucalyptus, Grevillea Robusta is planted. Due to the uncertainty of productivity by this mixed plantation, the MAI was assumed to be reduced approximately 50% based on expert input.
 - (iv) The 1st stand is for 2228 ha and 2nd stand is for 500 ha.
 - (v) Information is included in the TARAM. Description was added to the PDD.
 - (vi) Indicated in the PDD and TARAM.
The explanation is added as PDD Annex 13 (3).
As for the pre-existing tree, explanation was added to the PDD.
The pre-existing tree vegetation will be left standing and there is no biomass stock change due to the clearance of trees. Hence, the carbon stock changes are not included in the ex ante calculation of actual carbon stock changes.
As for the non tree biomass, it is assumed to disappear in 4 years as shown in above calculation.
- (vii) TARAM was provided.

Clarification Request 16

Justification about the leakage should be done based on the methodology and the background information is to be provided regarding fuel wood collection and grazing.

Response

The explanation based on the methodology was added and background information was added as Annex 11. Refer to the response to CAR 4.

3.4.3. Conclusion

As for grazing, it was demonstrated based on the reliable data that Na_{BL} is smaller than $Na_{AR,t}$. Also, for fuel wood it was appropriately evaluated that the FG_{BL} is smaller than $FG_{AR,t}$. (Annex 11 of PDD) CAR 4 was closed.

CL 15 was clarified. The assumptions for yield data are considered conservative.

CL 16 was clarified.

The project complies with the requirements.

3.5 Monitoring Plan

3.5.1. Discussion

Monitoring items, Monitoring frequency, Monitoring manual and permanent sample plot design were discussed.

3.5.2. Findings

Clarification Request 17

(3) Please explain about the relation of Table E-4 and E-5. (Table E-4 and 5 seem to be duplicated. E-4 appears to be unnecessary.)

Response

- Table E-4 & 5 will be consolidated to avoid duplication. Among the monitoring items of the methodology, items necessary for the project will be tabulated.

Clarification Request 18

Please explain how the requirement for the changes in circumstances within the project boundary that affect legal title to the land or right of access to the carbon pools was taken into account in the monitoring plan.

Response

This will be monitored as a part of monitoring of forest management included in the monitoring plan of Annex 4 of the PDD.

Clarification Request 19

For some of the monitored items, the description on this requirement appears to be missing in PDD. Please check and amend PDD if necessary.

Response

The monitoring items are revised based on the requirements of the methodology AR-AM0003 version 04.

Clarification Request 20

Please provide the SOPs and training programs, training text and record.

Response

Training programs and record were provided. (/17/)

Clarification Request 21

As for survival rate checking, it is indicated that the initial survival rate will be checked within three months, however, the methodology requirement is three months after the planting.

Monitoring of forest management is to be in accordance with AR-AM0003 version 04. If not, justification is necessary. (8 items need monitoring, however only 3 referred.)

Response

Description of PDD E.1.1 was amended.

PDD was revised in accordance with the AR-AM0003 version 04 requirements.

Clarification Request 22

Please provide the evidence that the 89 sample plots were derived in accordance with the requirements of the methodology. Equations, assumptions, values assigned to variables shall be clearly described.

Response

Calculation is carried out based on the equation 54 to 57 of AR-AM0003 version 04. The detail calculation procedures are indicated in the "project sample size calculation sheet". (/19b/)

Clarification Request 23

Please provide the location of planned sampling plots.

Response

The location of permanent sample plots is indicated in Annex 4 of the PDD.

Clarification Request 24

Table E-5: Items for vehicle and fertilizer are not necessary.

(Refer to AR-AM0003 version 04, section 6, table 2.)

Same symbols as methodology are preferable such as Δ

Response

PDD was amended.

Clarification Request 25

If there are some documents, such as "Monitoring Manual" which further prescribes the detail of the monitoring technique and methods, please provide.

Response

Operation Manual draft was provided. (/25/)

Clarification Request 26

Please explain the reason of deleting some items listed in the methodology section 8 Table 3 such as following items.

- (i) related to EGL, NGL, XGL and SFR
- (ii) APV, FNRp, LK and components of LK such as LK_{fuelwood} , etc.
- (iii) $Na_{AR,t}$ and relevant items such as Na_{EGL} , etc.
- (iv) PART.

Transport activity is not necessary to be mentioned in PDD E.5. ,Table E-6, Table E-7, and Annex 4 5. Monitoring of leakage.

Response

Since the leakage is insignificant, these items were deleted.

Clarification Request 27

PDD E.5.2 describes the item to be monitored. However, procedure and review frequency etc. are not clear.

Response

Description was added in Annex 4.

Clarification Request 28

PDD F.3 refers to ongoing monitoring plan as to environmental impact, and G.1 refers to social mitigation plan related to social impact. Please provide the plans and explain what are monitored and how they will be monitored.

Response

Ongoing monitoring plan is actually the monitoring of the project operation, not the environmental monitoring. PDD expression is revised.

The latter will be described in Annex 7

Clarification Request 29

Please explain what measures are planned to deal with the questions E.6.1 to E.6.11. If such measures are integrated in the document such as “Monitoring Manual”, please provide.

Response

Operation Manual draft was provided. (/25/)

Clarification Request 30

(4) Please provide the organization chart for the project management and communities including number of key staffs and persons positively involved in the project.

Response

Humbo Assisted Regeneration Chart of management was provided.

3.5.3. Conclusion

CL 17 to 24, CL 26 to 28 and CL 30 were clarified.

The draft operation Monitoring plan for Humbo Ethiopia Assisted Regeneration Project was provided. This plan includes Monitoring methodology, Operation, data collection, management and Operational System and Auditing, etc.

CL 25, 29 were clarified.

Project complies with the requirements.

3.6. Environmental Impacts

3.6.1. Discussion

According to the Ethiopian law, EIA is not required for forestry projects. In this situation a preliminary Environmental assessment was carried out in February, 2006. (Annex 14)

3.6.2. Findings

Clarification Request 31

Clarify whether EIA is legally required or not for such kind of project in Ethiopia.

If required, please provide the EIA report and approval.

Response

EIA was not legally required. EIA related legal procedure and actual process taken was described in the table which is added to Annex 5. Also brief description of the procedure was added to PDD F.1 Preliminary EIA conducted by WV is provided,

Clarification Request 32

Please explain about planned monitoring and remedial measures to address significant environmental impacts.

Response

Preliminary EIA was carried out to determine if any negative environmental impacts were likely as a result of the project. (Annex 14)

Description was added to the PDD.

Clarification Request 33

(5) G1: please explain about the social mitigation action plan.

(6) G2: Please clarify about the regulation about the socio-economic impact assessment regarding AR projects in Ethiopia.

Response

- Explanation was given in Annex 7
 - Socio-economic impact assessment is carried out in the context of EIA.
- No independent law/regulation exists.
The result of voluntarily conducted analysis is attached to PDD as Annex 7.

Clarification Request 34

Please provide the record of the consultative workshop held at Sodo during April 10-12, 2006.

Response

Summary of the training records and workshops record were provided. (/17/)

Clarification Request 35

Please clarify the legal requirement as to the implementation of stakeholder consultation.

Response

Stake holder consultation is carried out in the context of EIA.

No independent law/regulation exists.

3.6.3. Conclusion

CL31 to 35 were clarified.

The validation team confirmed at the on-site assessment that the project will contribute to the ecosystem of the project area.

The project complies with the requirements.

3.7. Socio-Economic Impacts

3.7.1. Discussion

In order to maximize the community benefits of the project, a participatory approach was implemented. Participatory rural appraisal (PRA) methods were adopted in interviewing and consulting with farmer households in the project areas to understand the local farmers/communities' preferences, wishes and concerns, so that the proposed A/R CDM project activity would better respond to their desires for livelihood development. Farmers have significant impact to the contractual agreement they enter into, including the legal nature of the organization actually selling the emissions reductions. Local farmers will participate in the reforestation activities such as site preparation, planting, weeding, pruning, thinning, harvesting, coppicing etc. Positive socio-economic impacts and Potential socio-economic risks and countermeasures are discussed. (Annex 7)

3.7.2. Findings

None

3.7.3. Conclusion

The project complies with the requirements.

3.8. Comments by Local Stakeholders

3.8.1. Discussion

A consultative workshop was held during April 10-12. (Annex 9)

Main issues are formation of farmers groups in to Cooperatives and the involvement of negatively impacted minority in the safety net program.

In this connection, the role of the local government is essential.

3.8.2. Findings

None

3.8.3. Conclusion

The project complies with the requirements.

4. COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

PDD was made publicly available in the period of 45 days from October 17, 2008 to November 30, 2008.

No comments were received.

5. VALIDATION OPINION

JACO CDM has performed the validation of the “Humbo Ethiopia Assisted Natural Regeneration Project” (hereinafter the Project).

The validation was performed on the basis of UNFCCC criteria for A/R project activities under the Clean Development Mechanism and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. The review of the project design documentation and the subsequent follow-up interviews have provided JACO CDM with sufficient evidence to determine the fulfilment of stated criteria.

Ethiopia fulfils the participation criteria and has approved the project and authorized the project participants. The DNA of Ethiopia approved the project by the letter dated October 09, 2007 stating that the project assists in achieving sustainable development.

The project correctly applies AR-AM0003 Ver.04 “Afforestation and reforestation of degraded land through tree planting, assisted natural regeneration and control of animal grazing”.

CO₂ will be sequestered from the atmosphere and stored in biomass following the reforestation of grass land through tree planting. The project results in net anthropogenic removals of CO₂ that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Net anthropogenic removals attributable to the project are hence additional to any that would occur in the absence of the project activity.

Total net anthropogenic removals from the project are estimated to be on average of 29,343 tCO₂ per year over the selected 30 year crediting period. The net anthropogenic removal forecast has been checked and is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

Adequate training and monitoring procedures have been implemented.

In summary it is JACO CDM's opinion, that the “Humbo Ethiopia Assisted Natural Regeneration Project” in Ethiopia as described in the PDD version 3 of June 19, 2009 meets all relevant UNFCCC requirements for A/R project activities under the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology AR-AM0003 Ver.04. Hence, JACO CDM requests the registration of the project as an A/R CDM project activity.

6. REFERENCES

Category 1 Documents:

Documents related directly to the GHG components of the project,

- /1a/ PDD version 01, August 18, 2008
- /1b/ PDD version 02. May 5, 2009
- /1c/ PDD version 03, June 19, 2009
- /2a/ PDD Annex 5: Legal and Institutional Aspects
- /2b/ PDD Annex 6: Project PRA Report (Participatory Rural Appraisal), April, 2008
- /2c/ PDD Annex 7: Social Aspects Study during Pre-Feasibility Study & Social Mitigation Action Plan, (1st version, Sept. 14, 2007, updated, May 5, 2009)
- /2d/ PDD Annex 8: Project Boundary map, GPS map
- /2e/ PDD Annex 9: Results of Consultations with Communities
- /2f/ PDD Annex 10: Forest Fire Management Plan
- /2g/ PDD Annex 11: Additional Information on Leakage
- /2h/ PDD Annex 12: Statement by United Bank S.C., Ethiopia, dated May 8, 2009
- /2i/ PDD Annex 13 (1): Foresters Report on Forest and Plantation Growth, Dr. Deribe Gurmu Benti
- /2j/ PDD Annex 13 (2): TARAM (Tool for Afforestation and Reforestation Approved Methodologies)
- /2k/ PDD Annex 13 (3): Justification of Figures presented in TARAM – Stand Model 1 & 2
- /2l/ PDD Annex 14: Environmental Analysis by Greenhouse Balanced
- /3/ Host Country Approval to “Humbo Ethiopia Assisted Natural Regeneration Project” CDM project (October 09, 2007)
- /4/ Written Approval for “Humbo Ethiopia Assisted Natural Regeneration Project” by the DNA of Canada (22, 06, 2009)
- /5/ Humbo Community Managed Natural Regeneration Forest Project, World Vision Ethiopia, “Design Document”; published February 2007
- /6/ Humbo/Soddo Community Managed Forestry Project; Activity Plan for FY 2007. (World Vision)
- /7/ Humbo and Sodo budgets 2007 (World Vision)
- /8/ Forests and CO2 Flows (Annual Report for 2006) (World Vision)
- /9/ Annual Activity Accomplishment Report for FY’07 (World Vision)
- /10/ Annual Activity Accomplishment Report FY’08 (World Vision)
- /11/ Federal Proclamation No. 456/2005; Federal Democratic Republic of Ethiopia Rural Land Administration and Use Proclamation
- /12/ SNNPR Proclamation No. 53/2003; The Southern Nation, Nationalities and People Region Rural Land Administration and Utilization Proclamation
- /13/ Confirmation of Land user right certificate (Permanent user right certificate), August 6, 2007
- /14/ Land use certificates (for 7 cooperatives), April 4, 2007
- /15/ Registration Certificate of 7 Co-operatives, June 27, 2007
- /16/ Cooperative bye – laws (Example)
- /17a/ Summary of trainings (2006 – 2008)
- /17b/ CDM work shop, April 10-12, 2006

- /17c/ Participants list to CDM Work shop of April 10-12, 2006
- /18/ Forest Fires in Ethiopia (UNDP, 2001)
- /19a/ Sourcebook for Land Use, Land Use Change and Forestry Projects, Winrock
- /19b/ Project sample size calculation sheet
- /20a/ E-mail communications record of World Vision Australia (WVA) (Sept. 13, 2004, Sept. 22, 2004, May 23, 2005)
- /20b/ E-mail communication in World Bank (Oct. 18, 2005, Oct. 24, 2005)
- /20c/ E-mail communication between WVA and the World Bank (December 1, 2006)
- /21/ Trip report and Recommendations by Tony Rinaudo of WVA (June, 2008)
- /22/ CBD Report, Ethiopia (<http://www.cbd.int/doc/world/et/et-nr-03-en.doc>)
- /23/ Soil erosion in Ethiopia
(World Bank, Country Economic Memorandum, Background Report, April 22, 2004;
<http://siteresources.worldbank.org/INTETHIOPIA/Resources/PREM/Technical%20Note2.revised%20April13..pdf>)
- /24/ Farmer managed Natural Revegetation (FMNR):
www.irinnews.org/report.asp?ReportID=55911&SelectRegion=West_Africa
- /25/ Draft Operations Monitoring Plan for the Humbo Ethiopia Assisted Regeneration Project
- /26/ Ethiopia Humbo Reforestation Carbon Project, Project Concept Note (PCN) (World Bank, 11/01/2005)
- /27/ World Bank Carbon Finance Business, Carbon Finance Document (CFD) "Humbo Community Based Forest Management Project, Ethiopia" (Revised Oct. 14, 2005)
- /28/ BioCarbon Fund, Clean Development Mechanism, Verified Emission Reductions Purchase Agreement (November 15, 2007)
- /29/ Sustainable Land management Sourcebook, World Bank 2008 (pp30-31)

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /31/ Decision 16/CMP.1 & Annex
- /32/ Decision 5/CMP.1
- /33/ AR-AM0003, version 04
- /34/ Tool for the Demonstration and assessment of Additionality in A/R CDM project Activities (EB 35, Annex 17)
- /35/ Procedures to Demonstrate the Eligibility of Lands for Afforestation and Reforestation CDM Project Activities (EB 35, Annex 18)
- /36/ AR methodological tool " Calculation of the number of sample plots for measurements within A/R CDM project activities" (EB46 Annex 19)
- /37/ IPCC Good Practice Guidance / LULUCF
- /38/ FAO Eucalyptus:
<http://www.fao.org/docrep/004/ac121e/ac121e04.htm#bm04.3>Species
- /39/ FAO technical note: Yield model of plantations in the tropics:
<http://www.fao.org/docrep/s4550e/s4550e0b.htm>
- /40/ VVM

Persons interviewed:

Persons interviewed during the validation, or persons contributed with other information that are not included in the documents listed above.

- /45/ Mikko Ollikainen, Carbon Finance Specialist, Carbon Finance Unit, World Bank
- /46/ Rama Chandra Reddy, Senior Methodology Specialist, World Bank
- /47/ Edward Dwumfour, World Bank
- /48/ Yiigeru Sedi, Director World Vision Ethiopia
- /49/ Assefa Tofu, World Vision Ethiopia
- /50/ Asrat Yirgu Senato, World Vision Ethiopia
- /51/ Hailu Tefera Ayele, World Vision Ethiopia
- /52/ Abdi Ahiferaw, World Vision Ethiopia
- /53/ Paul Dettmann, World Vision Australia
- /54/ Tewolde B. G. Egziabher, Director General, EPA Ethiopia
- /55/ Meskir Tesfaye, EPA Ethiopia
- /56/ Yalew Belete, Ministry of Agriculture and Rural Development (MoARD)
- /57/ Kiflu Segu, Ministry of Agriculture and Rural Development (MoARD)
- /58/ Taye Buke, Humbo ADP
- /59/ Kebede Ryassa, Humbo ADP
- /60/ Temesge Aduew, Humbo ADP
- /61/ Yohannes Maham, Chairperson of Forest div. of Hobicha Bongota Cooperative
- /62/ Wlmedhin Shanko, Chairman of Abela Longena Cooperative
- /63/ Leka Lencha, secretary of Abela Longena Cooperative
- /64/ Demeke Muna, Accountant of Abela Longena Cooperative
- /65/ Beyene Agebo, Chairman of Abela Longena Cooperative
- /66/ Taddese GAлча, Assistant Chairman of Abela Longena Cooperative
- /67/ Daniel Unke, Chairman of Abela Shoya Cooperative
- /68/ Matusal Dea, Secretary of Abela Shoya Cooperative
- /69/ Matewos Meskele, Secretary (Audit Committee) of Abela Shoya Cooperative
- /70/ Debisa Dea, Chaiman of Bosa Wanche Cooperative
- /71/ Tademe Wana, Secretary of Bosa Wanchee Cooperative

Appendix 1

CDM Validation Protocol For A/R Project Ver.03

— Note —

1. *The protocol is applicable to the A/R project applying the already approved baseline and monitoring methodology.*
2. *A/R Modalities : M&P. for afforestation and reforestation project activities under the CDM.
(Decision 5/CMP.1)*

」 **Table 1 Mandatory Requirements for Clean Development Mechanism (CDM) Project Activities**

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
1. The project shall assist Parties included in Annex I in achieving compliance with part of their emission reductions commitment under Art. 3	Kyoto Protocol Art.12.2	CAR.4 OK LoA by Ethiopian DNA shall be provided.	Table 2, Section A.2.
2. The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof	Kyoto Protocol Art. 12.2, Marrakesh Accords(40a), A/R Modalities Para 15a	CAR.4 OK LoA by Canadian DNA shall be provided.	Table 2, Section A.2.
3. The project shall assist non-Annex I Parties in contributing to the ultimate objective of the UNFCCC	Kyoto Protocol Art.12.2.	Ditto. OK	Table 2, Section A.2.
4. The project shall have the written approval of voluntary participation from the designated national authorities of each party involved	Kyoto Protocol Art. 12.5a, Marrakesh Accords(40a), A/R Modalities Para 15a	Ditto. OK	
5. Private and/or public entities shall have the authorization to participate in the CDM by the DNA of the Party in which the entity is a legal entity. Authorization by the DNA of the Party is required for each project participant.	Marrakech Accord 33	Ditto. OK	
6. A Party not included in Annex I may host an A/R project if it has selected and reported to EB through DNA its definitions of forest within the allowable ranges specified below. (a) A single minimum tree crown cover value between 10-30% (b) A single minimum land area value 0.05-1ha (c) A single minimum tree height value 2-5m	A/R Modalities Para 8	OK. Forest definition of Ethiopia is reported to and indicated in UNFCCC web site.	
7. The GHG removals by sinks shall be real, measurable and give long-term benefits related to the mitigation of climate change	Kyoto Protocol Art. 12.5b	Pending (Concluded after discussion in Table2) OK	Table 2, Section D.

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
8. A/R project is additional if the actual net GHG removals by sinks are increased above the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the registered CDM A/R activity	Kyoto Protocol Art. 12.5c, Marrakesh Accords(43), A/R Modalities Para 18	Diffic OK	Table 2, Section C.6.
9. Potential public funding for the project from Parties in Annex I shall not be a diversion of official development assistance	Marrakech Accords	OK. No funding for the project is coming from ODA.	
10. Parties participating in the CDM shall designate a national authority for the CDM	Marrakech Accords, CDM Modalities Para 29	OK. DNA of Ethiopia is Environmental Protection Authority (EPA) DNA of Canada is Department of Foreign Affairs and International Trade.	
11. The host party and the participating Annex I Party shall be a Party to the Kyoto Protocol.	Marrakech Accords, CDM Modalities Para 30	OK. Ethiopia and Canada are Parties to Kyoto Protocol.	
12. The proposed project activity shall meet the eligibility criteria of lands for A/R project activities?		Pending (Concluded after discussion in Table 2) OK	Table 2, A.7.
13. The participating Annex I Party's assigned amount shall have been calculated and recorded.	CDM Modalities and Procedures Para 31b	OK.	
14. The participating Annex I Party shall have in place a national system for estimating emission reductions and a national registry in accordance with Kyoto Protocol Article 5 and 7.	CDM Modalities and Procedures Para 31b	OK.	
15. Comments by local stakeholders shall be invited, a summary of these provided and how due account was taken of any comments received	Marrakech Accords(37b), A/R Modalities Para 12b	OK (Concluded after discussion in Table 2)	Table 2, Section H.
16. Documentation on the analysis of the socio-economic and environmental impacts, including impacts on biodiversity and natural	Marrakech Accords(37c), A/R	OK	Table 2, Section F, Section G

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
eco-systems, and impacts outside the project boundary, shall be submitted, and, if any negative impacts are considered significant by the project participants or the Host Party, socio-economic and/or an environmental impact assessment in accordance with procedures as required by the Host Party shall be carried out.	Modalities Para 12c		
17. Baseline and monitoring methodology shall be previously approved by the CDM Executive Board, and the correct version of the methodology shall be applied.	Marrakech Accords(37e), A/R Modalities Para 12g	OK The baseline and monitoring methodology is Approved methodology AR-AM0003 version 04.	Table 2, Section C.1. and C.2.
18. Provisions for monitoring, verification and reporting shall be in accordance with the modalities described in the Marrakech Accords and relevant decisions of the COP/MOP	Marrakech Accords(37f), A/R Modalities Para 12h	OK	Table 2, Section E.
19. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 45 days, and the project design document and comments have been made publicly available	Marrakech Accords(40), A/R Modalities Para 15	OK. PDD was subjected to public comment in the period of Oct. 17, 2008 to Nov. 30,. No comments were provided.	
20. A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national and/or sectoral policies and circumstances	Marrakech Accords(45b,c), A/R Modalities, Para20b,c,e	Pending (Concluded after discussion in Table2) OK	Table 2, Section C.
21. The project design document shall be in conformance with the UNFCCC CDM-AR-PDD format, and the correct version of the format shall be applied.	Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	OK. The PDD applies Ver.04 of CDM-AR-PDD.	
22. Letter of Modalities of communications is to be provided. The form specified by UNFCCC EB shall be applied.		CAR.2 Letter of MoC shall be provided. OK Letter of MoC was provided to JACO CDM on June 6, 2009. The MoC is using F-CDM-MoC and in conformity to the requirement of UNFCCC.	

Table 2 Requirements Checklist

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A. General Description of Project Activity <i>The project design is assessed.</i>					
A.1. Title of the proposed project activity					
A.1.1. Are the title of the project, the version number of the PDD, and the date of issue described?	/1/	DR	Yes. The title is “Humbo Ethiopia Assisted Natural Regeneration Project” version 02, dated May 5, 2009.	OK.	OK
A.2. Description of the proposed project activity. <i>The project's explanation as to purpose, implementation measure, and contribution to sustainable development is assessed.</i>					
A.2.1. Does the PDD clearly describe the purpose of the project?, how the project activity is undertaken?	/1/	DR	Yes. PDD describe the purpose of the project.	OK.	OK
A.2.2. Does the PDD clearly describe how the project activity is undertaken?	/1/	DR	Yes. However, following points need clarification. CL.1 Please provide information about followings: (1) Present situation of the project (after starting date of Dec. 1, 2006.) • Progress of the project • Organization for implementing the project, especially communities (2) World Vision's experience in community capacity building in Ethiopia and other countries in Sub-Sahara Africa. (3) Please provide the planning documents of the project, if any.	CL.1	OK
A.2.3. Does the PDD clearly describe the PPs view on the contribution of the project to sustainable development of the Host Party?	/1/	DR	Yes. Contribution of the project to the sustainable development of the host country is clearly described in the PDD A.2. • Regenration of native forest utilizing FMNR.	OK.	OK

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			<ul style="list-style-type: none"> Enhancement of GHG removals Promotion of native vegetation and biodiversity which can be utilized as arefuge for local and migratory species and to improve the connectivity of the fragmented forest resources Reduction in soil erosion and flooding Provision of income stream for communities 		
A.2.3.1. Is the project in line with relevant legislation and plans in the host country?	/1/ /3/	DR	Pending (Acquisition of LoA will close the issue). Yes, The project is in line with relevant legislation and plans in Ethiopia, as indicated in the LoA of the project.	Pending	OK
A.2.3.2. Is the project in line with host-country specific CDM requirements?	/1/ /3/	DR	Ditto . Yes, The project is in line with host-country specific CDM requirements, as indicated in the LoA of the project.	Pending	OK
A.2.3.3. Is the project in line with sustainable development policies of the host country?	/1/ /3/	DR	Ditto . Yes, The project is in line with sustainable development policies of the host country, as indicated in the LoA of the project.	Pending	OK
A.2.3.4. Will the project create other environmental or social benefits than GHG removals?	/1/ /3/ /5/- /10/	DR	Ditto . Yes, Based on the on-site assessment, JACO CDM confirmed that the project create other environmental or social benefits shown in A.2.3.above.	Pending	OK
A.3. Project participants					
A.3.1. Are the parties and PPs in the project listed in the table as required?	/1/ /53/	DR I	CL.2 Please confirm which Party will authorize World Vision Australia. Ethiopian DNA?	CL.2	OK
A.3.2. Have the involved Parties provided a valid and complete letter of approval and have all the private/public PPs been authorized by an involved Party?	/1/ /3/ /4/	DR	CAR.1 Approval by the DNA of Ethiopia and Canada shall be acquired, where each PP shall be authorized.	CAR.1	OK
A.4. Physical location and boundaries of the					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
project <i>Project Boundaries geographically delineates the afforestation or reforestation project activity under the control of the project participants. The project activity may contain more than one discrete area of land.(A/R Modalities Para 1b)</i>					
A.4.1. Are the project's spatial (geographical) boundaries clearly defined? (A/R Modalities Para1b)	/1/ /2d/	DR	Yes. The boundary is defined in Annex.8 of PDD, in terms of easting and northing of the nodal points on the project boundary. However, following points need clarification. CL.3 • UTM grid zone ID shall be indicated.	CL.3	OK
A.5. Technical description of the project					
A.5.1. Description of the present environmental condition					
A.5.1.1. Is the description of present environmental conditions of the project area including climate, hydrology, soils and ecosystems provided?	/1/ /2l/	DR	Yes. The description present environmental conditions of the project area are described in the PDD A.5.1, including climate, surface hydrology, subsurface hydrology, geology, soils, biodiversity and vegetation of the project area.	OK	OK
A.5.2. Description of the presence of rare endangered species					
A.5.2.1. Is the description of endangered species provided, if any?	/1/ /2l/	DR	Yes. IUCN Red List Species are indicated in the PDD table A-1.	OK.	OK
A.5.3. Species and varieties selected for the					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Project					
A.5.3.1.Are the species and varieties selected for the project described?.	/1/	DR	Yes. The species and varieties are described in Table A-2 and C-2. However, following points need clarification. CL.4 Additional explanation is necessary about following points: <ul style="list-style-type: none"> • Indigenous species and other naturalized species • What are major species? (In the PDD, supplemental planting, buffer zone planting and live fence & erosion control species are listed.) 	CL.4	OK
A.5.4. Technology to be employed by the project <i>Validation of project technology focuses on the project engineering, choice of technology and competence/ maintenance needs. The validator should ensure that environmentally safe and sound technology and know-how is used.</i>					
A.5.4.1. Does the project design engineering reflect current good practices?	/1/ /24/	DR	Yes. The Farmer Managed Natural Regeneration (FMNR), which has been developed in Niger Republic , and practices over 2M hectares is applied. CL.5: In PDD A.5.4.,description of referenced methodology should include version number (In this project, AR-AM0003 Ver.04 is applied.)	CL.5	OK
A.5.4.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	/1/	DR	Yes The FMNR method is a technology best fitted for natural regeneration in the project area.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.5.4.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	/1/ /24/	DR	No. FMNR technology works best where annual rainfall is in excess of 650mm. The rainfall in the project region is 700-1000mm and suitable for implementing FMNR.	OK.	OK
A.5.4.4. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	/1/ /17/	DR	Yes. PDD A.5.5 states the cooperative will transfer the technology through training in reforestation and regeneration techniques etc.	OK.	OK
A.5.4.5. Does the project make provisions for meeting training and maintenance needs?	/1/ /17/ /25/	DR	Yes. The project proponent will conduct training and knowledge management on forest protection initiatives through the community society initiatives. (PDD, A.8)	OK.	OK
A.5.4.6. Are the management activities including harvesting cycle and verifications planned in such a way that a systematic coincidence of verifications and peaks in carbon stock is avoided ? A/R Modalities Para 12e	/1/	DR	Yes. PDD A.5.4 states harvesting will conducted at 12, 21, and 31 years, so that 50 % of standing biomass will be maintained.	OK.	OK
A.5.5. Transfer of technology/know-how					
A.5.5.1. Is the description of the technologies and know-how which will be transferred to the Host Party (ies) provided?	/1/ /17a/	DR	Yes. PDD A.5.5 states that the project will provide training in reforestation and regeneration techniques etc. to the local communities through community society cooperatives.	OK.	OK
A.5.6. Proposed measures to be implemented to minimize leakage					
A.5.6.1. Is the description of the measures that may be applied to minimize potential leakage provided?	/1/ /32/	DR	Yes. PDD A.5.6. states the various measures which will be implemented to minimize potential leakage. However, following points need clarification. CL.6	CL.6	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			<ul style="list-style-type: none"> Please explain the outline of sub-sampling (how many people out of how many inhabitants contacted, what were asked, investigated, how were the results etc.) Please explain the outline of the planning of fuel wood plantation, alternate community grazing areas. 		
A.6. Legal title to the land					
A.6.1. Is the description as to the legal title to the land, current land tenure and rights to tCER/ICER provided?	/1/ /11/ /12/ /14/ /54/ /56/ /58/	DR I	<p>Yes. The project area is the property of Ethiopian Government. The holding rights (land use right) are distributed given to individuals, communes, and state. Holding certificate will be issued as the proof of holding right.</p> <p>CL.7 Please provide data, and/or explanation on the following items.</p> <ul style="list-style-type: none"> Provide the proclamation No. 456/2005 and No.53/2003. Please explain about the holding rights of the project site before and after project implementation. Provide the holding certificate. <p>In this connection, please confirm about the meaning of the sentence "Those who possess community holdings". Does this mean that those who possess the holding certificate have the right to all products produced from land including CERs?</p> <ul style="list-style-type: none"> Who has the authority about the ownership of CERs in Ethiopia? 	CL.7	OK
A.7 Eligibility of lands for A/R project activities <i>Project participants shall provide evidence that the land within the project boundary is eligible as an A/R project activity following the steps outlined below. EB22 Annex16</i>					
A.7.1. Is it demonstrated that the land at the moment the projects starts is not a forest? (Decision 16/CMP.1 Annex	/1/ /31/ /58/	DR I	<p>Yes. According to the PDD, the land is not the forest currently was demonstrated by Field survey. Due to the unavailability of</p>		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Para 1 (a),(b),(c) or EB35 Annex18) Has the latest version of the "Procedure to define the eligibility of lands for AR project activities been applied properly?	- /71/		satellite imaginary, land was not the forest at 31 Dec. 1989 was demonstrated by PRA approach. The PRA report is provided as Annex 6 to the PDD. CL.8 Please provide the UN report 'Forest fires in Ethiopia', the evidences in the form of affidavits and written testimony by village leaders, and "Field survey assessment report" if any.	CL.8	OK
A.7.2. Is it demonstrated that the activity is a reforestation or afforestation project activity? (Decision 16/CMP.1 Annex Para 1 (a),(b),(c))	/1/ /31/	DR	Yes. Definition of forest of Ethiopia is as follows. A minimum area of 0.05ha A minimum crown cover of 20% A minimum average tree height above 2m The project is a reforestation project activity. The area was cleared between 1975 and 1985 and was subject to severe soil erosion. (PDD, C.5.1) This situation had been continued up to 2006. The project aims to regenerate indigenous tree species in the area. The project complies with the conditions of Decision 16/CMP.1 Annex para 1 (a) (c). ((b) is not applicable.)	OK.	OK
A.8. Addressing non-permanence					
A.8. Does the project participants select either of the following approaches to addressing non-permanence of A/R project? (a) Issuance of tCERs in accordance with Para 41-44 of A/R Modalities. (b) Issuance of ICERs in accordance with Para 45-50 of A/R Modalities. Approach chosen shall remain fixed throughout the crediting period. A/R Modalities Para 12f, Para 38	/1/ /32/	DR	Yes. tCER is selected as provisions for non –permanence.	OK.	OK
A.9. Estimated amount of net anthropogenic GHG removals by sinks over the chosen crediting periods					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.9.1 Are they indicated according to the form prescribed in CDM-AR-PDD?	/1/ /33/ /45- /53/	DR I	Yes. CL.8A • Table A-3: Please provide the calculation excel sheets for Table A-3 (yield calculation) and background information such as followings: ➢ Tree species and their coverage % in the project area ➢ Detailed baseline information (biomass information) including grass biomass before project implementation.	CL.8A	OK
A.10. Public funding of the proposed project activity					
A.10.1. Is the affirmation provided that the potential public funding for the project from Parties in Annex I is not the diversion of official development assistance?	/1/ /45- /53/	DR	Yes. No funding for the project is coming from ODA.	OK.	OK
B. Duration of the Project/ Crediting Period <i>It is assessed whether the temporary boundaries of the project are clearly defined.</i>					
B.1. Are the project's starting date and operational lifetime clearly defined and reasonable ?	/1/ /45- /53/	DR I	Yes. CL.9 Please explain what was started, and provide the evidence of the starting date of the project.	CL.9	OK
B.2. Is the beginning of crediting period so defined as the start of the afforestation or reforestation project activity? Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max. two x 20 years or fixed crediting period of max.30 years)? A/R Modalities Para 23	/1/ /45- /53/	DR	Yes. Fixed crediting period of 30 years is selected.	OK.	OK
C. Application of an approved baseline and monitoring methodology <i>It is assessed whether the project applies</i>					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<i>the appropriate methodology, whether the applicability condition satisfied, baseline scenario identified properly, and additionality demonstrated as per the requirements of the methodology</i>					
C.1. Title of the approved baseline and monitoring methodology.					
C.1.1 Are the title, ID, name, and version number of the applied methodology and the referred tool described correctly?	/1/ /33/	DR	CAR.3 Version No of the methodology is to be added. (Version 04)	CAR.3	OK
C.2. Applicability of the selected Baseline Methodology It is assessed whether the project applies an appropriate baseline methodology.					
C.2.1. Is the methodology previously approved by the CDM Executive Board? <i>A/R Modalities Para 12g(i)</i>	/1/ /32/	DR	Yes. AR-AM0003 (Ver.04) is applied.	OK	OK
C.2.2. Is the baseline methodology the one deemed most applicable for this project and is the appropriateness including applicability and selection of approach, justified? <i>A/R Modalities Para 22</i>	/1/ /32/ /33/ /45/- /53/	DR I	Yes. PDD C.2. Check the 10 applicability conditions of AR-AM0003 (Ver.04) one by one. The discussion is reasonable.	OK	OK
C.3. Assessment of the selected carbon pools and emission sources <i>It is assessed whether the selected carbon pools and emission sources are in line with the applied methodology.</i>					
C.3.1. Is the selected carbon pools and emission sources in line with the applied methodology?	/1/ /33/	DR	Yes. The selected carbon pools are above-ground biomass and below-ground biomass. This is consistent to the methodology AR-AM0003 version 04.	OK	OK
C.4. Assessment of strata identified using ex ante stratification <i>It is assessed whether the ex ante</i>					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<i>stratification in line with the applied methodology.</i>					
C.4.1 Are the stratification procedure in line with the methodology?	/1/ /33/	DR I	<p>Yes. The procedure follows that of the applied methodology. However, following points need clarification.</p> <p>CL.10</p> <ul style="list-style-type: none"> • PDD. C.4 step 1 a) b) How the soil type etc. were considered, please explain. • Table C-1: Growth data for each tree species (or each tree species group) and justification of Table C-1 representing many varieties of species by 1 species. • Please explain about the procedure to decide 4 (5) strata. • Annex 3 Please explain how the 18 plots were derived from the precision requirement of 10% precision level. If relevant document, report exists, please provide. • Number of plots for baseline survey: please provide the evidence for deciding the number of plots. 	CL.10	OK
C.4.2. Is the procedure and results discussion transparent?	/1/ /33/	DR	Ditto	Ditto.	OK
<p>C.5. Baseline Scenario Determination</p> <p>The choice of baseline will be validated with focus on whether the baseline is a likely scenario, whether the project itself is not a likely baseline scenario, and whether the baseline is complete and transparent.</p>					
C.5.1. Is the application of the methodology and the discussion and determination of the chosen baseline transparent?	/1/ /32/ /33/ /45/-	DR I	<p>Yes. Baseline determination procedure follows the procedure prescribed in the methodology.</p>	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A/R Modalities Para 20b	/53/				
C.5.2. Has the baseline scenario been determined using conservative assumptions where possible? A/R Modalities Para 20b	/1/ /32/ /33/	DR I	Yes. (1) The project boundary is clearly indicated in the PDD Annex 8 with coordinates. (2) The aerial photograph of the project area in 1973 is not clear. The Participatory rural appraisals (PRAs) carried out from 31 March to 2 nd April, 2008 indicates that during the era of Hailee Silassie (up to 1972) the Humbo forest was thick and dense forest with height greater than 7m with various indigenous species but in the period between 1970 and 1985 there had been a progression of land degradation. Since the removal of the communist regime in 1993, laws relating environmental protection haven passed. However, these objectives are not binding and the government resources are prioritized on more pressing issues and prohibiting widespread investment in such issues as protection of forest such as Humbo. In such situation, the project area had been left bare and barren area. (PDD C.5.1 & PRA) (3) As for the baseline, the project area was stratified to 4 strata.	OK	OK
C.5.3. Has the baseline scenario been established on a project-specific basis? A/R Modalities Para 20c	/1/ /32/ /33/	DR	Yes The baseline scenario is established on the Humbo project.	OK	OK
C.5.4. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies and circumstances such as historical land uses, practices, and economic trends? A/R Modalities Para 20e	/1/ /32/ /33/	DR I	Yes The baseline scenario takes into account relevant national and/or sectoral policies and circumstances as explained in C.2 and PRA, etc.	OK	OK
C.5.5. Is the baseline scenario determination compatible with the available data?	/1/ /45/- /53/	DR I	Yes The baseline scenario is determined based on the available data.	OK	OK
C.5.6. Does the selected baseline represent the most likely scenario	/1/ /45/-	DR I	Yes. The continuation of current land use is the selected baseline.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
among other possible and/or discussed scenarios?	/53/				
C.6. Additionality <i>Additionality will be assessed putting focus on that the project activity itself is not a likely baseline scenario.</i>					
C.6.1. Is the starting date of the project prior to the global stakeholder comments? If yes, below questions C.6.2 to C.B.3.2 6.4 apply.	/1/ /45/ /53/	DR I	The starting date of the project is December 01, 2006, which is prior to the global stakeholder comment (2008/10/17 - 2008/11/30/).	OK	OK
C.6.2. Is the timeline of the project clearly described in PDD according to the requirement of PDD guideline? (EB41 Annex12 B.5.)	/1/ /20/ /45/ /53/	DR I	CL.11 Although not explicitly stated in A/R PDD guideline, it is preferable that the timeline of events and actions taken to achieve CDM registration be indicated in PDD with the description of evidence .(Ref. B.5. of PDD guideline: EB41 Annex 12) Please provide the information/evidence regarding the project implementation decision as CDM. (Ref: C.6. of A/R PDD guideline:EB42 Annex12)	CL.11	OK
C.6.3. Were the CDM benefits considered necessary in the decision to undertake the project as a CDM project activity? (EB41 Annex 46)	/1/ /20/ /45/ /53/	DR I	Ditto.	CL.11	OK
C.6.4. Are the sufficient evidences provided that the benefit of CDM subjected to serious consideration in implementing the project?	/1/ /20/ /45/ /53/	DR I	Ditto.	CL.11	OK
C.6.5. Is the additionality of the project demonstrated according to the requirements of applied methodology (e.g. through (a) barrier analysis, (b) investment analysis, (c) common	/1/ /33/ /34/ /45/ /53/	DR I	Additionality is demonstrated through Barrier Analysis and Common Practice anlysis, The procedure is in line with the requirement of applied methodology. However, following points need clarification. CL.12 • Please provide the evidence that the income per capita is	CL.12	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
practice analysis)?			less than 100\$ • Table C-3: Explanation is to be added about Table C-3.		
C.6.6. Are the demonstration procedure and related assumptions described transparently and the assumptions conservative?	/1/ /2h/ /45/- /53/	DR I	CL.13 • Last part in the paragraph below Table C-3: "This can be evidenced through statements from local financial institutions" Please provide above statements. This sentence is important to show the investment barrier. • Please explain about other barriers of the additionality tool (EB35 annex 17) not indicated here. Sub-step 3b: please add the explanation for other 2 alternatives, too. • Please explain the difference between this project and the GTZ project at Dodola indicated in Section G. (2) and justify that this project is a first of its kind. (p77) • Is there any evidence (such as governmental, and/or 3rd Party Rep, governmental statistics) which ascertain the project is the first-of-its-kind project?	CL.13	OK
C.6.7. Are sufficient evidences provided, which support the discussion and or analysis conducted to demonstrate additionality?	/1/ /2h/ /13/- /17/ /24/ /45/- /53/ /58/	DR I	Ditto	CL.13	OK
C.6.8. Have the major risks to the baseline been identified?	/1/	DR	No. Since the baseline is the 0 GHG removals by sinks, risks are unlikely.	OK.	OK
C.6.9. Is all literature and sources clearly referenced?	/1/	DR	Yes, A literatures and sources are clearly referenced.	OK	OK
C.7. Estimation of ex ante baseline net GHG removals by sinks <i>The validation of estimated baseline net GHG removals focuses on transparency</i>					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
and completeness of calculations.					
C.7.1. Are the baseline GHG calculation procedure in line with the applied methodology.	/1/ /13/ /33/ /45/- /53/	DR I	Yes. Based on the PRA approach, it is concluded that the baseline net GHG removal is zero, due to continuing degradation of the project site. This is in line with the applied methodology. CL.14 1 st paragraph of PDD C.7: please provide the evidence of a progression of land clearing and degradation within this region with escalation since the 1970s other than Annex 6 (PRA) if any.	OK	OK
C.7.2. Boundaries clearly defined and do they sufficiently cover sinks for baseline removals?	/1/ /2d/	DR	Yes. The boundaries are clearly defined in PDD A.4.2 and Annex 8.	OK.	OK
C.7.3. Are the baseline GHG calculations documented in a complete and transparent manner?	/1/ /13/	DR	Yes. The baseline GHG calculations are documented in the PDD and TARAM in a complete as transparent manner.	OK.	OK
C.7.4. Have conservative assumptions been used when calculating baseline removals?	/1/ /13/	DR	CL.14A Please clarify how the requirement of II 10.1 of the applied methodology was reflected.	CL.14A	OK
C.7.5. Are uncertainties in the GHG removals estimates properly addressed in the documentation?	/1/ /13/	DR	CL.14B Please clarify how the requirement of II 10.2 of the applied methodology was reflected.	CL.14B	OK
D. Estimation of ex ante actual net GHG removals by sinks, leakage and estimated amount of net anthropogenic GHG removals by sinks over the chosen crediting period. <i>It is assessed whether all material GHG removalsources are addressed and how sensitivities and data uncertainties have been addressed to arrive at conservative estimates of projected GHG removals.</i>					
D.1. Estimate of the actual net GHG					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
removals by sinks The validation of predicted project GHG removals focuses on transparency and completeness of calculations.					
D.1.1. Are all aspects related to direct and indirect GHG removals captured in the project design?	/1/	DR	Yes.	OK	OK
D.1.2. Are the GHG calculations documented in a complete and transparent manner?	/1/ /13/ /45/- /53/	DR I	CL.15 <ul style="list-style-type: none"> Please explain about the derivation of -25,594ton in the year 2007 of Table D-1. PDD D.1. <ul style="list-style-type: none"> ➢ 1st paragraph, GPG-LULUFC (LULUCF?): Please inform the relevant section of GPG indicating these recommendations. ➢ 2nd, 3rd paragraph: Please provide the detail explanation about the followings <ul style="list-style-type: none"> - first stand model of mix of native species: the contents of mix of the IPCC GPG and its justification - Expert input by Dr. Deribe Gurmu - Relation between mix of the IPCC, expert input and an average above-ground biomass of 95 t/ha - 2nd stand model: Please justify the assumption of MAI when inter-planted. - Please inform the distribution and % of first stand and second stand. - Are there any differences of MAI among strata? - Please explain about the schedule of pruning, thinning, harvesting schedule and assumed mortality. - Please explain what and how the data / parameters are applied to the annual carbon stock change calculation, taking into account the AR-AM0003 version 04 section 7.1 and 7.2 - Please provide the calculation excel sheet of annual carbon stock change in each strata? (Similar question of 	CL15	OK

[illegible]

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			provided regarding fuel wood collection and grazing.		
D.2.2. Have these leakage effects been properly accounted for in calculations?	Ditto	Ditto.	Ditto.	CL.16	OK
D.2.3. Does the methodology for calculating leakage comply with the applied methodology?	Ditto	Ditto.	Ditto.	CL.16	OK
D.2.4. Are the calculations documented in a complete and transparent manner?	Ditto	Ditto.	Ditto.	CL.16	OK
D.2.5. Have conservative assumptions been used when calculating leakage?	Ditto	Ditto.	Ditto.	CL.16	OK
D.2.6. Are uncertainties in the leakage estimates properly addressed?	Ditto	Ditto.	Ditto.	CL.16	OK
E. Monitoring Plan <i>The monitoring plan review aims to establish whether all relevant project aspects deemed necessary to monitor and report reliable GHG removals are properly addressed</i>					
E.01. Is the monitoring plan based on the methodology previously approved by the CDM Executive Board? A/R Modalities Para 26	/1/ /32/ /33/ /45/- /53/	DR I	Yes. The monitoring plan is based on the approved methodology AR-AM0003/ version 04. However following points shall be clarified. CL.17 <ul style="list-style-type: none"> Please explain about the relation of Table E-4 and E-5. (Table E-4 and 5 seem to be duplicated. E-4 appears to be unnecessary.) 	CL.17	OK
E.02. Is the monitoring plan appropriate to the circumstances of the proposed afforestation/reforestation project activity? A/R Modalities Para 26a	/1/ /32/ /33/	DR	Yes. The monitoring plan complies with the methodology AR-AM0003 version 04 and appropriate to the circumstances of the project activity.	OK	OK
E.03. Does the monitoring plan reflect good monitoring practices appropriate to the types of afforestation/reforestation project activity?	/1/ /33/	DR	Yes. The monitoring plan indicated in the PDD and Annex 4 reflects good monitoring practices.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A/R Modalities Para 26b					
E.04. Does the monitoring plan take into account uncertainties by appropriate choice of monitoring method, such as number of samples, to achieve reliable estimates of net anthropogenic GHG removals by sinks? A/R Modalities Para 26c	/1/ /32/ /33/	DR I	Yes. The monitoring plan indicated in the PDD and Annex 4 takes into account uncertainties.	OK	OK
E.05. Does the monitoring plan provide for changes in circumstances within the project boundary that affect legal title to the land or right of access to the carbon pools? A/R Modalities Para 25f	/1/ /32/ /45/- /53/	DR I	No. CL.18 Please explain how the requirement for the changes in circumstances within the project boundary that affect legal title to the land or right of access to the carbon pools was taken into account in the monitoring plan.	CL.18	OK
E.06. Will all of the monitored data be archived for 2 years following the end of the (last) crediting period?	/1/ /33/	DR I	CL.19 For some of the monitored items, the description on this requirement appears to be missing in PDD. Please check and amend PDD if necessary.	CL.19	OK
E.07. Is there any measurements which do not follow typical practices of "forest inventory manual"? If any, are they commented?	/1/	DR	Not applicable.	OK	OK
E.08. Are the SOPs provided which are requested by the applied methodology?	/1/ /25/	DR	CL.20 Please provide the SOPs and training programs, training text and record.	CL.20	OK
E.1. Monitoring of the project implementation					
E.1.1. Is the data required by the applied methodology in order to monitor forest establishment and management listed in the form prescribed by PDD form?	/1/ /25/ /33/	DR	Yes. CL.21 <ul style="list-style-type: none"> Survival rate checking: The initial survival rate --- will be checked within one to three months: meth requirement is three months after the planting. Survival checking will be conducted for each plantation site:. Will it be conducted using permanent sample plot for each 	CL.21	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			plantation site? • Monitoring of forest management: This is to be in accordance with the methodology version 04. If not, justification is necessary. (8 items need monitoring, how ever only 3 referred.)		
E.2. Sampling design and stratification					
E.2.1. Is the description of the ex post stratification procedure provided?	/1/ /19/ /45/ /53/	DR I	CL.22 • Annex 4 3.b) Please provide the evidence (report) that the 88 sample plots were derived in accordance with the requirements of the methodology. Equations, assumptions, values assigned to variables shall be clearly described.	CL.22	OK
E.2.2. Is the above procedure in line with the applied methodology?	/1/ /19/ /33/	DR	Ditto.	CL.22	OK
E.2.3. Are the calculated number of samples and their distribution described?	/1/ /19/	DR	Numbers of sample plot is described. CL.23 Please provide the location of planned sampling plots.	CL.23	OK
E.2.4. Are the assumptions and preliminary data used for the calculation clearly described?	/1/ /19/	DR	Refer to CL.22	(CL.22)	OK
E.3. Monitoring of the baseline net GHG removals by sinks <i>It is established whether the monitoring plan provides for reliable and complete baseline net GHG removals data over time.</i>					
E.3.1. Does the monitoring plan provide for the collection and archiving of all relevant data prescribed in the applied methodology and necessary for determining baseline net GHG removals by sinks during the crediting period?	/1/ /33/	DR	NA. The applied methodology prescribes "the baseline GHG removal does not need to be monitored".	OK.	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A/R Modalities Para 25b					
E.3.2. Does the monitoring plan specify techniques and methods for sampling and measuring individual carbon pools and GHG removals by sinks, if the project uses control plots for determine the baseline? A/R Modalities Para 25b	/1/ /32/ /33/	DR	Ditto.	OK.	OK
E.4. Monitoring of the actual net GHG removals by sinks <i>It is established whether the monitoring plan provides for reliable and complete actual net GHG removals.</i>					
E.4.1. Monitoring of changes in carbon stock in the carbon pools within the project boundary					
E.4.1.1. Does the monitoring plan provide for the collection and archiving of all relevant data prescribed in the applied methodology and necessary for estimation or measuring the actual net GHG removals by sinks during the crediting period? A/R Modalities Para 25a	/1/ /33/	DR	Yes , however following points need to be clarified/ amended. CL.24 •Table E-5: Items for vehicle and fertilizer are not necessary. (Refer to AR-AM0003 version 04, section 6, table 2.) ➤ Same symbols as methodology are preferable such as Δ.	CL.24	OK
E.4.1.2. Does the monitoring plan provide for the collection of transparent and verifiable information to demonstrate that any choice of carbon pools made in Para 21 of A/R Modalities does not increase the net anthropogenic GHG removals by sinks? A/R Modalities Para 25e	/1/ /32/	DR	Yes , applied methodology prescribes the monitoring of above and below ground biomass.	OK.	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
E.4.1.3. Does the monitoring plan specify the technique and methods for sampling and measuring individual carbon pools and GHG removals by sinks included in the actual GHG removals by sinks, that reflects commonly accepted principles and criteria concerning forest inventory? A/R Modalities Para 25a	/1/ /32/ /33/	DR	Yes , Table E-4, and Annex4 describe the technique and methods. CL.25 If there are some documents, eg. "Monitoring Manual" which further prescribes the detail of the monitoring technique and methods, please provide.	CL.25	OK
E.4.2. Monitoring of GHG emissions by sources					
E.4.2.1. Does the monitoring plan provide for the collection and archiving of all relevant data prescribed in the applied methodology and necessary for estimation or measuring the actual net GHG emissions by sources during the crediting period?	/1/ /33/	DR	NA. Fuel burn and biomass burn are the sources of emissions to be taken account. PDD E.4.2 states these activities will not be present in the project.(Fertilizers are not necessary to mention in PDD E.4.2.) .	OK.	OK
E.4.2.2. Does the monitoring plan specify the technique and methods for sampling and measuring individual GHG emissions by sources included in the project boundary?	/1/ /33/	DR	NA.	OK.	OK
E.5. Monitoring of Leakage It is assessed whether the monitoring plan provides for reliable and complete leakage data over time.					
E.5.1. Does the monitoring plan identify all potential sources of leakage and provide for the collection and archiving of all relevant data prescribed in the applied methodology and necessary for its determination?	/1/ /2g/ /32/ /33/	DR	Yes. CL.26 • Please explain the reason of deleting some items listed in the methodology section 8 Table 3 such as following items. - related to EGL, NGL , XGL and SFR - APV, FNRp, LK and components of LK such as LK _{fuelwood} ,	CL.26	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A/R Modalities Para 25c			etc. - $Na_{AR,t}$ and relevant items such as Na_{EGL} , etc. - PART. • Transport activity is not necessary to be mentioned in PDD E.5. ,Table E-6, Table E-7, and Annex 4 5. Monitoring of leakage a).		
E.5.2. Does the monitoring plan specify the procedures for the periodic review of implementation of the activities and measures to minimize leakage? A/R Modalities Para 25h	/1/ /32/	DR	CL.27 PDD E.5.2 describes the item to be monitored. However, procedure and frequency of the review etc. are not clear.	CL.27	OK
E.5A. Monitoring of Sustainable Development Indicators/ Environmental Impacts, if any It is checked that choices of indicators are reasonable and complete to monitor sustainable performance over time.					
E.5A.1. Does the monitoring plan provide for the collection and archiving of information relating to the planned monitoring and remedial measures referred to in Para 12(c) (socio-economic impacts including impacts on biodiversity, natural ecosystems and impacts outside the project boundary) of A/R modalities? A/R Modalities Para 25d	/1/ /32/ /33/	DR	CL.28 PDD F.3 refers to ongoing monitoring plan as to environmental impact, and G.1 refers to social mitigation plan related to social impact. Please provide the plans and explain what are monitored and how they will be monitored.	CL.28	OK
E.5A.2. Is the choice of indicators for sustainability development (social, environmental, economic) reasonable?	/1/ /2c/	DR	Ditto.	CL.28	OK
E.5A.3. Will it be possible to monitor the specified sustainable development indicators?	/1/ /2c/	DR	Ditto.	CL.28	OK
E.5A.4. Are the sustainable development	/1/	DR	Ditto.	CL.28	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
indicators in line with stated national priorities in the Host Country?	/2c/				
E.6. QA/QC measures <i>QA/QC measures are checked including the project implementation is properly prepared for and that critical arrangements are addressed.</i>					
E.6.1. Are procedures identified for training of monitoring personnel?	/1/ /17/	DR I	CL.29 Please explain what measures are planned to deal with the questions E.6.1 to E.6.11. If such measures are integrated in the document such as "Monitoring Manual", please provide.	CL.29	OK
E.6.2. Are procedures identified for emergency preparedness for cases where emergencies can cause unintended removals?	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.3. Are procedures identified for calibration of monitoring equipment?	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.4. Are procedures identified for maintenance of monitoring equipment and installations?	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.5. Are procedures identified for monitoring, measurements and reporting?	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.6. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.7. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.8. Are procedures identified for review of reported results/data?	/1/ /25/	DR	Ditto.	CL.29	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
E.6.9. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	/1/ /25/	DR	Ditto.	CL.29	OK
E..6.10. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	/1/ /25/	DR	Ditto.	CL.29	OK
E.6.11. Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	/1/ /25/	DR	Ditto.	CL.29	OK
E.7. Operational and management structure that the project operator will implement in order to monitor actual GHG removal and leakage.					
E.7.1. Is the role and responsibility as to the monitoring clearly described?	/1/ /16/ /25/	DR	CL.30 •Please provide the community forestry association models used elsewhere in sub-Saharan Africa. •Please provide the organization chart for the project management and communities including number of key staffs and persons positively involved in the project. •Please explain about the organization of ARDFCO.	CL.30	OK
F. Environmental Impacts <i>Documentation on the analysis of the environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary will be assessed, and if deemed significant, an EIA should be provided to the validator.</i>					
F.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described	/1/ /21/	DR	Yes. PDD F.1. states the environmental impact.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
including where applicable, information on hydrology, soils, risk of fires, pests and diseases?					
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	/1/ /2/	DR	CL.31 Clarify whether EIA is legally required or not for such kind of project in Ethiopia. If required, please provide the EIA report and approval.	CL.31	OK
F.1.3. Will the project create any adverse environmental effects? If adverse effect is considered significant by the project participants or the Host Party, is the statement included that the project participants have undertaken EIA in accordance with the procedures required by the host party, including its conclusions and all references to support documentation? A/R Modalities Para 12c	/1/ /2/ /32/	DR	No. PDD F.2. states no significant negative impact is likely.	OK	OK
F.1.4. Are trans-boundary environmental impacts considered in the analysis?	/1/ /2/	DR	Yes. Impacts outside the project areas are assessed.	OK.	OK
F.1.5. Have identified environmental impacts been addressed in the project design?	/1/ /2/	DR	It is difficult to conceive negative environmental impacts. However, the reporting process is established.	OK.	OK
F.1. 6. Does the project comply with environmental legislation in the host country?	/1/ /2/	DR	Refer to CL.31	(CL.31)	OK
F.1.7. Are the planned monitoring and remedial measures to address significant environmental impacts established and described in PDD?	/1/ /2/	DR	CL.32 Pleas explain about planned monitoring and remedial measures to address significant environmental impacts.	CL.32	OK
G. Socio-economic impacts <i>Documentation on the analysis of the socio-economic impacts, including impacts on biodiversity and natural ecosystems, and</i>					

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
<i>impacts outside the project boundary will be assessed, and if deemed significant, a socio-economic impact assessment should be provided to the validator.</i>					
G.1.1. Has an analysis of the socio-economic impacts of the project activity been sufficiently described including where applicable, local communities, indigenous peoples, land tenure, local employment, food production, cultural religious sites, and access to fuelwood and other forest products?	/1/ /2c/ /2e/	DR	CL.33 • G1: please explain about the social mitigation action plan. • G2: Please clarify about the regulation about the socio-economic impact assessment regarding AR projects in Ethiopia.	CL.33	OK
G.1.2. Are there any Host Party requirements for a socio-economic impact assessment, and if yes, is the assesment approved?	/1/ /2c/ /2e/	DR	Ditto	(CL.33)	OK
G.1.3. Will the project create any negative impacts? If negative impact is considered significant by the project participants or the Host Party, is the statement included that the project participants have undertaken SEIA in accordance with the procedures required by the host party, including its conclusions and all references to support documentation?	/1/ /2c/ /2e/	DR	No. PDD G. states no significant negative impact is likely.	OK	OK
G.1.4. Are trans-boundary socio-economic impacts considered in the analysis?	/1/ /2c/ /2e/	DR	Not applicable.	OK	OK
G.1.5. Have identified socio-economic impacts been addressed in the project design?	/1/ /2c/ /2e/	DR	No. No significant negative impact is likely.	OK.	OK
G.1.6. Does the project comply with socio-economic legislation in the host	/1/ /2c/	DR	Refer to CL.33	(CL.33)	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
country?	/2e/				
G.1.7 Are the planned monitoring and remedial measures to address significant socio-economic impacts established and described in PDD?	/1/ /2c/ /2e/	DR	Yes, the monitoring of socio-economic issues is described in Annex 4 of the PDD.	OK.	OK
H. Stakeholder Comments <i>The validator should ensure that a stakeholder comments have been invited and that due account has been taken of any comments received.</i>					
H.1.1. Have relevant stakeholders been consulted?	/1/ /2c/ /2e/	DR	CL.34 • Please provide the record of the consultative workshop held at Soddo during April 10-12, 2006.	CL.34	OK
H.1.2. Have appropriate media been used to invite comments by local stakeholders?	/1/ /2c/ /2e/	DR	Yes A consultative workshop was held during April 10-12, 2006. This media is appropriate for inviting comments by local stakeholders.	OK.	OK
H. 1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	/1/ /2c/ /2e/	DR	CL.35 Please clarify the legal requirement as to the implementation of stakeholder consultation.	CL.35	OK
H.1.4. Is a summary of the stakeholder comments received provided?	/1/ /2c/ /2e/	DR	Yes.	OK.	OK
H.1.5. Has due account been taken of any stake holder comments received?	/1/ /2c/ /2e/	DR	Yes.	OK.	OK

STATUS OF CORRECTIVE ACTION AND CLARIFICATION REQUESTS OF DRAFT PROTOCOL AFTER ON-SITE ASSESSMENT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
CAR.1 Approval by the DNA of Ethiopia and Canada shall be acquired, where each PP shall be authorized.	Table 2 A.3.2.	LoAs are provided to PPs. Copy will be sent to DOE	OK.
CAR.2 Letter of MoC shall be provided.	Table 1 22	Will be provided before registration. MoC was provided on June 06, 2009.	OK.
CAR.3 Version No of the methodology is to be added. (Version 04)	Table 2 C.1.1.	PDD will be amended. PDD was amended.	OK.
CAR.4 (7) $LK_{vehicle}$ is not considered in AR-AM0003 Ver.04. Therefore, the description about leakage by vehicle is not necessary. (page 37 & 38) Shall be deleted. • Activity displacement: Zero activity displacement shall be demonstrated following the procedure prescribed in the applied methodology, for instance, ➢ As for grazing, $Na_{BL} < Na_{AR,t}$, ➢ As for $LK_{fuelwood}$, $FG_{BL} < FG_{AR,t}$ or $LK_{fuelwood} < 2\%$ of actual net GHG removal, shall be demonstrated, together with the data used for the evaluation. Same comments apply to derivation of 0 leakage due to fencing.	Table 2 D.2.1.	$LK_{vehicle}$ related descriptions were deleted. TARAM data demonstrates the procedure. It was also explained that the leakage related to fencing was excluded at EB42 decision. The explanation was added regarding the leakage due to grazing and fuel wood collection in the PDD and Annex 11.	• OK.
CL.1 Please provide information about followings: (1) Present situation of the project (after starting date of Dec 1, 2006.), Progress of the project, Organization for implementing the project, especially communities,	Table 2 A.2.2.	(3) Situation was explained by WVE. Outlines are as bellow. December 1, 2006: project start Jun 27, 2007: SNNPRS Certificate for land Organization of the community	OK.

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
<p>(2) World Vision's experience in community capacity building in Ethiopia and other countries in Sub-Saharan Africa.</p> <p>(3) Please provide the planning documents of the project, if any.</p>		<p>cooperative: Based on the Bye-laws, Following organization was established. General Assembly Executive committee (7persons) 4 Committees (each 3persons)</p> <p>(2) Annual report etc are provided. (3) Project Implementation plan and post implementation plan will be provided. "TARAM data" ,which is the basis of Table A-3 were Provided.</p>	<p>OK.</p> <p>OK.</p>
CL.2 Please confirm which Party will authorize World Vision Australia. Ethiopian DNA?	Table 2 A.3.1.	"World Vision Australia" is not a project participant and is deleted from the list of PDD A.3."	OK.
CL.3 • UTM grid zone ID shall be indicated.	Table 2 A.4.1.	• UTM grid zone ID will be added to Annex 8.	OK.
CL.4 Additional explanation is necessary about following points: • Indigenous species and other naturalized species • What are major species? (In the PDD, supplemental planting, buffer zone planting and live fence & erosion control species are listed.)	Table 2 A.5.3.1.	<p>Following explanation is provided in the revised PDD Table C-3.</p> <p>(1) Grouping of species category such as major species. (Table C-3) (2) Species selected for each strata (total 5 strata).</p>	OK.
CL.5: In PDD A.5.4.,Description of referenced methodology should include version number (In this project, AR-AM0003 Ver.04 is applied.)	Table 2 A.5.4.1.	Version 04. PDD was amended.	OK.
CL.6 • Please explain the outline of sub-sampling (how many people out of how many inhabitants contacted, what were asked, investigated, how	Table 2 A.5.6.1.	• Outline is explained in Annex 7. However, some of the explanation is limited to the extent of issues found by social impact	OK.

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
<p>were the results etc)</p> <ul style="list-style-type: none"> Please explain outline of the planning of fuel wood plantation, alternate community grazing areas. 		<p>assessment.</p> <p>Conclusion and /or mitigation measures taken will be added to Annex 7.</p>	
<p>CL.7 Please provide data, and/or explanation on the following items.</p> <ul style="list-style-type: none"> Provide the proclamation No. 456/2005 and No.53/2003. Please explain about the holding rights of the project site before and after project implementation. Provide the holding certificate. <p>In this connection, please confirm about the meaning of the sentence “Those who possess community holdings”. Does this mean that those who possess the holding certificate have the right to all products produced from land including CERs?</p> <ul style="list-style-type: none"> Who has the authority about the ownership of CERs in Ethiopia? 	<p>Table 2 A.6.1.</p>	<ul style="list-style-type: none"> 53/2003 and 456/2005 were provided by WVE. Before the project implementation (before issue of the holding certificate of cooperatives), the project site was common land and was belonging to anybody. After holding certificates, the holding rights and use rights belong to each cooperative were defined clearly. All the project areas belong to the cooperatives. Holding certificates for 7 communities were provided. According to the proclamation, No.53/2003 published by SNNPRS, the CERs are considered as natural resources (definition 27) and natural resources is included in the “Possessory right” (definition 5) 	<p>OK.</p> <p>Annex 5 (Legal and institutional analysis) was revised to make clear the fixed issues and pending issues. The conclusion in the Annex 5 is reflected in the PDD A.6.</p>
<p>CL.8</p> <ul style="list-style-type: none"> Please provide the UN report ‘Forest fires in Ethiopia’, the evidences in the form of affidavits and written testimony by village leaders, and “Field survey assessment report” if any. 	<p>Table 2 A.7.1.</p>	<ul style="list-style-type: none"> UN report was provided. affidavits and written testimony by village leaders will be provided. <p>“Field survey assessment report” means PRA report. Full PRA report will be provided.</p>	<p>OK.</p>
<p>CL.8A</p> <ul style="list-style-type: none"> Table A-3: 	<p>Table 2 A.9.1.</p>	<p>The “TARAM “data (excel sheets) were</p>	<p>OK</p>

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
<p>Please provide the calculation excel sheets for Table A-3 (yield calculation) and background information such as followings:</p> <ul style="list-style-type: none"> ➤ Tree species and their coverage % in the project area ➤ Detailed baseline information (biomass information) including grass biomass before project implementation. 		<p>provided.</p> <p>Stand model 1 is representing natural multi-species trees and Stand model 2 is representing naturalized species (<i>Grevilla robusta</i> and <i>Eucalyptus globulus</i>). For the growth calculation of these models, the expert input by Dr. Deribe Gurmu is applied.</p> <p>Grass biomass before project implementation is based on the IPCC LULUCF and indicated in the PDD C.7.</p>	
<p>CL.9 Please explain what was started, and provide the evidence of the starting date of the project.</p>	<p>Table 2 B.1.</p>	<p>Progress report and its covering E-mail by which the starting date can be confirmed were provided.</p>	<p>OK.</p> <p>(1) Project starting date As for CL1 and CL9, the validation team confirmed by the following series of evidences that December 01, 2006 is the starting date of the project.</p> <p>(i) World Vision's Annual Progress Report for fiscal year 2006 (December 2005 to November 2006)* (/8/)</p> <p>The annual progress report dated November, 2006 describes real actions implemented until the end of November 2006 to start the project. These included:</p> <ul style="list-style-type: none"> Site identification Delineation of project boundaries (inc. consensus building with communities) Stakeholder workshop from April 10 to 12 (/17b/) Training on forests management, sampling methods, and biomass data

* Forests and CO2 Flows: World Vision Ethiopia reported on November, 2006. December 1, 2006 is the beginning of the fiscal year of 2007.

* MoV = Means of Verification, DR= Document Review, I= Interview

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
			<p>collection Assesment of forest destruction process during 1976 – 2006 with PRA Socio-economic assessment on vulnerable social groups and individuals Baseline biomass estimation Soil test Seedling production Establishment of cooperatives to protect project site</p> <p>The report indicates with these real actions implemented, the project preparation was completed by the end of November, 2006.</p> <p>(ii) Email communication that confirms start of the project on December 1, 2006 (/20c/)</p> <p>The email communication between project participants (BioCarbon Fund of the World Bank and World Vision Ethiopia) confirms start of the project on December 1, 2006 as a follow-up of the real actions implemented by the end of November, 2006.</p> <p>(2) Compliance with the decision of paragraph 64 of EB21 “starting date of an A/R CDM project activity”</p> <p>As indicated in the PDD B.1, “December 1, 2006” is the starting date of the proposed project activity and at the same time it is the beginning of the first crediting</p>

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
			<p>period.</p> <p>The first verification of the project will be carried out after the project registration as per the monitoring plan of E.1 of the PDD. Therefore, the project complies with the conditions of the decision 64 of EB21 and it can accrue tCERs as of the starting date indicated in the PDD.</p> <p>Taking into account above information of World Vision and e-mail communication between project participants and also that December 1, 2006 is the beginning of the fiscal year 2007 in Ethiopia the validation team concluded that the project start date of December 1, 2006 indicated in the PDD is appropriate.</p>
<p>CL.10</p> <ul style="list-style-type: none"> •PDD. C.4 -step 1 a) b) How the soil type etc. were considered, please explain. •Table C-1: Growth data for each tree species (or each tree species group) and justification of Table C-1 representing many varieties of species by 1 species. • Please explain about the procedure to decide 4 (5) strata. • Annex 3 Please explain how the 18 plots were derived from the precision requirement of 10% precision level. If relevant document, report it exists, please provide. • Number of plots for baseline survey: please provide the evidence for deciding the number of plots. 	<p>Table 2 C.4.1.</p>	<ul style="list-style-type: none"> • These factors were considered but not taken into account due to the similar soil conditions throughout the project area.. • Refer to the response to 8a. Many varieties of native tree species are categorized as Stand Model 1, based on the expert judgment by Dr. Deribe Gurmu. • Procedures to decide strata are explained in the PDD. • PDD Annex 3 was revised and the explanation is added based on the source book for LULUCF page 15-16. • The procedures are based on the source book for LULUCF page 15-16 	<p>OK.</p>

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
CL.11 Although not explicitly stated in A/R PDD guideline, it is preferable that the timeline of events and actions taken to achieve CDM registration be indicated in PDD with the description of evidence. (Ref. B.5. of PDD guideline: EB41 Annex 12) Please provide the information/evidence regarding the project implementation decision as CDM. (Ref: C.6. of A/R PDD guideline:EB42 Annex12)	Table 2 C.6.2.	Timeline is included in PDD. Decision by WVA is provided.	OK.
CL.12 <ul style="list-style-type: none"> Please provide the evidence that the income per capita is less than 100\$ Table C-3: Explanation is to be added about Table C-3. 	Table 2 C.6.5.	<ul style="list-style-type: none"> Evidence is Included in ref.21 of PDD. Hard copy will be provided. Table C-3 is deleted, instead, text is added. 	OK. OK.
CL.13 (1) Last part in the paragraph below Table C-3: "This can be evidenced through statements from local financial institutions" Please provide above statements. This sentence is important to show the investment barrier. (2) Please explain about other barriers of the additionality tool (EB35 annex 17) not indicated here. (For validation report use) Sub-step 3b: please add the explanation for other 2 alternatives, too. (3) Please explain the difference between this project and the GTZ project at Dodola indicated in Section G. (2) and justify that this project is a first of its kind. (p77) (4) Is there any evidence (such as governmental, and/or 3rd Party Rep, governmental statistics) which ascertain the project is the first-of-its-kind project?	Table 2 C.6.6.	(1) Evidence was provided. (Declaration of local banks of Ethiopia) (2) lack of organization of local communities, Institutional barriers (legislation relating to forest or land-use) were added to the PDD. (3) The Dodola project is a project to protect an existing Juniper forest and is not a restoration project. An explanation was added to the PDD. (4) There is no evidences such as governmental statistics, etc. According to WVE's own investigation, there has been no other project implemented with the objective of	OK.

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
		establishing a forest through assisted natural regeneration.	
CL.14 1 st paragraph of PDD C.7: please provide the evidence of a progression of land clearing and degradation within this region with escalation since the 1970s other than Annex 6 if any.	Table 2 C.7.1.	CBD report is available from www.cbd.int/doc/word/et/et-nr-03-en.doc	OK. The CBD report indicates the degradation of the forest resources.
CL.14A Please clarify how the requirement of II 10.1 of the applied methodology was reflected. (Uncertainty in expert judgment)	Table 2 C.7.4.	Uncertainty levels are indicated in E.6 of the PDD.	OK.
CL.14B Please clarify how the requirement of II 10.2 of the applied methodology was reflected. (Methods to combine uncertainties)	Table 2 C.7.5.	Ditto.	OK.
CL.15 (4) Please explain about the derivation of -25,594tonCO ₂ in the year 2007 of Table D-1. (3) PDD D.1. a. 1 st paragraph, GPG-LULUCF: Please inform the relevant section of GPG indicating these recommendations.	Table 2 D.1.2.	(1) TARAM data provided. Brief explanation is as follows. 1st year: Grass: $2.3 \times (1 + 2.8) \times 0.5 \times 44/12 \times 2728 = 43711 \text{ tCO}_2$ (The grasses will disappear in 4 years period.) Stand model 1 (native species; 2228ha): $1.9 \times (1 + 0.27) \times 0.5 \times 44/12 \times (2728 - 500) = 9856 \text{ tCO}_2$ $9856 - 35700 = -25844 \text{ tCO}_2 \div -25594 \text{ (PDD)}$ Stand model 2 (plantation: 500ha): There is no GHG absorption in the 1st year. The detail is indicated in the TARAM. (5) PDD D.1 a. Relevant section of GPG is indicated in the Annex 13 (1) (/2i/).	OK

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
<p>b. 2nd, 3rd paragraph: Please provide the detail explanation about the followings</p> <ul style="list-style-type: none"> (i) first stand model of mix of native species: the contents of mix of the IPCC GPG and its justification (ii) Expert input by Dr. Deribe Gurmu (iii) 2nd stand model: Please justify the assumption of MAI when inter-planted. (iv) Please inform the distribution and % of first stand and second stand. (v) Please explain about the schedule of pruning, thinning, harvesting schedule and assumed mortality. (vi) Please explain what and how the data / parameters are applied to the annual carbon stock change calculation, taking into account the AR-AM0003 version 04 section 7.1 and 7.2 (vii) Please provide the calculation excel sheet of annual carbon stock change in each strata? (Similar question of No.10.) 		<p>b. 2nd, 3rd paragraph</p> <ul style="list-style-type: none"> (i), (ii) Input by Dr. Deribe Gurmu is reflected in the calculation of Stand model 1 & 2. Dr. Deribe's report was provided. (iii) Considering the harmful impacts to the soil by single stands Eucalyptus, Grevillea Robusta is planted. Due to the uncertainty of productivity by this mixed plantation, the MAI was assumed to be reduced approximately 50% based on expert input. (iv) The 1st stand is for 2228 ha and 2nd stand is for 500 ha. (v) Information is included in the TARAM. Description was added to the PDD. (vi) Indicated in the PDD and TARAM. The explanation is added as PDD Annex 13 (3). As for the pre-existing tree, explanation was added to the PDD. The pre-existing tree vegetation will be left standing and there is no biomass stock change due to the clearance of trees. Hence, the carbon stock changes are not included in the ex ante calculation of actual carbon stock changes. As for the non tree biomass, it is assumed to disappear in 4 years as shown in above calculation. (vii) TARAM was provided. 	
CL.16 Justification about the leakage should be done based on the methodology and the background	Table 2 D2.1	The explanation based on the methodology was added and background information	OK

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
information is to be provided regarding fuel wood collection and grazing.		was added as Annex 11.	
CL.17 (4) Please explain about the relation of Table E-4 and E-5. (Table E-4 and 5 seem to be duplicated. E-4 appears to be unnecessary.)	Table 2 E.01.	<ul style="list-style-type: none"> Table E-4 & 5 will be consolidated to avoid duplication. Among the monitoring items of the methodology, items necessary for the project will be tabulated. 	OK. Tables E-4 and E-5 to revised and consolidated
CL.18 Please explain how the requirement for the changes in circumstances within the project boundary that affect legal title to the land or right of access to the carbon pools was taken into account in the monitoring plan.	Table E.05	Yes. This will be monitored as a part of monitoring of forest management included in the monitoring plan of Annex 4 of the PDD.	OK
CL.19 For some of the monitored items, the description on this requirement appears to be missing in PDD. Please check and amend PDD if necessary.	Table 2 E.06.	The monitoring items are revised based on the requirements of the methodology AR-AM0003 version 04.	OK.
CL.20 Please provide the SOPs and training programs, training text and record.	Table E.08	Training programs and record were provided.	OK
CL.21 (5) Survival rate checking: The initial survival rate --- will be checked within three months: meth requirement is three months after the planting. (6) Survival checking will be conducted for each plantation site:. Will it be conducted using permanent sample plot for each plantation site? <ul style="list-style-type: none"> Monitoring of forest management: This is to be in accordance with the methodology version 04. If not, justification is necessary. (8 items need monitoring, how ever only 3 referred.) 	Table 2 E.1.1.	<p>Description of PDD E.1.1 was amended.</p> <p>PDD was revised in accordance with the AR-AM0003 version 04 requirements.</p>	OK,
CL.22 <ul style="list-style-type: none"> Annex 4, 3.b) Please provide the evidence (report) that the 88	Table 2 E.2.1.	<ul style="list-style-type: none"> Calculation is based on the methodology. 	OK.

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
sample plots were derived in accordance with the requirements of the methodology. Equations, assumptions, values assigned to variables shall be clearly described.		Calculation sheet is provided.	
CL.23 Please provide the location of planned sampling plots.	Table 2 E.2.4.	<ul style="list-style-type: none"> The procedures for the location of permanent sample plots are indicated in Annex 4 of the PDD. 	OK.
CL.24 Table E-5: Items for vehicle and fertilizer are not necessary. (Refer to AR-AM0003 version 04, section 6, table 2.) Same symbols as methodology are preferable such as Δ	Table 2 E.4.1..	<ul style="list-style-type: none"> PDD was amended. 	OK.
CL.25 If there are some documents, eg. "Monitoring Manual" which further prescribes the detail of the monitoring technique and methods, please provide.	Table 2 E.4.1.3.	Draft Operation Manual is provided.	OK This draft includes Monitoring methodology, Operation, data collection, management and Operational System and Auditing, etc.
CL.26 Please explain the reason of deleting some items listed in the methodology section 8 Table 3 such as following items. (i) related to EGL, NGL, XGL and SFR (ii) APV, FNRp, LK and components of LK such as LK _{fuelwood} , etc. (iii) Na _{AR,t} and relevant items such as Na _{EGL} , etc. (iv) PART. Transport activity is not necessary to be mentioned in PDD E.5., Table E-6, Table E-7, and Annex 4 5. Monitoring of leakage a).	Table 2 E.5.1.	<ul style="list-style-type: none"> Since the leakage is insignificant, these items were deleted. It was deleted. 	OK.
CL.27	Table 2	Described in Annex 4.	OK.

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
PDD E.5.2 describes the item to be monitored. However, procedure and review frequency etc. are not clear.	E.5.2.		
CL.28 PDD F.3 refers to ongoing monitoring plan as to environmental impact, and G.1 refers to social mitigation plan related to social impact. Please provide the plans and explain what are monitored and how they will be monitored.	Table 2 E.5A.1.	Ongoing monitoring plan is actually the monitoring of the project operation, not the environmental monitoring. PDD expression is revised. The latter will be described in Annex 7	OK.
CL.29 (QA/QC) Please explain what measures are planned to deal with the questions E.6.1 to E.6.11. If such measures are integrated in the document such as. "Monitoring Manual", please provide.	Table 2 E.6.1.	Operation manual including QA/ QC is provided.	OK
CL.30 Please provide the organization chart for the project management and communities including number of key staffs and persons positively involved in the project.	Table 2 E.7.1.	Humbo Assisted Regeneration Chart of management was provided.	OK
CL.31 Clarify whether EIA is legally required or not for such kind of project in Ethiopia. If required, please provide the EIA report and approval.	Table 2 F.1.2.	EIA was not legally required. EIA related legal procedure and actual process taken was described in the table which is added to Annex 5. Also brief description of the procedure was added to PDD F.1 Preliminary EIA conducted by WV is provided,	OK.
CL.32 Please explain about planned monitoring and remedial measures to address significant environmental impacts.	Table F.1.7	Preliminary EIA was carried out to determine if any negative environmental impacts were likely as a result of the project. Description was added to the PDD.	OK
CL.33 (1) G1: please explain about the social mitigation	Table 2 G.1.1.	• Explanation was given in Annex 7	• OK.

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 2	Summary of project owner response	Validation team conclusion
<p>action plan.</p> <p>(2) G2: Please clarify about the regulation about the socio-economic impact assessment regarding AR projects in Ethiopia.</p>		<ul style="list-style-type: none"> Socio-economic impact assessment is required in the context of EIA. No independent law/regulation exists. The result of voluntarily conducted analysis is attached to PDD as Annex 7. 	<ul style="list-style-type: none"> OK.
<p>CL.34</p> <p>Please provide the record of the consultative workshop held at Soddo during April 10-12, 2006.</p>	Table 2 F.1.1.	Record of the consultative workshop held at Soddo during April 10-12, 2006 is provided.	OK.
<p>CL.35</p> <p>Please clarify the legal requirement as to the implementation of stakeholder consultation.</p>	Table 2 F.1.2.	Stake holder consultation is required in the context of EIA. No independent law/regulation exists.	OK.

APPOINTMENT CERTIFICATE of Validation team members / Technical Expert and CURRIKULUM VITAE for Internal Verifiers

APPOINTMENT CERTIFICATE

Validation team

Teruo FUKUDA

Osamu KOBAYASHI

Technical Expert

Makino YAMADA YAMANOSHITA

CURRIKULUM VITAE for Internal Verifiers

Yoshihiro OTSUKA

Shigekazu OKA

Noriyuki KOBAYASHI (Technical Advisor)

APPOINTMENT CERTIFICATE

Mr. Teruo FUKUDA


born on 14 March 1942

satisfies the requirements as specified in the JACO CDM Quality Manual and is hereby appointed as

**JACO CDM CDM Lead Auditor and
Validation Team Leader for**

**Humbo Ethiopia Assisted Natural Regeneration
Project**

Tokyo, 01 October, 2008



Yoshihiro Otsuka
General Manager of the Business Development Division
JACO CDM Co., Ltd.

CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. Name of Firm: JACO CDM, Ltd.

2. Name of Staff: Teruo FUKUDA / Senior Chief Engineer, Assessment

3. Qualification: CDM lead auditor

4. Employment Record:

2004 - Present: Assessment Division of JACO CDM

- Verification team leader of China Xiaogushan Hydropower Project
- Validation team leader of Uganda Nile Basin AR Reforestation Project
- Verification team leader of “e7 Bhutan” CDM project
- Validation team member of Zafarana Windpower Project
- Validation team leader of “Fushun AN Plant “ CDM project
- Validation team sub-leader of “e7 Bhutan” CDM project
- Verification team leader of domestic GHG emission assessment projects

2002 - 2004: Technical Advisor of Japan AE Power Systems Corporation

1998 - 2002: Director and manager of Environmental department, Japan Electrical
Manufacturers Association

1967 - 1998: Hitachi, Ltd. Head Office

5. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned:

- Validation of Uganda Nile Basin Reforestation Project: acted as team leader
- Verification e7 Bhutan project: acted as a leader and made a verification report
- Verification of China Xiaogushan Hydropower Project: acted as a leader
- Validation of “Energy Recovery Project from Multistage Combustion treatment of Off-gas and Wastewater of the AN Plant of Fushun Chemical Company” (Trial project sponsored by Government of Japan, MOE): Acted as a validation team leader
- Validation of e7 Bhutan project: acted as a sub-leader and made a validation report and registration for EB

APPOINTMENT CERTIFICATE

Mr. Osamu KOBAYASHI

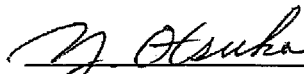
born on 22 February 1947

satisfies the requirements as specified in the JACO CDM Quality Manual and is hereby appointed as

**JACO CDM CDM Lead Auditor and
Validation team member for**

**Humbo Ethiopia Assisted Natural Regeneration
Project**

Tokyo, 01 October, 2008



Yoshihiro Otsuka
General Manager of the Business Development Division
JACO CDM Co., Ltd.



Validation Report: Humbo Ethiopia Assisted Natural Regeneration Project

CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. Name of Firm: JACO CDM, Ltd.

2. Name of Staff: Osamu KOBAYASHI/ Manager of Assessment Division

3. Qualification: CDM lead auditor, EMS lead auditor

4. Employment Record:

2007 – Present: Manager of Assessment Division of JACO CDM

2004 - 2007: Assessment Division of JACO CDM

- Validation team member of Uganda Nile Basin AR Reforestation Project
- Determination team leader of Kaliakra Windpower Project in Bulgaria (JI project)
- Verification team member of “e7 Bhutan” CDM project
- Validation team leader of Zafarana Windpower Project
- Validation team leader of “e7 Bhutan” CDM project
- Verification team leader of domestic GHG emission assessment projects

2002 - 2004: Japan Audit and Certification Organization for Environment and Quality

1970- 2002: Fuji Electric Holdings Co., Ltd.

5. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned:

- Verification team member of “e7 Bhutan Micro Hydro Power CDM Project”
- Validation team leader of Kaliakra Windpower Project in Bulgaria
- Validation team leader of Zafarana Windpower Project in Egypt
- Validation team leader of “e7 Bhutan Micro Hydro Power CDM Project”
- Verification team leader of domestic GHG emission assessment projects

JACO CDM

Validation Report: Humbo Ethiopia Assisted Natural Regeneration Project

APPOINTMENT CERTIFICATE

Ms. Makino YAMADA YAMANOSHITA

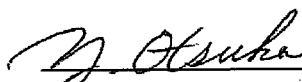
born on 25 November 1972

satisfies the requirements as specified in the JACO CDM Quality Manual and is hereby appointed as

**Technical Expert for AR-CDM Project for
Validation of**

**Humbo Ethiopia Assisted Natural Regeneration
Project**

Tokyo, 01 October, 2008



Yoshihiro Otsuka
General Manager of the Business Development Division
JACO CDM Co., Ltd.

CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. **Name of Firm:** Japan Overseas Plantation Center for Pulpwood
2. **Name of Staff:** Makino YAMADA YAMANOSHITA
3. **Membership of Professional Association:** The Japanese Forest Society
4. **Other Training:**
 - Training course for establishing tropical plantations by JIFPRO in 2002.
 - Capacity Building for AR-CDM project by JIFPRO in 2004
5. **Countries of Work Experience: Japan**
Research Experience in Vietnam, Thailand, Australia, Uruguay, Brazil, Chile, Guyana and South Africa
6. **Employment Record:**
1998 - Present: Researcher / Japan Overseas Plantation Center for Pulpwood

7.

Detailed Tasks Assigned	Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned
<ul style="list-style-type: none"> -Capacity building on AR-CDM for Vietnamese government and researchers -Develop a small scale AR-CDM project 	<p>Name of assignment or project: The Study on Capability Development for AR-CDM Promotion</p> <p>Year: 2006-2008</p> <p>Location: Vietnam</p> <p>Client: Japan International Cooperation Agency(JICA)</p> <p>Main project features: Capacity building of the Forestry Institute and Forestry University in Vietnam and develop a small scale AR-CDM project in Hoa Binh Province</p> <p>Position held: Experts on AR CDM</p> <p>Activities performed: Lecture in seminars, field research, PDD development and report making</p>
<ul style="list-style-type: none"> -Development of investment model for AR CDM 	<p>Name of assignment or project: Investment Model of AR CDM</p> <p>Year: 2006-2008</p> <p>Location: Japan</p>

JACO CDM

Validation Report: Humbo Ethiopia Assisted Natural Regeneration Project

<p>-Province information of AR CDM to potential investors</p>	<p>Client: The Forestry Agency of Japan</p> <p>Main project features: Developing a investment model of AR CDM for project developers and investors of the temporary CER</p> <p>Position held: Experts on AR CDM</p> <p>Activities performed: Investment analysis and report making</p>
<p>-Providing guidelines for developing AR- CDM project</p> <p>-Providing basic information of AR-CDM to investors and developer in Japan</p>	<p>Name of assignment or project: Technical guidelines for developing AR-CDM project</p> <p>Year: 2003-2008</p> <p>Location: Vietnam, Indonesia, Uruguay</p> <p>Client: The Forestry Agency of Japan</p> <p>Main project features: Making guidelines for the developer of AR-CDM project</p> <p>Position held: Experts on AR CDM</p> <p>Activities performed: Field research and report making</p>
<p>-A feasibility study of AR CDM on the industrial plantation sites for pulpwood production</p>	<p>Name of assignment or project: Model project for AR-CDM and JI</p> <p>Year: 2002-2004</p> <p>Location: Vietnam, Australia</p> <p>Client: Japan Paper Association</p> <p>Main project features: Using industrial plantation sites in Australia and Vietnam as a case study, the models are developed with different baselines and tree growth patterns.</p> <p>Position held: Experts on AR CDM</p> <p>Activities performed: Field research and report making</p>

JACO CDM

Validation Report: Humbo Ethiopia Assisted Natural Regeneration Project

<p>-Evaluation of the potential carbon stock in the industrial plantation for pulpwood</p>	<p>Name of assignment or project: Evaluation of Carbon Accumulation in Industrial Plantation for Pulpwood</p> <p>Year: 1998-1999</p> <p>Location: Vietnam, Australia, Chile, India</p> <p>Client: Ministry of Economy, Trade and Industry</p> <p>Main project features: Evaluating the Carbon stock in the industrial plantations for the future carbon trading and biomass energy utilization.</p> <p>Position held: Experts on Forest Ecology</p> <p>Activities performed: Field research, analysis in laboratory and report making</p>
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CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. **Proposed Position :** CDM Internal Auditor, Project manager
2. **Name of Firm:** JACO CDM., Ltd.
3. **Name of Staff:** Yoshihiro OTSUKA
4. **Date of Birth:** January 27, 1948 , **Nationality:** JAPAN
5. **Education:** Graduated from Faculty of Engineering, Chemical Engineering, Chiba University in 1970
6. **Qualification:**
CDM Lead Auditor
JRCA accredited Quality Auditor
CEAR accredited Environment Auditor
7. **Countries of Work Experience:** Japan, USA
8. **Languages:** Mother language: Japanese
Other language: Good in speaking, reading and writing in English
9. **Employment Record:**
2003 – Present: Director and General Manager of JACO CDM
2002 – 2003: Director of JACO Management System Co. Ltd.
1997 – 2002: Director of Tokai Branch, SONY Human Capital Corporation
1994 – 1997: Director of SONY Display Tube Co. Ltd. USA
1983 – 1994: Project Leader of "32 inches CRT", SONY Inazawa Factory
1979 – 1983: SONY San Diego Factory, USA
1970 – 1979: SONY CRT Tube Manufacturing Division
10. **Detailed Tasks Assigned.(Proposed)**
CDM Internal Auditor, Project manager for Capacity Building Project
11. **Work Undertaken that Best Illustrates Capability of Handle the Tasks Assigned:**
Planning, administration and dispatch of instructors for validator and verifier 5 days course sponsored by METI (Japanese Government) (In 2004, 2005 and 2006, 3 times)
12. **Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Date: 1 October, 2008

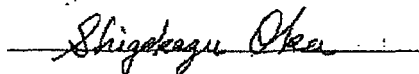
Full name of authorized representative: Yoshihiro OTSUKA

CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. Proposed Position: Internal verifier
2. Name of Firm: JACO CDM, Ltd.
3. Name of Staff: Shigekazu OKA
4. Date of Birth: January 02, 1945 Nationality: Japan
5. Education: Graduated from Faculty of Engineering, Tokyo University in 1968
6. Qualification: manager in charge of pollution control, health administer, health controller in health engineering, RST Trainer, CEAR accredited Environmental lead auditor (A 1658)
7. Membership of Professional Associations: Full member of Japan Society of Mechanical Engineers
8. Countries of Work Experience: Japan
9. Languages: Mother language: Japanese
Other languages: Good in speaking, reading and writing in English
10. Employment Record :
 - 2004 - Present: Manager of Assessment Division of JACO CDM
 - Verification team leader of domestic GHG emission assessment projects
 - 2000 - 2004: Japan Audit and Certification Organization for Environment and Quality
 - 1968 - 2000: Hitachi, Ltd. July 4, 2007
 - *The manager of Production Technology Department
 - *Lead the operation of EMS
 - *Engaged in development of the elemental technology of new series, development of automation of production facilities and the rationalization of refrigerators, etc.
11. Detailed Tasks Assigned: Internal Verifier
12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned:

Validation of "Introduction of Gas turbine co-generation system" to Semiconductor Company Nagaoka Factory of Matsushita Electric Industrial Co., Ltd. (Trial Project sponsored by Government of JAPAN, MOE)
13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Date: 1 October, 2008

Full name of authorized representative: Yoshihiro Otsuka

3F. CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position: Technical Advisor

Name of Firm: Law School of Nihon University
Nihon University

Name of Staff: Noriyuki KOBAYASHI

Profession: Professor of Law School, Nihon University
Professor of Bioresources Science of Nihon University

Date of Birth: August 9, 1940

Years with Firm/Entity: one year

Nationality: Japan

Membership in Professional Societies:

Expert Reviewer of the IPCC Forth Assessment Report

Member of Government Committees related with CDM, Forest Sink

Member of Committee of the Technical Advisory Board of Bio Carbon Fund

Detailed Tasks Assigned: Technical Advisor for AR CDM

Key Qualifications: Ph.D.

Education:

1964 Graduated from Hokkaido University, Agriculture Department, Forestry

2000 Ph.D., (Hokkaido University)

Employment Record:

2004 Professor of Law School, Nihon University
Professor of Bioresources Science of Nihon University

2003 Retired from Sumitomo Forestry Co., Ltd.

2001 Chief Research Fellow of Sumitomo Forestry Co., Ltd.

1998 Supervisory Officer of Sumitomo Forestry Co., Ltd.

1991 General Manager of Green Environmental Department of Sumitomo Forestry Co., Ltd.

1987 General Manager of Overseas Department of Sumitomo Forestry Co., Ltd.
1964 Entered to Sumitomo Forestry Co., Ltd.

Part Time Lecture:

Tokyo University of Agriculture and Technology
Shinsyu University

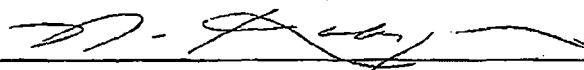
Languages:

Mother Language: Japanese

Other Languages: Excellent in speaking, reading and writing in English

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experience, and me.



[Signature of staff member and authorized representative of the firm]

Date: 15 / 12 / 08

Day/Month/Year

Full name of staff member: Noriyuki Kobayashi

Full name of authorized representative: Yoshihiro Otsuka

