



# A/R VALIDATION REPORT

DIVISIONAL FOREST OFFICER (DFO), OBRA  
FOREST DIVISION, UTTAR PRADESH

SMALL SCALE OBRA JFM A/R CDM  
PROJECT ON DEGRADED LANDS IN OBRA  
FOREST DIVISION, UTTAR PRADESH, INDIA.

**Report No: 8000453049 -14/055**

**Date: 2015-11-24**

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<b>Project:</b>	<b>Title:</b>		<b>Initial PDD Version:</b>	<b>Final PDD Version</b>	
	Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India.		2014-03-31 Version 1	2015-11-22 Version 3	
<b>Project Participant(s):</b>	<b>Client:</b>				
	Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh				
	<b>Non-Annex 1 country:</b>		<b>Annex 1 country:</b>		
	India		N/A		
	<b>PP from Non-Annex 1 country:</b>		<b>PP from Annex 1 country:</b>		
Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh, India		N/A			
<b>Applied methodology/ies:</b>	<b>Title:</b>		<b>No.:</b>	<b>Scope / TA:</b>	
	"Afforestation and reforestation project activities implemented on lands other than wetlands"		AR-AMS0007 Version 03.0	14/14.1	
<b>Validation team / Technical Review and Final Approval</b>	<b>Validation Team:</b>		<b>Technical review:</b>	<b>Final approval:</b>	
	G EZHILARASU INDRAPAL PARMAR SUDHA PADMANABHA KUNDAN KUMAR BURNWAL	TL TM ETE ETE	Alexandra Nebel	Alexandra Nebel	
<b>Expected Emission reductions: [t CO<sub>2</sub>e]</b>	<b>Expected emission reductions over the first crediting period:</b>		<b>(Expected) starting date of the crediting period:</b>		
	111,428		2012-01-01		
<b>Confidential content:</b>	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No		
<b>Key dates of validation:</b>	<b>Publication of PDD:</b>	<b>Draft Report issued:</b>	<b>On-site (from):</b>	<b>On-site (to):</b>	
	2014-06-18	2014-11-28	2014-08-29 <sup>1</sup>	2014-09-12	
<b>Summary of Validation Opinion:</b>	<p>In detail the conclusions can be summarised as follows:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The project is in line with all relevant host country criteria (India) and all relevant UNFCCC requirements for CDM. Project activity approval have been obtained from DNA of India vide the Letter of Approval (HCA) no 4/17/2014–CCC dated 11 February 2014.</li> <li><input checked="" type="checkbox"/> The project additionality is sufficiently justified in the PDD.</li> <li><input checked="" type="checkbox"/> The monitoring plan is transparent and adequate.</li> <li><input checked="" type="checkbox"/> The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission removals of 111,428 t CO<sub>2</sub>e are most likely to be achieved within the (1<sup>st</sup> renewable) crediting period.</li> <li><input checked="" type="checkbox"/> The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.</li> </ul>				
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<sup>1</sup> Combined site visit for 10 projects of UP forest department was planned due to travel requirements, but on 08-09-2014 VT visited one of the JFMCs of this project.

## Abbreviations

<b>A/R</b>	Afforestation/Reforestation
<b>BEF</b>	Biomass Expansion Factor
<b>CA</b>	Corrective Action / Clarification Action
<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CERs</b>	Certified Emission Reductions
<b>CL</b>	Clarification Request
<b>DBH</b>	Diameter at Breast Height
<b>GBH</b>	Girth at Breast Height
<b>t-CER</b>	Temporary Certified Emission Reduction
<b>I-CER</b>	Long-term Certified Emission Reduction
<b>MoEF</b>	Ministry of Environment and Forests
<b>NCDMA</b>	National CDM Authority
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2e</sub></b>	Carbon dioxide equivalent
<b>CP</b>	Certification Program
<b>DNA</b>	Designated National Authority
<b>EB</b>	CDM Executive Board
<b>EIA</b>	Environmental Impact Assessment
<b>FAR</b>	Forward Action Request
<b>FYM</b>	Farm Yard Manure
<b>FUG</b>	Forest User Group
<b>JICA</b>	Japan International Cooperation Agency
<b>JFMCs</b>	Joint Forest Management Committees
<b>GHG</b>	Greenhouse gas(es)
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>LULUCF</b>	Land Use, Land Use Change and Forestry
<b>PDD</b>	Project Design Document
<b>QC/QA</b>	Quality control/Quality assurance
<b>SOPs</b>	Standard Operating Procedures
<b>SHG</b>	Self Help Group
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UP</b>	Uttar Pradesh Participatory Forest Management and Poverty
<b>PFMPAP</b>	Alleviation Project
<b>VVS</b>	Validation and Verification Standard.

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## 1 OBJECTIVE / SCOPE

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

- the requirements of Article 12 of the Kyoto Protocol;
- the CDM modalities and procedures as agreed in the Marrakech Accords under decision 3/CMP.1
- the annex to the decision;
- subsequent decisions made by COP/MOP & CDM Executive Board and
- other relevant rules, including the host country legislation and sustainability 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 seen as necessary to provide assurance to stakeholders on the quality of the project and its intended generation of temporary certified emission reductions (t-CERs).

The validation scope is given as a thorough independent and objective assessment of the project design including especially: the correct application of the methodology, the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PDD and other relevant supporting documents, to ensure that the proposed CDM project activity meets all relevant and applicable A/R CDM criteria.

The information included in the PDD and the supporting documents were reviewed against the requirements as set out by the UNFCCC. The validation team has, based on the requirements in the Validation and Verification Standard<sup>VVS</sup>, carried out a full assessment of all evidences to assess the compliance of the project with the key areas as outlined in section V.II. of the VVS (version 07.0).

The validation is based on the information made available to TÜV NORD JI/CDM CP and on the contract conditions.

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

## 2 GHG PROJECT DESCRIPTION

### 2.1 Project Characteristics

Essential data of the project is presented in the following Table 2-1.

**Table 2-1:** Project Characteristics

Item	Data
Project title	Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India.
Project size	<input type="checkbox"/> Large Scale <input checked="" type="checkbox"/> Small Scale
Project Scope (according to UNFCCC sectoral scope numbers for CDM)	<input type="checkbox"/> 1 Energy Industries (renewable- /non-renewable sources)
	<input type="checkbox"/> 2 Energy distribution
	<input type="checkbox"/> 3 Energy demand
	<input type="checkbox"/> 4 Manufacturing industries
	<input type="checkbox"/> 5 Chemical industry
	<input type="checkbox"/> 6 Construction
	<input type="checkbox"/> 7 Transport
	<input type="checkbox"/> 8 Mining/Mineral production
	<input type="checkbox"/> 9 Metal production
	<input type="checkbox"/> 10 Fugitive emissions from fuels (solid, oil and gas)
	<input type="checkbox"/> 11 Fugitive emissions from production and consumption of halocarbons and hexafluoride
	<input type="checkbox"/> 12 Solvents use
	<input type="checkbox"/> 13 Waste handling and disposal
	<input checked="" type="checkbox"/> 14 Afforestation and Reforestation
	<input type="checkbox"/> 15 Agriculture
Applied Methodology	AR-AMS0007 Version 03.0
Technical Area(s)	14.1 Forestry
Crediting period	<input checked="" type="checkbox"/> Renewable Crediting Period (20 y) <input type="checkbox"/> Fixed Crediting Period (30 y)
Start of crediting period	2012-01-01

### 2.2 Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-2).

**Table 2-2:** Project Parties and project participants

Characteristic	Party	Project Participant
Non-Annex 1 Country	<b>India</b>	Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh
Annex 1 Country	<b>N/A</b>	N/A

## 2.3 Project Location

The details of the project location are given in table 2-3:

**Table 2-3:** Project Location

No.	Project Location
Host Country	India
Region:	Uttar Pradesh – State
Project location address:	Obra District
Latitude:	24°17" N to 24°32"N
Longitude:	82°42'E to 83°31'E

## 2.4 Technical Project Description

The technical key data are provided in table 2-4 below

**Table 2-4:** Technical data of the project activity

Parameter	Unit	Value
No. of JFMCs	-	10 (Kota, Sinduriya, Bardiya, Parsoitola, Bairpur, Nadehari, Pdrachh, Gidhiya, Kanhara, and Semia
Total reforested area	Ha	326.72
Pit Sizes	m x m x m	0.45 x 0.45 x 0.45
Trenches	m x m x m	3m in length x 0.6m in width x 0.45 m
Tree species (scientific name)	Name	<i>Emblica officinalis</i> , <i>Acacia auriculiformis</i> , <i>Tamarindus indica</i> , <i>Annona reticulate</i> , <i>Azadirachta indica</i> , <i>Syzygium cumini</i> , <i>Holoptelea integrifolia</i> , <i>Eucalyptus Hybrid</i> , <i>Terminalia belerica</i> , <i>Acacia catechu</i> , <i>Madhuca indica</i> , <i>Haplophragma adenophyllum</i> , <i>Cordia dichotoma</i> , <i>Terminalia arjuna</i> , <i>Tectona grandis</i> , <i>Butea monosperma</i> , <i>Albezia lebbeck</i> , and <i>Bombax ceiba</i>



## **3 METHODOLOGY AND VALIDATION SEQUENCE**

### **3.1 Validation Steps**

The validation of the project consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the project design document (PDD)
- Desk review of the PDD and supporting documents
- Validation planning
- On-Site assessment
- Background investigation and follow-up interviews with personnel of the project developer and its contractors
- Draft validation reporting
- Resolution of corrective actions (if any)
- Final validation reporting
- Technical review
- Final approval of the validation

### **3.2 Contract review**

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the validation can be provided,
- Impartiality issues are clear and in line with the CDM accreditation requirements

a contract review was carried out before the contract was signed.

### 3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities, a validation team, consisting of one team leader and 3 additional team member, as well as the Technical Review personnel were appointed.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

**Table 3-2:** Involved Personnel

	Name	Company	Function <sup>1)</sup>	Qualification Status <sup>2)</sup>	Scheme competence <sup>3)</sup>	Technical competence <sup>4)</sup>	Host country Competence	On-site visit
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	G Ezhilarasu	TUV India Private Limited	TL	SA	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Indrapal Parmar	TUV India Private Limited	TM <sup>A)</sup>	LA	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Sudha Padmanabha <sup>2)</sup>		ETE		<input type="checkbox"/>	14.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Kundan Kumar Burnwal <sup>3)</sup>		ETE		<input type="checkbox"/>	14.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Alexandra Nebel	TUV Nord Cert	TR/ FA <sup>B)</sup>	SA	<input checked="" type="checkbox"/>	14.1	<input type="checkbox"/>	-

<sup>1)</sup> TL: Team Leader; TM: Team Member; TR: Technical review; OT: Observer-Team; OR: Observer-TR; FA: Final approval

<sup>2)</sup> GHG Auditor Status: A: Assessor; LA: Lead Assessor; SA: Senior Assessor; T: Trainee; TE: Technical Expert

<sup>3)</sup> GHG auditor status (at least Assessor)

<sup>4)</sup> As per S01-MU03 or S01-VA070-A2 (such as 1.1, 1.2, ...)

<sup>5)</sup> In case of verification projects

A) Team Member: GHG auditor (at least Assessor status), Technical Expert (incl. Host Country Expert or Verification Expert), not ETE

B) No team member

All team members contributed to the review of documents, the assessment of the project activity and to the preparation of this report under the leadership of the team leader.

All team members as indicated in the table above attended in the complete site-visit.

Technical Experts contributed to the assessment of special aspects of the project activity, e.g. technical or host country aspects.

<sup>2)</sup> Sudha Padmanabha attended the site from 29-08-2014 to 05-09-2014

<sup>3)</sup> Kundan Kumar Burnwal attended the site from 08-09-2014 to 12-09-2014

Statements of competence for the above mentioned team members are enclosed in annex 7 of this report.

### **3.4 Consideration of Public Stakeholder Comments**

Acc. to the modalities and procedures the draft PDD, as received from the project participants, has been made publicly available on the dedicated UNFCCC CDM website prior to the validation activity commenced. Stakeholders have been invited to comment on the PDD within the 30 days public commenting period.

In case comments are received, they are taken into account during the validation process. The comments and the discussion of the same are documented in annex 6 of this report.

### **3.5 Validation Protocol**

In order to ensure consideration of all relevant assessment criteria, a validation protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of validation and the results from pre-validating the identified criteria. The validation protocol reflects the generic CDM requirements each CDM project has to meet as well as project specific issues as applicable. The validation protocol serves the following purposes:

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

The validation protocol is described in Figure 1.

<b>Validation Protocol Table A-1: Requirement checklist</b>				
<b>Checklist Item</b>	<b>Validation Team Comment</b>	<b>Reference</b>	<b>Draft Conclusion</b>	<b>Final Conclusion</b>
<i>The checklist items in Table A-1 are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further sub-divided as per the requirements of the topic and the individual project activity.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the validation team and how the assessment was carried out. The reporting requirements of the VVS shall be covered in this section.</i>	<i>Gives reference to the information source on which the assessment is based on</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft validation stage.</i>	<i>In case a corrective action or a clarification the final assessment at the final validation stage is given.</i>

**Figure 1:** Validation protocol table

The completed validation protocol is enclosed in Annex 1 to this report.

### 3.6 Review of Documents

The published PDD and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the validation team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

### 3.7 Site Visit and Follow-up Interviews

The validation team has carried out a site visit in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for CDM. A selection of sites of the project activity has been visited.

During validation the validation team has performed interviews to confirm selected information and to resolve issues identified in the document review. The main topics of the interviews are summarized in table 3-3.

**Table 3-3:** Interviewed persons and interview topics

<b>Interviewed Persons / Entities</b>	<b>Interview topics</b>
Project proponent representatives Project consultant	Chronological description of the project activity with documents of key steps of the implementation.

Interviewed Persons / Entities	Interview topics
	<ul style="list-style-type: none"> <li>- Current status of plant design</li> <li>- Technical details of the project realization, project feasibility, designing, operational life time, monitoring of the project</li> <li>- Host Government Approval</li> <li>- Approval procedures and status</li> <li>- Monitoring and measurement equipment and system.</li> <li>- Financial aspects</li> <li>- Crediting period</li> <li>- Project activity starting date</li> <li>- CER allocation / ownership</li> <li>- Baseline study assumptions</li> <li>- Additionality</li> <li>- Sustainable development issues</li> <li>- Monitoring</li> <li>- Analysis of local stakeholder consultation</li> <li>- Roles &amp; responsibilities of the project participants w.r.t. project management, monitoring and reporting</li> <li>- National Legislation</li> <li>- Editorial issues of the PDD</li> </ul>

A comprehensive list of all interviewed persons is part of section 7 'References'.

### 3.8 Project comparison

The validation team has compared the proposed A/R CDM project activity with similar projects or technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Project set-up and eligibility
- Additionality issues
- Reasons for reviews, requests for reviews and rejections within the CDM registration process.

### 3.9 Resolution of Clarification and Corrective Action Requests

#### 3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence the project results,
- the requirements deemed relevant for validation of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered by the UNFCCC or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first verification.

### 3.9.2 Draft Validation

After reviewing all relevant documents and taken all other relevant information into account, the validation team issues all findings in the course of a draft validation report and hands this report over to the project proponent in order to respond on the issues raised and to revise the project documentation accordingly.

### 3.9.3 Final Validation

The final validation starts after issuance of the proposed corrective action (CA) of the CARs, CLs and FARs by the project proponent. The project proponent has to reply on those and the requests are “closed out” by the validation team in case the response is assessed as sufficient. In case of raised FARs the project proponent has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first verification. The validation team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive validation opinion can be issued by the validation team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

## 3.10 Technical review

Before submission of the final validation report a technical review of the whole validation procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the validation team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the validation opinion and the topic specific assessments as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

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### **3.11 Final approval**

After successful technical review of the final report an overall (esp. procedural) assessment of the complete validation will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for registration can be started (in case of a positive validation opinion).

## 4 VALIDATION FINDINGS

In the following table the findings from the desk review of the published PDD, visits, interviews and supporting documents are summarised:

**Table 4-1:** Summary of CARs, CLs and FARs issued

Validation topic <sup>1)</sup>	No. of CAR	No. of CL	No. of FAR
Description of project activity (A): <ul style="list-style-type: none"> <li>- Project specification</li> <li>- Technical project description</li> <li>- Project Participants Technologies and/or measures</li> </ul>	4	1	0
Application of selected approved baseline and monitoring methodology (B) <ul style="list-style-type: none"> <li>- Application of the Methodology</li> <li>- Project Boundary</li> <li>- Baseline identification</li> <li>- Calculation of GHG emission reductions <ul style="list-style-type: none"> <li>Project emissions</li> <li>Baseline emissions</li> <li>Leakage</li> </ul> </li> <li>- Additionality determination</li> <li>- Monitoring Methodology</li> <li>- Monitoring Plan</li> <li>- Project management planning</li> </ul>	11	2	0
Duration and Crediting Period (C)	1	0	0
Environmental impacts (D)	0	1	0
Local Stakeholder Consultation (E)	1	0	0
Approval, Authorization and other aspects (F): Letter of Approval - Contribution to sustainable development <ul style="list-style-type: none"> <li>- MoC</li> <li>- PDD editorial aspects</li> </ul>	1	0	0
<b>SUM</b>	<b>18</b>	<b>4</b>	<b>0</b>

<sup>1)</sup> The letters in brackets refer to the validation protocol



The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all validation items it should be referred to the validation protocols (see Annex 1).

The findings of validation process are summarized in the tables below.

Finding	A1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. In section A.2.5 of the PDD does not provide a description/depiction of the project boundary that delineates discrete areas of land under the control of the PP. Explanation requested.</p> <p>Associated checklist question(s): B.3.1</p>		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	<p>1. The discrete parcels within the Proposed Small Scale A/R Project Activity (PA) were selected based on the eligible lands within the Joint Forest Management Committees (JFMCs) formed from the forest dependent village(s) nearby. The management of the plantation critically involves the participation of the JFMCs in all spheres from selection of the species to be planted to plantation management under the guidance of the Uttar Pradesh Forest Department (UPFD). The JFMCs are also the eventual beneficiaries of all the carbon benefits that shall be accrued. So, the JFMCs involved in the project were also highlighted in the PDD which was webhosted. However, it is realised that this has inadvertently resulted in vague depiction of the actual areas and project boundary which are under the PA.</p> <p>In section A.2.5 of version 2 of the PDD all such discrete parcels under the PA are specifically marked in the maps along with the geo-coordinates that clearly demarcate the project boundary. The geo-coordinates are also separately presented in the annex to the PDD. Reference to JFMCs which may confuse with the actual project boundary has been removed; however JFMC specific codes (unique identification numbers of the JFMCs) are provided in the PDD for transparency. Project boundaries are also submitted in a separate KML file.</p>		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):A.2.5, Annex	New version No.: 2
	<input checked="" type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:2
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>1. In the Section A.2.5 of the revised PDD the PP incorporated the maps of Obra forest division and the details of the discrete land parcels of all the 10 JFMC areas. The maps incorporated shows the GIS co-ordinates of the all the land parcels and the total area under the CDM A/R project activity is given. The KML files are verified during the site visit and the same is submitted. The area</p>		

	mentioned in the PDD and CER sheets are made consistent. Thus the PP is able to demonstrate the land area under their control for the A/R CDM project activity very clearly. Also the section is as per the filling guidelines.  Hence CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	A2		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. Section A.3 of the PDD is not as per the PDD filling guidelines and detailed information about harvesting cycles, Species types and land preparation methods are missing. Please clarify  Associated checklist question(s): A.1.1		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. Section A.4 of the PDD has been now revised and updated in version 2 of the PDD. The following details are now added: climate, hydrology, soil condition, ecosystem type, species type and land preparation. The trees are not planned to be harvested for before first 25 years, and hence, harvesting cycle is not added. The undertaking from the PP in this regard is also submitted along with the revised PDD (version 2).		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):A.4	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. Section A.4 of the revised PDD includes the details of Climate, Hydrology, Soil condition, eco system type, Species and the methods of land preparation as per the PDD filling guidelines CDM-SSC-AR-PDD-FORM. The harvesting cycle mentioned is more than 25 years and an undertaking to this effect is submitted by the PP It is noted the PDD template is changed during the course of validation and the information in section A.3 of hosted PDD is given in section A.4 of the revised PDD hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	A3		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. How the PP ensured the right of carbon credit. Please explain with evidences.  Associated checklist question(s): A.1.1		

<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. As per the Rule 19 of the Joint Forest Management (JFM) Rules 2002, dated 26/11/2010 of the Government of the Uttar Pradesh, the specific rights over the selected lands for project activity has been given to the respective JFMC. Also the UPFD holds the ownership of the land. The PP has also submitted an undertaking to that 100% of the benefits from the carbon credits generated from the project activity will be passed on to the participating JFMC. Evidence for the land ownership and JFMC rule 2002 and 2010 are also being provided to the DOE. English translation of the extracts is now being provided to the DOE		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): A.3	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The Extracts of the JFMC rule have been provided to the Validation team and cross verified that the carbon rights are with the project proponent. Hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	A4		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. The demonstration of land eligibility criteria from the start date of the project activity is not adequate and void of proper/appropriate references, kindly clarify.  Associated checklist question(s): A.1.1 and B.3.2		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. Analysis of RS imagery of JICA land areas was conducted which was followed by surveys and ground-truth verification exercises. In first screening, all land area containing less than 15% canopy cover was selected. This process was the initial step in selection of the Project Area and was conducted in 2010-11. On the basis of this, 10 potential forest divisions were identified in which large tracts of degraded area was available, and could be a candidate CDM Project Area with high potential. From these 10 divisions identification of JFM village forest areas in which CDM projects can be undertaken was conducted. These areas were already within the 15% forest canopy cover cap. Later the Landsat imagery of ( of October and November 2011) was used to tally that there was no forest land prior to the start date of the proposed small scale A/R project activity (start date of the PA is 01/01/2012). Landsat data from 2012 could not be used as Landsat-5 had been de-commissioned and imagery was not available. Hence it is being demonstrated that the lands selected for the proposed small-scale project activity are eligible lands. A detailed explanation of these exercises is explained in section		

	A.7 of the revised PDD version 2.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): A.7	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The section A.7 of the revised PDD demonstrates the land eligibility based on the data latest available evidence (Landsat image of 2011 October) prior to the start date of the project activity. Also the PP through the satellite imageries of LANDSAT – TM dataset of 1989 shown that the land is degraded during 1989. This was crossed checked with the PRA exercise conducted as well as during the onsite interviews with elderly local stakeholders. Also all the land parcels included in the project activity is within the limits of less than 15% forest canopy. Hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

<b>Finding</b>	A1		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. The Forest classification given in section A.3 of the PDD is not in line the host country norms. Please clarify Associated checklist question(s): A.1.1		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. The forest classification has now been depicted as per Indian State Forest Report (ISFR) 2011.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): A.3	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. As per the Indian State Forest Report (ISFR) 2011 the following classifications are given a). Very Dense Forest b). Moderately Dense Forest c). Open Forest d). Scrub Forest. It is noted the PDD template is changed during the course of validation and the information in section A.2.4 of hosted PDD is given section A.3 of the new PDD. Hence CL is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	B1								
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR						
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. In section B.2 of the PDD, please explain how the project area is not falling under forest land, crop land, grass land or settlements categories including reservoirs, natural rivers and lakes with proof.</p> <p>2. The PDD claims the soil disturbance to the project is less than 10%. Please clarify. Also the area mentioned in PDD is not consistently mentioned.</p> <p>Associated checklist question(s): B.3.1</p>								
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	<p>1. The proposed project activity area is degraded land and is left fallow and no agriculture activity is being carried out in the selected area. According to the PRA exercise carried out, the land is unsuitable for agriculture and the crop production is very low in agricultural lands near to the project area. Further, as explained earlier, a detailed RS analysis has been conducted which includes a Land Use Land Cover analysis. It is observed that the land contains no wetlands or settlements of any sort. Hence, the project area does not fall under wetland. The same has been depicted in the revised version of the PDD. The project area is owned by the Uttar Pradesh State through the U. P. Forest Department, and hence does not contain any cropland either.</p> <p>2. The project envisages 488 pits per hectare whereas the size of the pits is 45cm x 45cm which works out to be 98.82 m<sup>2</sup>. Also due to trenching the soil disturbance is 360 m<sup>2</sup>, with 200 trenches of 3m by 0.6m. Hence, in line with the foot note 2 of the methodology and based on the pit distribution the planting activities will lead to soil disturbance 4.6 % of the total area which is below the threshold of 10% as specified in the methodology. The PDD has been revised accordingly. There was a typo error which has been revised and now the area is consistent throughout the PDD.</p> <table border="1"> <tr> <td><input checked="" type="checkbox"/> Changes in PDD</td><td>Section(s): B.2</td><td>New version No.: 2</td></tr> <tr> <td><input type="checkbox"/> Changes in XLS</td><td>Worksheet(s):</td><td>New version No.:</td></tr> </table>			<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.2	New version No.: 2	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.2	New version No.: 2							
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:							
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>1. The PRA exercise carried out by the PP is submitted for verification and it refers that the land is left fallow and no agriculture activity is going on. This is also confirmed during the site visit interviews with the local elders and JFMC members that the land is fallow and no vegetative cover is there for the last 25 years. Also the remote sensing analysis depicts that land is void of any settlements or wetland hence accepted.</p> <p>2. The Soil disturbances is only 4.6% of the total land area, considering 488 pits per hectare and 45 cm by 45 cm pits and trenches of 3m by 0.6m with 100 numbers which is less than 10% threshold referred by the methodology. Also the soil disturbance area is 458.82 m<sup>2</sup> is made consistent in the PDD.</p>								



	Hence accepted CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	B2		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. In Table B.2 of the PDD, the reference and explanation related to appendix 2 and appendix 3 of the methodology is not clear. Please clarify.  Associated checklist question(s): B.4.5		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. The land in the baseline does not fall under grassland or crop land (as explained in the Corrective Action #1 to CAR B1) and hence the conditions of Appendix 2 and Appendix 3 are not applicable. The same has been added in the revised PDD (version 2).		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.2	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The reference to the appendix 2 and appendix 3 of the methodology is not applicable for this project activity and same is explained in the revised PDD hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	B3		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. The evidence for additionality demonstration is not provided. Please clarify.  Associated checklist question(s): B.5.5.4		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. The evidences for additionality are now being provided in the section B.6 of the revised version 2 of the PDD		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.6	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encom-</i>	1. The PRA exercise done by the PP is submitted for verification. The barriers provided in the PDD are verified and found		

pass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments(#2, #3, etc.) shall be added.	applicable for the project activity. The same barriers were noted during the onsite sites and interview with local stakeholders. Hence CAR is closed.
<b>Conclusion</b> Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	B4		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> Describe the finding in unambiguous style; address the context (e.g. section)	1. The evidence and information about prior consideration is not provided. Please clarify. Associated checklist question(s): B.5.2.4		
<b>Corrective Action #1</b> This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.	1. The section B.6 is revised with the details of the prior consideration and prior consideration correspondence mails to UNFCCC and NCDMA are provided to the DOE		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.6	New version No.: 3
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments(#2, #3, etc.) shall be added.	1. The information about the prior consideration is given in the revised PDD. The start of the project activity is 01-01-2012. The prior consideration form is also checked and along with the correspondence to UNFCCC and NCDMA. The PP intimated to DNA on 27-06-2012 and UNFCCC on 29-06-2012, which is within 180 days from the start date of the project which is in line with VVS. Hence CAR is closed.		
<b>Conclusion</b> Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	B5		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> Describe the finding in unambiguous style; address the context (e.g. section)	1. Section B.7.1 of the PDD, the methodological steps is not followed. Please clarify 2. It is given that pre-project tree and shrub biomass is deduced from ER calculations however in the baseline it is considered as zero. Please explain. Associated checklist question(s):B.4.5		
<b>Corrective Action #1</b> This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is	1. PDD has been revised and now all the methodological steps are clearly detailed. 2. The lands under the PA are highly degraded and unfertile lands. The change in carbon stock in the baseline is negative. With reference to paragraphs 12 and 13 of the AR-TOOL 14, the		

<p><i>requested to indicate the revised sections as well as the new version No.</i></p>	<p>change in carbon stocks in the baseline is considered as zero, which is also conservative. Further, for reasons of conservativeness, all the biomass carbon stock is quantified and deducted in year 1 itself, as detailed in the ER calculation spread sheet. The revised PDD (version 2) has the detailed explanation of this in section B.7.2.</p>		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):B.7.2	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p><b>DOE Assessment #1</b></p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. The calculation of GHG removals by sink given in the section B.7.1 of the revised PDD is as per the steps given the methodology. Hence accepted.</p> <p>2.The change in the carbon stocks is conservatively deducted from the net GHG removals as evident from the table for “Total baseline carbon estimation and net baseline GHG removal in tCO2 equivalents” in the revised PDD, hence accepted</p> <p>CAR is closed.</p>		
<p><b>Conclusion</b></p> <p><i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the first periodic verification  <input type="checkbox"/> Additional action should be taken (finding remains open)  <input checked="" type="checkbox"/> The finding is closed         </p>		

<b>Finding</b>	<b>B6</b>		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p><b>Description of finding</b></p> <p><i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>1. In section B.7.2 of the PDD, the evidence for sources of information for all the parameters is not adequately given. Also the purpose of the data mentioned for all parameters is not clear. Please clarify.</p> <p>Associated checklist question(s): B.5.7.1 &amp; B.5.7.4</p>		
<p><b>Corrective Action #1</b></p> <p><i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i></p>	<p>1. The PDD has been revised and the source links of the parameters (evidences for the assumptions) are clearly given now.</p> <p>The purpose of the parameters is also given clearly in section B.7.2 of the revised PDD (version 2). The evidences for the same are also being submitted to the DOE.</p>		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):B.7.2	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p><b>DOE Assessment #1</b></p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. In the revised PDD section B.7.2, the evidence is submitted for all the parameters and where ever possible given as foot notes where ever applicable. The purpose of the data is given specifically for all the parameters in the revised PDD hence CAR is closed.</p>		
<b>Conclusion</b>	<input type="checkbox"/> To be checked during the first periodic verification		



Tick the appropriate checkbox	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed
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Finding	B7		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. Section B.7.3 is not in line with Section B.7.1 of the PDD. 2. The equations used and steps followed are not as per the applied methodology and applicable tools. 3. Some of the information sources mentioned are without reference. Kindly clarify. Associated checklist question(s): B.5.7.1 & B.5.8.4		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. Now section B.7.3 has been revised and all the calculations have been done as per the applied methodology and the details mentioned in section B.7.1 of the revised PDD. 2. The PDD has been revised as per the methodology and applicable tool, and inconsistencies have been rectified. 3. All the references have been mentioned clearly in the respective sections of the revised PDD.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.7.1 and B.7.3	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments(#2, #3, etc.) shall be added.</i>	1. In section B.7.3 of the revised PDD the calculations for net GHG removals is based on the equations as given in the applied methodology hence OK. 2. The calculations are based on the steps given in methodology and to the tools referred in. Hence accepted. 3. The information sources mentioned for the references values are clear Hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	B8		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1 The table in section B.8 of the PDD for monitoring parameters is not filled as per the guidelines 2. The parameters to calculate the sample plots are not mentioned. 3. The details of measurement methods, QA/QC procedures and purpose of the data are not clearly given.		

	<p>4. Sample size calculation is not traceable. Please explain.</p> <p>Please clarify.</p> <p>Associated checklist question(s): B.5.7.6, B.5.8.1, B.5.8.2, B.5.8.5, B.5.8.6 &amp; B.5.8.7</p>		
<p><b>Corrective Action #1</b></p> <p><i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i></p>	<p>1. Section B.8 of the PDD has been revised as per the guideline. Information such as ‘Source of Data’ has been added which clearly states the source. Other changes such as in QA/QC procedures, Purpose of data, Value(s) applied etc.</p> <p>2. Parameters to calculate the sample plots have now been provided in the section B.7.2 and B.8.1 of the PDD.</p> <p>3. QA/QC procedures, Purpose of data, Value(s) applied are now clearly given in the revised PDD.</p> <p>4. The calculations that follow the A/R Methodological tool “Calculation of the number of sample plots for measurements within A/R CDM project activities” version 2.1.0. is detailed in the revised PDD version 2..</p>		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.7.2 and B.8.2	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p><b>DOE Assessment #1</b></p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. Section B.8 of the PDD has been revised without altering the table structure given the PDD form for all the parameters. Hence accepted</p> <p>2. Parameters used to calculate the sample size is given in the revised PDD hence accepted.</p> <p>3. QA/QC procedures, Purpose of data, Value(s) applied for all the monitored parameters are now clearly given in the revised PDD. Hence OK</p> <p>4. The number of sample plots calculated is based on the A/R methodological tool “Calculation of the number of sample plots for measurements within A/R CDM project activities” version 2.1.0”. In section B.8.2 of the PDD the explanation is given transparently and the number of sample plots required for verification is calculated as 30. The calculation, which was submitted as a part of the ER calculation spread sheet are checked and found correct. Hence CAR is closed.</p>		
	<p>However during the technical review in version 2 of the PDD it was observed that paragraph 27 of the methodology is not applied, hence CAR is opened.</p>		
<p><b>Corrective Action #2</b></p> <p><i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is</i></p>	<p>The Paragraph 27 methodology is applied already in the PDD. The QA/QC plan is as per the SOP. However a line is added in the PDD stating that the SOP will be prepared as per the commonly accepted principles and practices of forest inventory and forest management in the host country.</p>		

requested to indicate the revised sections as well as the new version No.	<input checked="" type="checkbox"/>	Changes in PDD	Section(s): B.8.3	New version No.: 3
	<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>		The SOP prepared will be in line with the commonly accepted principles and practices of forest inventory and forest management in the host country, hence the project adheres to the Paragraph 27 of the methodology. Hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>		<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	B9			
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR	
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1 The organisational structure, QA/ QC plan and emergency preparedness are not mentioned in section B.8.3, 2. Appendix - 5 is referenced and information is not provided. Please clarify Associated checklist question(s): B.5.8.5			
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. Section B.8.3 has been revised and explained the management structure and emergency preparedness for the proposed small scale A/R CDM project activity. 2. There was a typo error. The details has been provided in the section b.8 of the PDD			
	<input checked="" type="checkbox"/>	Changes in PDD	Section(s): B.8.3	New version No.: 2
	<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. Section B.8.3 is provided with the management structure for monitoring, envisaged emergency preparedness plan for the project activity 2. The reference to the appendix -5 is deleted hence ok. CAR is closed.			
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

Finding	B10		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR



<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<div>1 In the baseline calculation sheets, the number sample plots and appropriation so attained is not traceable,</div> <div>2. The species specific default values are not used for specific gravity and the reference of the same is not used.</div> <div>3. The units, notations and equations used (same as per the methodology) are not mentioned.</div> <div>Associated checklist question(s): B.5.7.2, B.5.8.3 &amp; B.5.3.4</div>		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	<div>1. The baseline calculation sheet has been revised and linked with the appropriate sheets. The calculations are made traceable now.</div> <div>2. The calculations have been reviewed and where applicable species default values have been applied. The values have been sourced from peer reviewed sources, which has given the region specific or host country specific values, which have been properly referenced. In instances where such default values were not available, IPCC GPG LULUCF (2003) or other tier-1 data has been used. In instances where no default values were available, the wood density of a similar species has been used. This is explained in the revised PDD.</div> <div>3. The PDD and excel sheets have been revised. Units and equations as mentioned in the methodology are now presented in them.</div>		
	<input type="checkbox"/> Changes in PDD	Section(s):	New version No.:
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments(#2, #3, etc.) shall be added.</i>	<div>1. The baseline calculation sheet has been revised and typed in values are removed and are linked with the appropriate source/reference cells. The calculations are made transparent hence OK.</div> <div>2. The default values used are from either from peer reviewed sources, are based on the region specific or host country specific values, which proper references. The reason for choosing the same is clearly given in the revised PDD hence OK.</div> <div>3. The PDD and excel sheets have been revised with standard units and equations as mentioned in the methodology hence accepted.</div> <div>CAR is closed.</div>		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<div><input type="checkbox"/> To be checked during the first periodic verification</div> <div><input type="checkbox"/> Additional action should be taken (finding remains open)</div> <div><input checked="" type="checkbox"/> The finding is closed</div>		

Finding	B11
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Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1 In the Emission reduction calculation, explain how the increment in carbon stocks is calculated 2. Please clarify whether any exotic species is proposed to be planted in the project area. 3. The units, notations and equations used (same as per the methodology) are not mentioned. Clarify. 4. Some of the terms used in the emission reduction calculation sheets are not specific A/R CDM project. Clarify. 5. The parameter headings are not provided for traceability. Clarify. Associated checklist question(s): B.4.5 & B.5.7.6		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. An expert panel was constituted comprising senior forest officials, forest scientists and forestry experts to estimate the productivity of each planted tree species. A letter has been issued from the Forest department dated 25/09/2012 on Productivity Assessment of Species Planted in UPPFMPA project for A/R CDM Project Activity which has been used to calculate the annual increment of the species. The same is being provided to the DOE. 2. There is no any exotic or invasive species proposed to be planted in the project area. All the species planned for plantation have been detailed in the revised PDD. 3. The PDD and excel sheets have been revised and the units, notations and equations are made consistent with the applied methodology. 4. The ER sheet has been revised and any term inconsistent with the applied methodology has been revised. All steps are now made in line with the applied methodology. 5. Parameters have been clearly provided in the revised ER sheet.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.7.1 and b.7.3	New version No.: 2
	<input checked="" type="checkbox"/> Changes in XLS	Worksheet(s): ER sheet	New version No.: 2
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The productivity assessment is based on the expert panel recommendations, the members are experts in the field of forestry in the region as well as in the host country. The reference to the expert panel is given in the revised PDD. Hence accepted. 2. As no invasive species is proposed for planting, it is accepted 3. Standard units and methodology specific units are used hence OK. 4. The terms used in the excel calculation sheets are made in line with the methodology, hence OK 5. The proper headings are given for the parameter specific		

	calculations in the CER sheets to ensure transparency CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	B1		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. What is the basis for keeping the entire project area as one stratum? Clarify with evidences.  Associated checklist question(s): B.3.1		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. As per section A.3 of the PDD, the climate, land form and soil conditions are similar over the entire project area, hence all the sites under the project activity kept under one stratum. The reference links have been provided in the section A.3 of the PDD. As per section A.3 of the PDD, the climate, land form and soil conditions are similar over the entire project area, hence all the sites under the project activity kept under one stratum. The reference links have been provided in the section A.3 of the PDD. As explained earlier the edaphic conditions of the project area are similar to one another, and so there is no need for further stratification. All the land has been kept under one strata.  However for calculating the baseline carbon, the project area has been stratified based on the existing vegetation: lands with sparse vegetation and lands without vegetation. This allows accurate assessment and carbon stock. This stratification is not to be followed for the project scenario since all the land will have tree cover as per the design explained in the PDD		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):A.3	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The explanation provided in section B.4 is with reference to the baseline. For accounting the baseline the PP considered 2 stratum. However the entire project area is under similar geographic condition as the project area is within the district of Obra, thus further stratification is not required as for now. Hence CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	B2		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR



<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. In the baseline identification the information about the sampling applied is missing, please clarify. Associated checklist question(s): B.4.5.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. The PDD has now been revised and mentioned with the sampling applied for the baseline identification in the section B.4 of the PDD and the baseline calculation sheets submitted also gives the transparent calculation..		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): B.4	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The PP indeed took 21 sample plots, the sampling applied is well defined in the revised PDD and the baseline calculations sheets submitted are verified and found that the calculation procedures and calculations are correct. Hence CL is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

<b>Finding</b>	C1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. Please explain how the start date of the project is determined with proof. 2. Please provide proof for the operational life time of the project. 3. The length of the crediting period provided is not in line with filling guidelines. Associated checklist question(s): B.5.2.1, C.1.1, C.1.2 & C.1.3		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. Start date of the project activity is the date on which the first action on field was taken up, which was site preparation on CDM project areas in this case. An undertaking from the Divisional Forest Officer has been submitted regarding the start date. 2. The plantation is not planned to be harvested completely. So the operational lifetime is not applicable. However it will be more than 60 years, which will be the minimum time required for CDM project after renewing the crediting period twice. 3. The PDD has been revised and the length of the crediting period is mentioned in year and months (yy years and mm months) as per the filling guideline.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):Section C	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encom-</i>	1. The start date for A/R CDM project activity is the date of first action on the field which is the site preparation on 01/01/2012.		

<p>pass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</p>	<p>Hence OK</p> <p>2. The operational life time is mentioned as more than 60 years in the revised PDD, a requirement met for A/R CDM project hence OK.</p> <p>3. The length the crediting period is in yy mm format as per the PDD filling guidelines hence accepted</p> <p>CAR is closed</p>
<p><b>Conclusion</b> Tick the appropriate checkbox</p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Additional action should be taken (finding remains open)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

Finding	D1		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<p><b>Description of finding</b> Describe the finding in unambiguous style; address the context (e.g. section)</p>	<p>1 The evidences are missing for the information provided in section D and F of the PDD.</p> <p>2. The details about the impacts outside the boundary is missing, please clarify.</p> <p>Associated checklist question(s): E.1.1 &amp; E.1.2</p>		
<p><b>Corrective Action #1</b> This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</p>	<p>1. All the information has been taken from the PRA and working plan documents of the PA. The PDD (version 2) has also been revised to clearly reflect this. The same evidences are being provided to the DOE.</p> <p>2. The PDD has been revised and summarized the socio-economic impacts including impacts outside the project boundary of the project activity in section E.2 of the revised PDD</p>		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): D.1	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p><b>DOE Assessment #1</b> The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments(#2, #3, etc.) shall be added.</p>	<p>1. The evidences are clearly referenced in the revised PDD. Hence OK</p> <p>2. The Socio- economic impacts outside the project boundary is given in the section E.2 of the revised PDD. Hence CL is closed.</p> <p>However during the technical review the adequacy of stakeholder meeting conducted in 20<sup>th</sup> May 2014 is questioned as the start date of the project is two years before that is on 01-01-2012</p> <p>Hence CL is opened.</p>		
<p><b>Corrective Action #2</b> This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is</p>	<p>The section F.1 of the PDD revised with information about the stakeholder meetings held before the start of the meeting. The Stakeholder meeting conducted on 09-10-2013 is basically for the A/R CDM project immediately after PRA exercise to consolidate all the comments as the information from all stakeholders of all the 10 JFMCs are taken through questionnaire over period of twenty days.</p>		





<p><i>requested to indicate the revised sections as well as the new version No.</i></p>	<p>This is conducted specifically to establish the baseline and to prepare the A/R CDM PDD.</p> <p>Also the JFMCS were formed and the elections were conducted before 2012 after JFMCs rules formed by the UP forest department through various consultations.</p>		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): F.1	New version No.: 3
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<p><b>DOE Assessment #2</b></p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments(#2, #3, etc.) shall be added.</i></p>	<p>Section F.1 in the revised PDD is checked and found that a semi structured questionnaire as part of the PRA exercise during May 2014 was given to the get the status of land prior to 1989 to all the identified relevant stakeholders in all the JFMC areas over a period of time and then they are once again appraised of the benefits of the A/R CDM project activity in the area. On 09-10-2013 for the purpose of the A/R CDM project the PP conducted the stakeholder meeting with the presidents' secretaries and JFMC members of all the JFMC members to discuss particularly about the A/R CDM project within the JFMCs to consolidate the comments. This is evident from the PRA exercise report for the project.</p> <p>Prior to this the first meeting was conducted on 13-08-2010 among the officers from Uttar Pradesh Forest Department to finalise the modalities of JFMC formation and reforestation program. This is evident from the minutes of the meeting and attendance registers. Then on 30-05-2011 at Renukoot a stakeholder meeting and capacity building meeting with Local community from Vindhyaachal region (Renukoot and Obra divisions) was organised (members of the JFMCs were present). Before that the JFMC members are included with the voluntary participation and committees were formed, and the elections for president were conducted. This is inferred from the stakeholder interviews during site visit by validation team.</p> <p>After the formation of the JFMC committee, the committee meeting was conducted every month in each of the JFMCs to discuss about the various issues of the reforestation activities. This is evident from the records checked at the Parsi Tola JFMC during the site visit</p> <p>Thus the stakeholder meeting conducted on 13-07-2013 was adequate in the A/R CDM project context considering the chain of events and involvement of all the stakeholders during the start of the project.</p> <p>Hence CL is closed.</p>		
<p><b>Conclusion</b></p> <p><i>Tick the appropriate checkbox</i></p>	<div> <input type="checkbox"/> To be checked during the first periodic verification         </div> <div> <input type="checkbox"/> Additional action should be taken (finding remains open)         </div>		

<input checked="" type="checkbox"/> The finding is closed
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Finding	E1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. How the socio economic impact outside project boundary is taken into account for the project activity? Associated checklist question(s): E.1.2		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	1. The detailed socio-economic impact assessment has been provided in the revised PDD to explain the impacts of the project on the life of the members of the JFMCs.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s): E.2	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. The socio –economic impacts outside the project boundary is clearly given in section E.2 of the revised PDD. Hence CAR is closed		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	F1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1.The PDD template is not valid 2. New versions of tools are not referenced in the PDD. Kindly clarify.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	.1. The PDD has now been updated as per the latest Version 05.0 of CDM-SSC-AR-PDD-FORM 2. The PDD has now been updated and has referred the latest version of all the tools used for the project design development.		
	<input checked="" type="checkbox"/> Changes in PDD	Section(s):	New version No.: 2
	<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	.1. The PDD has now been updated as per the latest Version 05.0 of CDM-SSC-AR-PDD-FORM which is the latest and applicable form available in the UNFCCC website. 2. The latest tools related to the methodology and available in the UNFCCC website are now referred in the revised PDD. The list is enumerated <sup>/tool/</sup> in table 7.2 of this report. Hence CAR is closed.		



	However the during the technical review some formatting errors and minor information were requested.			
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	The spelling mistakes and formatting issues are corrected. The organic fertiliser applied is cow dung the information is provided in the revised PDD			
	<input checked="" type="checkbox"/>	Changes in PDD	Section(s): All	New version No.: 3
	<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The PP corrected all formatting mistakes and spelling mistakes identified by and the information about cow dung as organic fertiliser is given in the revised PDD. Hence CAR is closed.			
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			

## 5 VALIDATION ASSESSMENT SUMMARY

### 5.1 General Description of the A/R Project Activity

#### 5.1.1 Technology to be employed

The basic characteristics of the implemented plantation technology have been described in section 2.4 of this report. The PDD<sup>/PDD/</sup> addresses the project description in sections A.1 The same specifies the selected species and defines the present environmental conditions such as climate, hydrology, soils as well as the regional flora and fauna. The validation team has checked whether the given description is in line with the site visit findings and the CDM requirements. The project activity is the reforestation of degraded forest land in 10 JFMCs of Obra district of Uttar Pradesh state, India. Through growing of the trees the forest will capture carbon from the atmosphere and sequester it. The reforestation activity is proposed to be on 326.72 ha of degraded lands.

It proposed to plant twenty three species in the entire project area. The plantation is done on degraded land owned by forest department with little or no facilities of irrigation. The plantations started from January 2012 only are considered under the A/R CDM project. The project design has been carefully developed and implemented, including risk mitigation measures to ensure a successful implementation of the project.

Due care has been taken in the selection of trees and it has been verified that none of the planted trees belong to the category of Invasive Alien Species (IAS) or Genetically Modified Organism (GMO). Carbon pools in above- and below-ground biomass have been considered in this project activity in accordance with the applied methodology. Dead wood, litter and decomposed pools have not been considered for conservative reasons. Soil Organic Carbon is not considered because of the high costs involved to estimate the same and it is conservative. Based on the financial information provided by the project participants, no ODA contributes to the financing of the project. An undertaking from proponent<sup>/ODA/</sup> is taken for this purpose.

The project description in the PDD<sup>/PDD/</sup> is accurate w.r.t. plantation design, tree species, site preparation, age of planted trees. This was further ascertained during DOE onsite visit. However, certain clarifications were required on the management of forest (pruning, harvesting). CAR A2 was raised on the details of harvesting and it was observed that there is no harvesting cycle planned for the first 60 years. Rotation and re-plantation after end of coppice vigour etc and details regarding mechanism for the saplings to be used in replanting are not required.

Standard operation procedures<sup>/SOP/</sup> was checked which includes in detail procedure for the site selection and preparation, handling of planting stock and planting

operations and maintenance. The SOP includes provisions for protection of plantations, best time of transplanting, survival and growth of plantations.

### 5.1.2 Small Scale Projects

The proposed project activity is small-scale with the Sectoral Scope – 14, Afforestation and Reforestation. The project type is conversion of degraded forest land through plantations. The project activity complies with the thresholds for the small-scale A/R CDM project activities i.e. average annual net anthropogenic removals by sinks of GHGs is less than 16,000 t CO<sub>2</sub>e.

The UP forest department under its jurisdiction developing another 9 A/R CDM projects (under validation /Requesting registration stage). But the minimum distance between the JFMCs is more than 1 km as observed from the GIS data. Hence the proposed CDM project activity is not a part of a debundled large-scale A/R project activity, in accordance with the rules defined in appendix C of the annex to decision 6/CMP.1.

## 5.2 Duration of the A/R project activity

### 5.2.1 Starting date, Lifetime and Crediting Period

The starting date of the project activity as mentioned in the PDD<sup>/PDD/</sup> is 2012-01-01. This is the date on which site preparation started for the A/R CDM project. The evidence given for the project start date<sup>/SD/</sup> is in line with the definition of start date in the glossary of CDM terms<sup>/GLOS/</sup>.

The project lifetime is given as more than 60 years as no harvesting cycle is planned. Thus the years in of operational lifetime exceed the crediting period chosen of 20 years (renewable twice)

## 5.3 Project Baseline

### 5.3.1 Application of the Methodology

The PDD<sup>/PDD/</sup> applies AR-AMS0007: methodology version 03 *the title of the methodology* - “Afforestation and reforestation project activities implemented on lands other than wetlands”, Version 03”. The methodology is correct and version is valid from 04 Oct 2013 onwards<sup>4</sup> and applicable for requesting registration.

<sup>4</sup> <http://cdm.unfccc.int/methodologies/DB/J6ZHLX1C3AEMSZ52PWIII6D2AOJZUB>

## Justification of the applicability criteria of the applied methodology

SI.N o	Applicability criteria /meth/	Assessment of validation team
(a)	The land subject to the project activity does not fall in wetland category;	<p>As per the IPCC GPG LULUCF 2003<sup>5</sup>, wetlands are defined as lands that are covered or saturated by water for all or part of the year (e.g., peat land) and that does not fall into the forest land, crop land, grass land or settlements categories including reservoirs, natural rivers and lakes.</p> <p>The entire project area falls under Obra district of Uttar Pradesh state. The district website <a href="https://en.wikipedia.org/wiki/Obra,_Uttar_Pradesh">https://en.wikipedia.org/wiki/Obra,_Uttar_Pradesh</a> is checked and found that it lies in subtropical humid climatic zone. Also the project area does not fall under the Yamuna and Ganga doab eliminating the chances of wetland. The PRA exercise done by the PP and submitted to the validation team and inferred that the area is completely degraded without or with very minimal vegetation for ages.</p> <p>Hence this criterion is satisfied.</p>
(b)	<p>Soil disturbance attributable to the project activity does not cover more than 10 per cent of area<sup>6</sup> in each of the following types of land, when these lands are included within the project boundary</p> <p>a. Land containing organic soils as defined in "Annex A: Glossary" of the IPCC GPG LULUCF 2003;</p> <p>b. Land which, in the baseline, is subjected to land-use and management practices and receives inputs as listed in appendix 2 and</p>	<p>It proposed to have 100 pits with a length and breadth of 0.45 m X 0.45 m for the planting and 100 trenches of 3 m X 0.6 m. Thus the surface area for pitting will be 20.25 m<sup>2</sup> and for trenching is 180 m<sup>2</sup>. Thus total surface area disturbed is 200.25 m<sup>2</sup> which is less than 10% per hectare which is 1000 m<sup>2</sup> as per the methodology. Hence, this applicability condition has been fulfilled.</p> <p>The proposed project activity area is degraded land and is left fallow and no agriculture activity is being carried out in the selected area. This is verified from the PRA exercise carried out by the PP and also during the site visit interviews with the JFMC members and local elders.</p> <p>Thus the land in the baseline does not fall in the categories of grassland and cropland and methodology Appendix 2 and Appendix 3 are not applicable.</p>

<sup>5</sup> [http://www.ipccnggip.iges.or.jp/public/gpplulucf/gpplulucf\\_files/Glossary\\_Acronyms\\_BasicInfo/Glossary.pdf](http://www.ipccnggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Glossary_Acronyms_BasicInfo/Glossary.pdf)

<sup>6</sup> For example, digging pits of size 0.50 m x 0.50 m (length x width) at a spacing of 3 m x 3 m is equal to a coverage of 2.78 per cent; continuous ploughing of land is equal to a coverage of 100 per cent.



Sl.N o	Applicability criteria /meth/	Assessment of validation team
	appendix 3 to this methodology.	

The validation team concludes that the project activity meets all the applicability criteria of the applied methodology<sup>/meth/</sup>. No significant project or leakage emissions are expected in the project, other than those mentioned in the applied methodology.

### 5.3.2 Project Boundary

The key assumption of the applied methodology is that the most plausible baseline scenario of the small-scale A/R CDM project activity is continuation of the land-use prior to the implementation of the project activity.

The PRA exercise<sup>/PRA/</sup> show that the land, prior to implementation of the proposed project activity, and in December 1989 was waste land / degraded land which was not put to use. The land was not productive and the people in the area lack the technical, social as well as financial capacities to undertake any other activities on the unproductive barren lands by themselves. The PRA conducted for each JFMCs, also show that in the absence of the project activity, the land area would have remained barren i.e. the land-use prior to implementation of the project would have continued.

Accordingly, the baseline net GHG removals by sinks are assumed to be insignificant and are accounted for as zero

### 5.3.3 Baseline Identification

The identification of the baseline scenario has been carried out in line with the paragraph 14 of AR-AMS0007: "Afforestation and reforestation project activities implemented on lands other than wetlands", Version 03.0. As only feasible baseline scenario the continuation of the practice prior to the implementation of the project activity i.e. degradation of land was identified.

There was no requirement of identifying possible baseline scenarios as the same is already identified in this methodology as *status quo* which is for the present project activity continuation of degraded land. The information provided was cross checked first in a desk review, then during the site visit and finally by cross checking with other relevant information available. The sources quoted were also verified and found to be correct. This included examination of the PRA report<sup>/PRA/</sup> and other relevant third party and official documents which are publicly available and observations during the site visits.

Evidences of no natural regeneration taking place were observed during the site visit. The interviews confirmed that the lands have not supported natural regeneration. It has also been demonstrated by the barrier analysis that forestry activity without CDM

benefits is not possible. A barrier analysis has been carried out. It has been correctly concluded on the basis of the above mentioned validated facts, assumptions and calculations that the identified baseline would be remaining with degraded land. All the documents involved in the analyses have been submitted to the validation team. The baseline identification by the PP has been judged to be transparent, verifiable and true to the local conditions.

For identification of the baseline scenario the step wise approach from the applied methodology was used. The procedure used was of eligibility of land and mapping of historical vegetation and land use. The plausible baseline scenario of the small-scale A/R CDM project activity is continuation of land-use prior to the implementation of the project activity. The validation team based its assessment on literature review and its own sectoral and host country knowledge and through interviews with the local community. PP has shown that through satellite image data of 1989-1990 year the land parcels under the project were degraded land.

### 5.3.4 Land Eligibility

Following evidences were used by the DOE to assess eligibility of land as required by Procedures to demonstrate the eligibility of land for A/R CDM project activities AR Tool-19, Annex 25, EB 75:

1. Satellite imagery complemented by ground reference data: The Project participant has provided evidence in form of GIS based data that the land within the project boundary is eligible for an A/R CDM project activity. The Validation team interviewed the GIS expert<sup>/IM02/</sup> who has carried out the GIS assessment<sup>/LCA/</sup> of the project lands. GIS data was gathered in form of high resolution satellite imagery and was corrected against GPS data from ground. Detailed methodology is provided in the assessment report. The assessment shows that there was no area which could be categorised as forest at the time of project start and in December 1998.
2. Ground based surveys: Land use or land cover information from JFMC members during on site interview and also the declaration form the UP forest department that the land is degraded as per the government records are obtained and validation team concluded that the land is categorised as degraded barren lands for the past many years.
3. Participatory Rural Appraisal: The project participant has submitted a standard Participatory Rural Appraisal<sup>/PRA/</sup>. PRA infers that the land was a degraded land at the time of commencement of the project (2011) and twenty five years prior to the project start (1989). The validation team using its local and sectoral expertise confirmed that the PRA was conducted as practised in the host country.

The DOE concluded that:



- The land parcels did not contain forest at the time project start (Jan 2012)
- There was no vegetation on the land that could be classified as forest or have a potential to become forest
- The land was not temporarily unstocked, as a result of human intervention such as harvesting or natural causes.
- The project activity conforms to the requirement for reforestation project activities as the land areas were not forest on 31 December 1989.

Thus, land area included in the project boundary was assessed as eligible as per the Procedures to demonstrate the eligibility of land for A/R CDM project activities (version 1; EB35/Annex 18).

### 5.3.5 Algorithms and formulae used to determine emission reductions

According to approved methodology AR-AMS0007, ex-ante baseline estimations are not applicable and ex-ante baseline estimations are equal to zero. Calculations for actual GHG gas removals were correctly applied accordingly to the approved methodology.

#### Ex ante estimation of net anthropogenic GHG removals by sinks:

The net anthropogenic GHG removals by sinks is the actual net GHG removals by sinks minus the baseline net GHG removals by sinks minus leakage. This is as per the equation 5 of the methodology and PP correctly applied the equation.

The net anthropogenic GHG removals by sinks is calculated as follows:

$$\Delta C_{AR-CDM,t} = \Delta C_{ACTUAL,t} - \Delta C_{BSL,t} - LK_t$$

Where:

$\Delta C_{AR-CDM,t}$	=	Net anthropogenic GHG removals by sinks, in year $t$ , t CO <sub>2</sub> -e
$\Delta C_{ACTUAL,t}$	=	Actual net GHG removals by sinks, in year $t$ , t CO <sub>2</sub> -e
$\Delta C_{BSL,t}$	=	Baseline net GHG removals by sinks, in year $t$ , t CO <sub>2</sub> -e
$LK_t$	=	GHG emissions due to leakage, in year $t$ , t CO <sub>2</sub> -e

#### A) The actual net GHG removals by sinks is calculated as follows:

$$\Delta C_{ACTUAL,t} = \Delta C_{P,t} - GHG_{E,t}$$

Where:

$\Delta C_{ACTUAL,t}$  = Actual net GHG removals by sinks, in year  $t$ ; t CO<sub>2</sub>-e

$\Delta C_{P,t}$  = Change in the carbon stocks in project, occurring in the selected carbon pools, in year  $t$ ; t CO<sub>2</sub>-e

$GHG_{E,t}$  = Increase in non-CO<sub>2</sub> GHG emissions within the project boundary as a result of the implementation of the A/R CDM project activity, in year  $t$ , as calculated in the tool "Estimation of non-CO<sub>2</sub> GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity"; t CO<sub>2</sub>-e

The above equation applied as per the equation (2) of the methodology.

Change in the carbon stocks in project, occurring in the selected carbon pools, in year  $t$  is calculated as follows:

$$\Delta C_{P,t} = \Delta C_{TREE\_PROJ,t} + \Delta C_{SHRUB\_PROJ,t} + \Delta C_{DW\_PROJ,t} + \Delta C_{LI\_PROJ,t} + \Delta SOC_{AL,t}$$

Where:

$\Delta C_{P,t}$  = Change in the carbon stocks in project, occurring in the selected carbon pools, in year  $t$ ; t CO<sub>2</sub>-e

$\Delta C_{TREE\_PROJ,t}$  = Change in carbon stock in tree biomass in project in year  $t$ , as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO<sub>2</sub>-e

$\Delta C_{SHRUB\_PROJ,t}$  = Change in carbon stock in shrub biomass in project in year  $t$ , as estimated in the tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; t CO<sub>2</sub>-e

$\Delta C_{DW\_PROJ,t}$  = Change in carbon stock in dead-wood biomass in project in year  $t$ , as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO<sub>2</sub>-e

$\Delta C_{LI\_PROJ,t}$  = Change in carbon stock in litter biomass in project in year  $t$ , as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; t CO<sub>2</sub>-e

$\Delta SOC_{AL,t}$  = Change in carbon stock in SOC in project, in year  $t$ , as estimated in the tool “Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities”;  
t CO<sub>2</sub>-e

The PP used the above as per the equation (3) given in the methodology.

In the estimation of the  $\Delta C_{TREE\_PROJ,t}$  the PP used the equation 12 of the AR TOOL 14 used a single stratification as the biomass is homogeneous and the project area is not climatically varying from one JFMC to the other.

The PP used the IPCC values of BEF Biomass expansion factor, table 3A.1.10 of the IPCC Good Practice Guidance for LULUCF which is 3.4 and the value of root shoot ratio from GPG LULUCF table no. 3A.1.8 as no national values are present. Hence this is acceptable as per the AR Tool 14. The references for the value of  $v_{tree}$  and wood density for the species is given in the CER calculation sheets. The appropriate species specific volume equations are presented in the CER sheets and the reference is also indicated.

Thus the calculation of  $\Delta C_{TREE\_PROJ,t}$  presented is as per the methodology and tools specified.

The value for  $\Delta C_{SHRUB\_PROJ,t}$  is taken as zero as per paragraph 12 and 13 of the AR Tool 14. Also as the dead wood and litter from the biomass is expected to be zero due to the degraded conditions of the project lands. Hence  $\Delta C_{DW\_PROJ,t}$  and  $\Delta C_{LI\_PROJ,t}$  is considered as zero.

Thus  $\Delta C_{P,t} = \Delta C_{TREE\_PROJ,t}$

## B) Baseline net greenhouse gas removals by sinks;

$$\Delta C_{BSL,t} = \Delta C_{TREE\_BSL,t} + \Delta C_{SHRUB\_BSL,T} + \Delta C_{DW\_BSL,t} + \Delta C_{LI\_BSL,T}$$

Where,

$\Delta C_{BSL,t}$  Baseline net GHG removals by sinks in year  $t$ ; t CO<sub>2</sub>-e

$\Delta C_{TREE\_BSL,t}$  Change in carbon stock in baseline tree biomass within the project boundary in year  $t$ , as estimated in the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities”; tCO<sub>2</sub>-e

$\Delta C_{SHRUB\_BSL,T}$  Change in carbon stock in baseline shrub biomass within the project boundary, in year  $t$ , as estimated in the tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM

$\Delta C_{DW\_BSL,t}$	project activities"; tCO <sub>2</sub> -e Change in carbon stock in baseline dead-wood biomass within the project boundary, in year $t$ , as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; tCO <sub>2</sub> -e
$\Delta C_{LI\_BSL,T}$	Change in carbon stock in baseline litter biomass within the project boundary, in year $t$ , as estimated in the tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities"; tCO <sub>2</sub> -e

The project area is degraded lands and the carbon stocks in the baseline trees and shrubs are going to change negatively. So, the change in carbon stock is negative. The PP applied § 12 of A/R Methodological tool AR-TOOL 14 "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"; version 04.2 to conclude that the changes in carbon stocks in trees in the baseline as zero.

Similarly applying § 13 of the same tool, the changes in carbon stock in shrubs is considered as zero.

Also, for continuous removal of the woody biomass and leaves, there is hardly any woody litter available in the project area in the baseline scenario.

Hence,

$$\begin{aligned}\Delta C_{TREE\_BSL,t} &= 0 \\ \Delta C_{SHRUB\_BSL,T} &= 0 \\ \Delta C_{DW\_BSL,t} &= 0 \\ \Delta C_{LI\_BSL,T} &= 0\end{aligned}$$

Therefore, Baseline net GHG removals by sinks

$$\Delta C_{BSL,t} = 0$$

The above calculation is based on the equation (1) given in the methodology and during the site visit interviews the site conditions were checked as well. However, the pre project tree and shrub biomass is deducted from the emission reduction, which is 5192 tCO<sub>2</sub>-e

### C) Leakage:

Leakage  $LK_t$  is due to the displacement of agricultural activities in year  $t$ , as calculated in the tool "Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity"; in t CO<sub>2</sub>-e. The PP considered the following

#### 1. Agricultural activities

2. Crop cultivation activities
3. Grazing activities

But due to the degraded and hilly terrain the possibility of Agricultural and crop cultivation is considered as nil. But the PRA exercise conducted estimate 77% of fodder requirement is met through the lands owned by farmers themselves. Also as part of UPPFMPAP program, UP Forest Department is raising fodder and fuel plantations since 2009 in the adjoining forest lands as well as other JFM village forest areas in order to fulfil the requirements of fuelwood and fodder. Thus displacement of grazing activities due to this project implementation will not happen. This is also verified during the site visit. Hence Leakage  $LK_t$  is considered as zero.

The burning activities are neglected as per the methodology and thus the value of  $GHG_{E,t}$  is taken as zero.

Thus for the whole 326.72 hectare of the project area it is estimated that the net anthropogenic GHG removals by sinks is 5,571 tCO<sub>2</sub>e per annum and considering the plantation schedule and the baseline removals the net anthropogenic GHG removals by sinks for the 20 years period is 111,428 tCO<sub>2</sub>e.

The calculations presented in the CER sheets can be reproduced and traceable and it is in line with the methodology and tools specified.

## 5.4 Additionality Determination

### 5.4.1 Consideration of CDM in decision making (if project start before validation)

The Start date of the project activity is 01-01-2012, which is the date on which the land preparation activities started. An undertaking from the DFO and the prior consideration forms are referred to this regard. Thus the start date considered is as per CDM glossary of terms as this is the first date on which the actual work on the project started.

The project activity start is after 02-08-2008 so the PP intimated the UNFCCC and DNA of the host country on 29-06-2012 and 27-06-2012 respectively which is within 180 days from the project start date as per observed from the UNFCCC web site and mail communication between PP to NCDMA. Thus the Prior consideration for this project is in line with VVS.

### 5.4.2 Alternatives

The baseline is defined by the methodology and hence alternative selection is not applicable for this project activity.

### 5.4.3 Investment analysis

Investment analysis is not used to demonstrate the additionality.

### 5.4.4 Barrier analysis

The PP demonstrated the additionality as per Appendix A paragraph (a) and (g) of the applied methodology.

The following barriers due to local ecological conditions are demonstrated.

1. Degraded Soil: The PRA exercise conducted and submitted by the PP is referred in this regard and the project area is degraded for the last 25 years. Also during the on-site interview with the local persons and JFMC members it was informed that the land was plain for more than 3 decades.
2. Unfavourable Environmental conditions: Obra has a humid subtropical hot summer climate that is mild with dry winters, hot humid summers and moderate seasonality, <http://www.allahabad.climatemps.com/#ixzz3U9lqGCj9> thus summers are prone to forest fires and the precipitation is also less in this area. Also the district map is checked and there is major rivers flowing near to the project area. Hence drought is predominant in the project area.
3. Pervasive opportunistic species: During the site visit the land near to the project area and some parcels of the project area is highly inundated with the pervasive species like Van tulsi and Lantana camara even Parthenium weeds. These species will affect the survival rate of the plantations which requires extra care and investment. The following literatures are reviewed to substantiate the same
  - A) Applied Ecology and Environmental Research 9(3): Page 253-264 the article on "LANTANA CAMARA L. Invasion and impact on herb layer diversity and soil properties in a dry deciduous forest of India by Sharma, G.P. and Raghubanshi, A.S." and
  - B) Science Direct, Forest Ecology and Management 186 (2003) 61–71, article on Tree species composition, dispersion and diversity along a disturbance gradient in a dry tropical forest region of India by R. Sagar, A.S. Raghubanshi, J.S. Singh.
  - C) Environmental Conservation, / Volume / Issue 01 / March 2004, pp 55-62 article on Local plant species depletion in a tropical dry deciduous forest of northern India by R. Sagar & J.S. Singh
  - D) International Society for Tropical Ecology ISSN 0564-3295 article on Effect of disturbance, habitat fragmentation and alien invasive plants on

floral diversity in dry tropical forests of Vindhyan highland: a review by A.S. Raghubanshi & Anshuman Tripathi

The other barrier presented in the PDD is Barrier due to social conditions which are

- (i) Widespread Illegal Practices: The demand for fuel wood, timber and fodder is very high in the region. This is evident from the following web link <http://indiatoday.intoday.in/story/uttar-pradesh-forest-department-lays-down-strict-rules-but-has-no-means-to-enforce-them/1/330171.html> (accessed as on 15-11-2015) that the illegal practices are predominant in the region. Also the following literature Joint Forest management :Policy , practices and prospects by Aravind Khare and others in collaboration with WWF-India and IIED United kingdom, in the year 2000, (page 32 section 2.4.4 fodder) states that the grazing takes place in 83% of the forest land in the state of Uttar Pradesh.
- (ii) Investment barriers other than economic/financial barriers: During the site visit interview, it was evident that the Loan by JICA for reforesting the degraded land was sanctioned along with the consideration of CDM revenues. Secondly the history of Uttar Pradesh forestry is referred from the following web link <http://upforest.gov.in/StaticPages/History2.aspx> for the progress of forestry activities but still the targets are not achieved.

All the stated barriers are found real and it was confirmed that the barriers prevent the implementation of the project activity but not the implementation of the baseline scenario. Based on the aforesaid approach, the validation team confirms that the documentation provided is appropriate for this project activity. The project is considered additional as degraded lands are reforested which otherwise would have remained degraded lands..

Thus the additionality of the project is proved as per the methodological requirements given in appendix 1.

#### **5.4.5 Common practice analysis**

Not applicable as it is a small scale project.

### **5.5 Monitoring Plan**

The monitoring plan covers the following parameters have to be monitored with respect to the project boundary as per the tools used in the methodology.

#### **1. Area of stratum i :**



The area of each discrete parcel of land will be calculated using software installed in the personal computer by taking the position and co-ordinates of the each parcel of land, and saved tracks will be feed into the software to estimate the area. The cumulative area of the land parcels will give the total area of the project activity. The land area will be measured every five years from the start of the project activity.

## **2. Diameter at breast height of tree DBH:**

The diameter of the tree is measured as per SOP at breast height of 1.37 m. The procedure shall follow the SOP developed.

## **3. Height of the tree H**

The height of the tree is measured using Ravi Altimeter and for all those trees where DBH is measured in the sample plot.

## **4. Number of Baseline Trees $B_{trees}$**

The number trees in the sample plot will be counted and the counted trees will be recorded as per the SOP and every five years it will be monitored.

## **5. Total number of possible sample plots within the project boundary N**

This is calculated using the total project area divided by the size of the each sample plot which is 0.05 Ha. This is in line with the tool for “calculation of the number of sample plots for measurements within A/R CDM project activities” version 02.1.0. This is monitored at the starting of the verification.

## **6. Relative weight of the area of stratum i ( $w_i$ )**

This parameter is also calculated based the area of the single stratum (here it is entire JFMC) to the total area of the project. This is in line with the tool for “calculation of the number of sample plots for measurements within A/R CDM project activities” version 02.1.0. This is monitored at the starting of the verification.

## **7. Variance of tree biomass per ha in stratum I ( $si^2$ )**

Approximate value of the standard deviation of biomass stock in each stratum is either known from existing data related to the project area or existing data related to a similar area, or is estimated from a preliminary sample is taken for the variance.\

Above parameters listed 1 to 4 are required in the tree biomass estimation and parameters listed 5 to 7 are required in the estimation of the number of sample plots. Thus the parameters monitored are in line with the methodology and the tools used.

Also the project boundary will be monitored during the verification using GPS. PP has mentioned in the PDD<sup>/PDD/</sup> that any changes in the project boundary will be accounted for in all calculations of actual net GHG removals by sinks. Quality

Assurance / Quality Control plan, including field measurements, data collection verification, data entry and archiving is given as an integral part of the monitoring plan of the proposed A/R CDM project activity, to ensure the integrity of data collected.

Also the due the small scale of the project activity the long term Certificate of Emission Reduction (ICER) is not a viable option for the project proponents, as it is not possible to ensure supply of alternate credits if the carbon sequestered under the project is lost due to accidental fire or other threats that forests are exposed to. Therefore, the non-permanence of carbon sequestration in this proposed A/R CDM project shall be addressed by the issuances of temporary Certificates of Emission Reductions (tCERs).

As per §9 of the applied methodology and the tool "Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity" (version 4.0.0) the pre and post project activities does not involve in the burning of biomass or forest fires, or usage of fire for site preparation or usage of fire to clear land of harvest residue prior to replanting of land. Considering the degraded land prior to the project it is negligible. Hence project emissions are not required to be monitored.

As per applicability conditions of the methodology and as per the tool to "Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity", version 2.0, grazing is the only activity envisaged for the project. However as discussed in the section B.5.3.5 as a part of UPPFMPAP program, UP Forest Department is raising fodder and fuel plantations since 2009 in the adjoining forest lands as well as other JFM village forest areas in order to fulfil the requirements of fuelwood and fodder. Thus displacement of grazing activities due to this project implementation will not happen. Also the JFMC areas are fenced to protect grazing of stray animals which is observed verified during the site visit. However the PP will monitor the leakage if any.

### **Sample Plot Calculation**

The sampling design is based on the tool for "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities; (Version 04.2) and further referred with tool for "Calculation of the number of sample plots for measurements within AR CDM project activities"; (Version 02.1.0.)

Based on the above tools the number of sample plots estimated for the first verification is 30. As per the tool in the first iteration itself the number of sample plots is more than or equal to 30 hence the sample plots estimated is adequate as per the paragraph 11 of the tool for "Calculation of the number of sample plots for measurements within AR CDM project activities".

Due care is taken to distribute the sample plots for each stratum as per paragraph 17 of the above tool. The same is described in the section B.8 of the PDD. The sample

points will be located randomly to trace the sample plot as per the SOP. Thus calculation of sample is in line with the tool. The SOP prepared will be as per the commonly accepted principles and practices of forest inventory and forest management in the host country are implemented. Hence the project activity is in line with paragraph 27 of the methodology.

Thus based on the above assessment the Validation team confirms that the sampling procedures i.e, the sampling design for monitoring the changes in carbon stocks of above ground biomass and below ground biomass is adopted from AR-TOOL 14, version 04.2 and methodological tool – Calculation of the number of sample plots for measurements within A/R CDM project activities“, version 02.1.0 and monitoring plan adopted to estimate the actual emission reduction can be implemented by PP as per VVS and the accuracy level achieved will be well within limits prescribed and QA/QC procedure is well defined and found to be acceptable. The sampling design, the procedures for the data measurement and the sample plot implementation is well defined adequately with minimal sampling errors. The sample plot selection approach is considered to follow best forest practice.

## 5.6 Crediting Period

The project choice of the crediting period is renewable for every 20 years and it is explicitly given in the PDD<sup>PDD/</sup>. For A/R CDM projects the start date of the crediting period is the start date of the project activity.

## 5.7 Environmental Impacts

The proposed project activity does not require EIA as per the host country legal requirements. The DOE confirmed the same from EIA notification and its updates given by MoEFCC under the Environment Protection Act 1986. The following link is checked for the purpose <http://envfor.nic.in/legis/eia/eia-2006.htm> The project activity leads to the establishment of 326.72 ha of forests on degraded land. However to cater the negative risk the application of pesticides or chemical fertilisers is forbidden by the PP in the project area. Secondly the fire risks are minimised by giving training and awareness about the causes of fire and protecting the forest from fire to the JFMC members This evidenced in the JFMC meeting records.

Socio Economic Impacts and its assessment: The Project is implemented by the UP forest department along with the JFMC members. The JFMC Members are mainly comprised for families from poor families and marginalised Farmers with very less land holding capacity and agricultural labours. Thus the project benefits the poor from low income communities.

The project enhances the employment potential of the JFMC members, thereby income generation during the initial years and later on additional income

when they go for the value addition of the Non timber forest products like fruits. The project will also give adequate fuel wood through by collecting the dead and fallen twigs and increase in fodder supply (cut and carry). Thus the time spent on collecting the same will be reduced. This was evidenced during the site visit interviews. More than that it enhances the women empowerment as women representation in the JFMC committee is more than 33%.

Thus the socio economic impacts of this project activity are positive. Also the negative impacts are very less, since in the JFMC committee; the secretary is from the forest department unsustainable management is eliminated.

## **5.8 Comments by Local Stakeholders**

The PP has identified Villagers and farmers, local village panchayat representatives, NGO representatives, JFMC members and forest department personal as local stakeholders. As a part of the PRA exercise conducted by TERI, a separate meeting was conducted in each of the 10 JFMCs of the project during October 2013.

At first semi structured questionnaire as part of the PRA exercise during October 2013 was given to the get the status of land prior to 1989 and then stakeholders are appraised of the benefits of the A/R CDM project activity in the area. On 09-10-2013 for the purpose of the A/R CDM project the PP conducted a stakeholder meeting with the presidents' secretaries and JFMC members of all the JFMC members to discuss particularly about the A/R CDM project within the JFMCs and to consolidate the comments as well as to establish the baseline. This is evident from the PRA exercise report for the project.

Prior to this the first meeting was conducted on 13-08-2010 among the officers from Uttar Pradesh Forest Department to finalise the modalities of JFMC formation and reforestation program. This is evident from the minutes of the meeting and attendance registers. Then on 30-05-2011 at Renukoot (for Obra, and Renukoot divisions) a stakeholder and capacity building meeting with local community was organised (members of the JFMCs were present). Before that the JFMC members are included with the voluntary participation and committees were formed, and the elections for president were conducted. This is inferred from the stakeholder interviews during site visit by validation team.

After the formation of the JFMC committee, the committee meeting was conducted every month in each of the JFMCs to discuss about the various issues of the reforestation activities. This is evident from the records checked at the Parsi Tola JFMC during the site visit.

Thus the local stakeholders are well aware of the project and there were no adverse comments received for the project. All the comments received were addressed. Thus

the validation team concluded that the local stakeholder consultation process is adequate for the project activity.

## **5.9 Participation**

### **5.9.1 Project Participants**

Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh, India is the project participant from the host party, which is a private entity and it has obtained the Letter of Approval i.e., the Host Country Approval (HCA) from MoEF, Government of India for the proposed project activity.

The host party Project Participant's name is consistent in the PDD and the HCA issued by the DNA of India. Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh, India is the Project Participant for the CDM project activity "Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India" without any specifications.

### **5.9.2 LOA**

The National Clean Development Mechanism Authority (NCDMA), Ministry of Environment and Forests (MoEF), Government of India, is the Designated National Authority (DNA). Host Country Letter of Approval (HCA) bearing number No. 4/17/2014-CCC dated 11 February 2014. from the MoEF, DNA, Government of India (GOI)- the Host Country, has approved the project activity "Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India".

The PP submitted the HCA received from DNA of India to the DoE. The authenticity is verified from the submitted HCA and the NCDMA website is also checked for the purpose. Also it reveals the following

- The Party (India) is a Party to the Kyoto Protocol and party has ratified the Kyoto protocol in August 2002;
- Participation is voluntary;
- It refers to the precise proposed CDM project activity title "Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India" in the PDD being submitted for registration.
- It also refers that the proposed CDM project activity has been developed or implemented by low-income communities and individuals.

### **5.9.3 MoC**

The MOC is signed by Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh, India represented by Mr. Brijesh Chandra Tiwari primary authorised

signatory and Mr. Vasu Mitra Arora as the alternate authorised signatory dated 12-02-2015.

The MOC is received from UP forest department who had the contractual agreement with the DOE for Validation.

Also the written mail communication from the PP was obtained by the validation team and it states that all corporate and personal details, including specimen signatures, are valid and accurate.

Thus the validation team confirms the authenticity of the MOC

Also the latest version 02.1 of the form (F-CDM-MOC) has been used and annex 1 of the MoC is correctly completed

The project participants' authorized signatories signing the MoC are also listed in Annex 1 of the MoC and it is consistent with information provided in annex -1 of the PDD.

## **5.10 PDD editorial Aspects**

The PDD has been prepared in the approved format project design document form for small-scale afforestation and reforestation CDM project activities (Version 05.0) (CDM-SSC-AR-PDD-FORM) and completed in accordance with the Attachment "Instructions for filling out the project design document form for small-scale afforestation and reforestation CDM project activities".



## 6 VALIDATION OPINION

Divisional Forest Officer (DFO), Obra Forest Division, Uttar Pradesh has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the project: "Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India." with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board

In the course of the pre-validation 18 Corrective Action Requests (CARs) and 4 Clarification Requests (CLs) were raised and successfully closed.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria (India) and all relevant UNFCCC requirements for CDM. Further the project activity is in compliance with the requirements set up by the applied approved CDM methodology AR-AMS0007 Version 03.0 Project activity approval have been obtained from DNA of India vide the Letter of Approval (HCA) no 4/17/2014–CCC dated 11 February 2014.
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission removals of 111,428 t CO<sub>2</sub>e are most likely to be achieved within the (1st renewable) crediting period.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.

Coimbatore, 24-11-2015



G Ezhilarasu.

TÜV NORD JI/CDM CP

Validation Team Leader

Essen, 24-11-2015



Alexandra Nebel

TÜV NORD JI/CDM CP

Final Approval



## 7 REFERENCES

**Table 7-1:** Documents provided by the project participant

Reference	Document
<b>/GIS/</b>	GIS based maps for the project activity for the year 1989 and 2011.
<b>/HCA/</b>	Host Country Approval from the DNA of India no 4/17/2014–CCC dated 11 February 2014.
<b>/KML/</b>	Shape files for the project activity, depicting the project boundary
<b>/MOC/</b>	Modalities of Communication for the titled project from the client dated 12-02-2015.
<b>/PDD/</b>	<p>Draft Project Design Document named “Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India.” hosted from 19-06-2014 – 18-06-2014</p> <p>Project Design Document named “Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India. Version 2 dated 25-07-2015</p> <p>Project Design Document named “Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India. Version 3 dated 22-11-2015</p>
<b>/PRA/</b>	<p>Report on Stakeholder Consultation Meeting for AR-CDM Project in Obra Forest Division Submitted to Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project (UPPFMPAP) by TERI – PRA exercise dated 09-10-2013</p> <p>Records for Stakeholder meeting with Top Uttar Pradesh forest department officers on 11-08-2010 at Lucknow, with agenda, meeting attendance and Minutes.</p> <p>Records for Stakeholder meeting with Local community of Vindhyachal region at Mirzapur on 01-06-2011, with agenda, meeting attendance and Minutes.</p> <p>Monthly meeting records and attendance for JFMC meeting of the JFMC Parsi Tola.</p>

Reference	Document
<b>/prod/</b>	Productivity figures for the species planted in the AR CDM project dated 25-09-2012 by UPFFMPAP.
<b>/rules/</b>	JFMC rules prepared by UPFD, dated 28-12-2002 and 26-11-2010, Hindi version and its English translation. (Land rights evidence)
<b>/SD/</b>	Undertaking from the DFO, Obra division stating the start date as 01-01-2012, dated 21-11-2014.
<b>/SOP/</b>	Standard operating Procedures
<b>/VOL/</b>	Volume equations for forests of India, Nepal and Bhutan by FSI, MoEF, 1996. and Indian state of forest report 2011 Annexure 2.
<b>/XLS/</b>	Emission reduction calculation spreadsheet and baseline calculation sheets corresponding to the draft PDD and Final PDD.

**Table 7-2:** Background investigation and assessment documents

Reference	Document
<b>/meth/</b>	AR-AMS0007 Version 03.0: "Afforestation and reforestation project activities implemented on lands other than wetlands"
<b>/CPM/</b>	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
<b>/IPCC/</b>	<ul style="list-style-type: none"> <li>IPCC Good Practice Guidance &amp; Uncertainty Management in National Greenhouse Gas Inventories, 2000</li> <li>Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual</li> </ul>
<b>/KP/</b>	Kyoto Protocol (1997)
<b>/MA/</b>	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
<b>/PDD-T/</b>	Project Design Document Form (F-CDM_PDD) - Version 5.0
<b>/Tools/</b>	<p>Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities Version 4.2, EB 85 annex 22.</p> <p>Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities Version 3.1, EB 85 annex 23.</p> <p>Demonstration of eligibility of lands for A/R CDM project activities Version</p>

Reference	Document
	<p>2.0, EB 75 annex 25.</p> <p>Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities Version 1.1.0, EB 60 annex 12.</p> <p>Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity Version 4.0.0, EB 65 annex 31.</p> <p>Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity Version 2.0, EB 75 annex 28.</p> <p>Calculation of the number of sample plots for measurements within A/R CDM project activities Version 2.1.0, EB 58 annex 15.</p>
<b>/VVS/</b>	CDM Validation and Verification Standard (Version 07.0)

**Table 7-3:** Websites used

Reference	Link	Organisation
<b>/dna/</b>	<a href="http://www.moef.nic.in">www.moef.nic.in</a>	Ministry of Environment and forest, Government of India
<b>/UPFD/</b>	<a href="http://forest.up.nic.in/">http://forest.up.nic.in/</a>	Uttar Pradesh forest Department.
<b>/cd4cdm/</b>	<a href="http://www.cd4cdm.org">www.cd4cdm.org</a>	UNEP Riso Centre
<b>/ipcc/</b>	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	IPCC publications
<b>/unfccc/</b>	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	UNFCCC

**Table 7-4:** List of interviewed persons

Reference	Mol <sup>1</sup>		Name	Organisation / Function
<b>/IM01/</b>	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	B. C Tiwari,	JICA Project - UP/ Project Director M& E
<b>/IM01/</b>	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Dr. P P Verma	DMU/ DFO / Obra
<b>/IM02/</b>	V/T/E	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	A S Ashwin	IORA/ Senior Manager

Reference	Mol <sup>1</sup>		Name	Organisation / Function
/IM02/	T/E	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	Zainab Hasan	IORA/ Project Manager
/IM02/	T/E	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Suresh Chauhan	TERI / Fellow and Area Convener Forestry and Biodiversity Group Climate Change Division
/IM02/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Nirbhoy Bhatnagar	TERI / Research Associate.
/IM02/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Vivek Ratan	TERI / GIS Consultant
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	S N Pandey	UPFD Secretary / Parsi Tola JFMC
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Bhagwandas	President / Parsi Tola JFMC
/IM03/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	Shagodari	Women Member / Parsi Tola JFMC
/IM03/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	Chandravati	Women FUG Member / Parsi Tola
/IM03/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	Babitha	Women FUG Member / Parsi Tola
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Ramjathan	Guard Watcher / Parsi Tola JFMC.
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Motilal	Guard Watcher / Parsi Tola JFMC.

<sup>1)</sup> Means of Interview: (Telephone, E-Mail, Visit)

# ANNEX

- A1:** Validation Protocol
- A2:** Assessment of Applicability Criteria
- A3:** Assessment of Baseline Identification
- A4:** Assessment of Financial Parameters
- A5:** Assessment of Barrier analysis
- A6:** Outcome of the GSCP
- A7:** Statement of competence of involved Personnel

## ANNEX 1: VALIDATION PROTOCOL

**Table A-1: Requirements Checklist**

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<b>A. General Description of Project Activity</b>				
<b>A.1. Technology to be employed</b> <i>Validation of project technology focuses on the project engineering, choice of technology and competence/maintenance needs. The DOE should ensure that environmentally safe and sound technology and know-how is used.</i>				
<b>A.1.1. Does the PDD contain a clear, accurate and complete project description?</b> (VVS, §§ 65, 70) <i>The PDD shall contain a clear description of the project activity which provides the reader with a clear understanding of the precise nature of the project activity and the technical aspects of its implementation.</i> <i>Pl. consider esp. chapters A.1, A.3 (in case of LSC PDD) for assessment.</i> <i>§69 (a) Describe the process undertaken to validate the accuracy</i>	/PDD/ /IM01/ /IM02/ /IM03/	<i>Description:</i> The project activity involves plantations over 326.72 hectares of waste degraded land in 10 JFMCs of Obra District <i>Validator's action:</i> The review of PDD and Site visit interviews <i>Conclusion:</i> The description is not accurate and hence CAR A2, CAR A3 CAR A4 and CL A1 are raised	CAR A2  CAR A3  CAR A4  CL A1	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><i>and completeness of the project description.</i></p> <p>§69 (b) Contain the DOE's opinion on the accuracy and completeness of the project description.</p> <p>§69 (c) provide a justification in case no site visit has been carried out (also for single sites that belong to a project with more than one site and where no site visit has been done.)</p>				
<p>A.1.2. Is this description in accordance with the real situation or (in case of greenfield projects) is it most likely that the project will be implemented acc to the project description?</p>	<p>/PDD/ /IM01/ /IM02/ /PRA/</p>	<p><i>Description:</i></p> <p>The project is planting of different tree species in the degraded land area.</p> <p><i>Validator's action:</i></p> <p>PDD is checked along with the GIS maps and site visit interviews</p> <p><i>Conclusion:</i></p> <p>Thus it is confirmed that the project implementation will be according to the project description</p>	OK	OK
<p>A.1.3. In case the project involves alteration of the existing installation or process, is a clear description available regarding the differences between the project and the pre-project situation?</p> <p>(VVS, § 69)</p> <p><i>Describe the steps taken to validate this issue.</i></p>	<p>PDD/ /IM01/ /IM02/ /KML/</p>	<p><i>Description:</i> The pre-project scenario mentioned in the PDD that the project area was a waste /degraded land on 1989-12-31 and the farmers in the area lack the technical, social as well as financial capacities to undertake any activity on the barren land.</p> <p><i>Validator's action:</i> Review of PDD, satellite image data of year 1989 and interviews of local communities.</p> <p><i>Conclusion:</i> Difference between pre-project and project situations is described in the published PDD.</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<b>A.2. Small scale project activity</b> <i>It is assessed whether the project qualifies as small-scale CDM project activity</i>				
A.2.1. Does the project fall within the small scale project activity threshold and applies a large-scale approved methodology? In this case, are the modalities and procedures for large-scale project activities followed? (VVS, § 193)	/PDD/ /meth/	<p><i>Description:</i></p> <p>The project applies approved A/R small scale methodology AR-AMS0007: "Afforestation and reforestation project activities implemented on lands other than wetlands", Version 03.0</p> <p><i>Validator's action:</i></p> <p>The PDD and Small Scale Methodologies listed in UNFCCC Website are checked.</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded does not use a large scale methodology even though it is well within the small scale threshold.</p>	OK	OK
In case of project activities applying a LSC-Methodology, go to B.1				
A.2.2. Does the project qualify as a small scale CDM project activity as defined in Decision 9/CMP.3 annex II? (VVS, §§ 193) <i>Please indicate whether the project activity meets the eligibility criteria for small scale-projects. Specially consider whether the project qualifies within the thresholds of the three possible types of small-scale project activities</i>	/PDD/	<p><i>Description:</i> The proposed project activity is expected to result in net GHG removals by sinks of less than 16000 t-CO<sub>2</sub> /year.</p> <p><i>Validator's action:</i> The PDD is checked</p> <p><i>Conclusions :</i></p> <p>As per Decision 9/CMP.3, the project falls within the small scale threshold and accordingly A/R small scale methodology AR-AMS0007: "Afforestation and reforestation project activities implemented on lands other than wetlands", Version 03.0</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
A.2.3. Does the project apply one of the approved small scale categories and any methodology and tool referred therein (appendix B of the annex to decision 6/CMP.1)?  (VVS, § 193 (b)) <i>Check, if applicable the expiry dates of the applied methodology. Further, take into consideration the general guidance to the methodologies<sup>7</sup>, which provide guidance on equipment capacity, equipment performance, sampling and other monitoring related issues.</i>	/PDD/ /unfccc/ /meth/	<p><b>Description:</b></p> <p>Yes, the project apply A/R small scale methodology AR-AMS0007: "Afforestation and reforestation project activities implemented on lands other than wetlands", Version 03.0</p> <p><b>Validator's action:</b></p> <p>The following web link has been verified and found that the methodology AR-AMS0007 version 3 is valid from 2013-10-04.</p> <p><a href="http://cdm.unfccc.int/methodologies/DB/J6ZHLX1C3AEMSZ52PWIII6D2AOJZUB">http://cdm.unfccc.int/methodologies/DB/J6ZHLX1C3AEMSZ52PWIII6D2AOJZUB</a></p> <p><b>Conclusion:</b></p> <p>The methodology referred for this project activity is verified and the methodology version and tools for baseline calculation are found to be valid and confirmed that the project applies one of the approved small scale categories.</p>	OK	OK
A.2.4. Is the small scale project activity not a debundled component of a larger project activity?  (VVS, §§ 161-164) <i>Describe the steps taken to assess whether the project activity is not a debundled component of a large scale activity, in accordance to the "Guidelines on assessment of debundling for SSC project activities"...</i>	/PDD/ /unfccc/	<p><b>Description:</b></p> <p>The first project activity by the PP from the host country India to request registration..</p> <p><b>Validator's action:</b></p> <p>UNFCCC and EB 54 Annex 13 are checked.</p> <p><b>Conclusion:</b></p>	OK	OK

<sup>7</sup> See EB 54 report, paragraph 37 and the latest "General guidelines to SSC methodologies" for further clarification.

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
		Thus it is concluded that this is not a de bundled component of the larger project activity as per EB 54 Annex 13.		
<b>B. Project Baseline, Additionality and Monitoring Plan</b>				
<b>B.1. Reference of the Methodology</b>				
B.1.1. Does the PDD correctly quote an applicable version of the methodology? (VVS, § 74)	/PDD/ /meth/ /unfccc/	<input checked="" type="checkbox"/> The applied methodology is correctly quoted and is identical to the version available on the UNFCCC website.  <input checked="" type="checkbox"/> The applied version of the baseline and monitoring methodology is applicable and valid at the time of submission for stakeholder consultation.	OK	OK
<b>B.2. Applicability of the Methodology</b>				
B.2.1. Does the project apply an approved and applicable CDM methodology and a valid version thereof? (VVS, §§ 70, 74, 76, 77) <i>Describe the steps taken to validate this issue.</i>	/PDD/ /meth/ /unfccc/	<input checked="" type="checkbox"/> The applied methodology is correctly quoted and is identical to the version available on the UNFCCC Website.  <input checked="" type="checkbox"/> The applied version of the baseline and monitoring methodology is valid at the time of submission for	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>Describe for each applicability criterion listed in the selected approved methodology the steps taken to assess its fulfilment</i>		<p>stakeholder consultation.</p> <p><input checked="" type="checkbox"/> All applicability criteria in the methodology, the applied tools or any other methodology component referred to therein are fulfilled (please make detailed assessment in Annex 2 of this protocol).</p>		
<p>B.2.2. In case one or more applicability criteria have not been met, has the validation team requested clarification to, revision of or deviation from the methodology in accordance with the latest guidelines?</p> <p>(VVS, §§ 80-82)</p>	<p>/PDD/ /meth/</p>	<p><i>Description:</i> All the applicability conditions of the methodology are met.</p> <p><i>Validator's action:</i> PDD and methodology are checked.</p> <p><i>Conclusion:</i> Hence assessment against the criteria is not required</p>	OK	OK
<p><b>B.3. Project Boundaries</b></p> <p><i>Project Boundaries are the limits and borders defining the GHG emission reduction project</i></p>				
<p>B.3.1. Are the project's spatial boundaries (geographical) clearly defined?</p> <p>(VVS, §§ 73 (a), 84)</p> <p><i>Provide information on how the validation of the geographical boundary has been performed either based on reviewed documented evidence or by describing what was observed/viewed</i></p>	<p>/IM01/ /PDD/ /meth/ /GIS/</p>	<p><i>Description:</i> The detailed locations as per the GPS survey. Along with their unique locations Ids and the land area of each parcel have been provided in Appendix 6 of the PDD</p> <p><i>Validator's action:</i></p>	<p>CAR A1 CAR B1 <del>CLB1</del></p>	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
during a site visit.		<p>The validation team during onsite visit did a physical inspection of the project boundary based on the tool to assess eligibility of lands and the provisions of the applied methodology.</p> <p><i>Conclusion:</i></p> <p>However CAR A1 CARB1 and CL B1 are raised in this regard</p>		
<p>B.3.2. Has the PP, for all parcels of land, shown documented evidence on the control (minimum of exclusive right according to host country legislation with the aim of achieving GHG removals by sinks) over the afforestation/reforestation</p> <p><i>Provide information which kind of evidence to show control over the forest area has been presented and whether it is acceptable with the host country legislation.</i></p>	<p>/PDD/ /IM01/ /IM02/ /IM03/ /rules/</p>	<p><i>Description:</i></p> <p>The entire project area belongs to the JFMC and which is under the control of JFMCs.</p> <p><i>Validator's action:</i></p> <p>The validation team reviewed the PDD, JFMC rules and conducted in site interviews</p> <p><i>Conclusion:</i></p> <p>However CAR A4 is raised.</p>	CAR A4	OK
<p>B.3.3. Are all sources and GHGs included in the project boundary as required in the applied methodology?</p> <p>(VVS, §§ 82, 84)</p> <p><i>Provide information on how the validation of the GHGs and sources has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.</i></p>	<p>/PDD/ /meth/ /IM01/</p>	<p><i>Description:</i></p> <p>GHG emissions are only included within the project boundary as per the applied methodology</p> <p><i>Validator's action:</i></p> <p>The validation team reviewed the GHGs included in the project boundary as stated in the PDD against the requirements of the methodology. The validation team also made physical assessment during onsite visit.</p> <p><i>Conclusion:</i></p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.															
		All the sources and GHG are considered within the project boundary.																	
<p>B.3.4. In case the methodology allows to choose whether a source and/or gas is to be included, is the choice sufficiently explained and justified?</p> <p>(VVS, §§ 84, 87)</p> <p><i>Confirm if the Adequacy provided by the PPs is reasonable, based on assessment of supporting documented evidence provided by the PPs or by onsite observations.</i></p>	<p>/VVS/ /meth/ /PDD/</p>	Not applicable as the methodology does not allow to choose a source and/or gas to be included.	N/A.	N/A															
<p>B.3.5. Have carbon pools been selected in accordance with the methodology? Above-ground biomass, below-ground biomass, litter, dead wood, soil organic carbon?</p> <p>(VVS, §§ 176-178)</p> <p><i>Describe the steps taken to validate this issue. If any emission sources that are expected to contribute more than 1% have been identified, the DOE shall request clarification of, revision to, or deviation from the methodology, as appropriate.</i></p>	<p>/meth/ /PDD/</p>	<p><i>Description:</i></p> <p>The carbon pools selected are:</p> <table><tr><th>Carbon Pools</th><th>Selected</th><th>Justification / Explanation</th></tr><tr><td>Above-ground</td><td>Yes</td><td>Major carbon pool subjected to the project activity</td></tr><tr><td>Below-ground</td><td>Yes</td><td>Major carbon pool subjected to the project activity</td></tr><tr><td>Deadwood</td><td>No</td><td>Excluded</td></tr><tr><td>Woody</td><td>No</td><td>Excluded</td></tr></table>	Carbon Pools	Selected	Justification / Explanation	Above-ground	Yes	Major carbon pool subjected to the project activity	Below-ground	Yes	Major carbon pool subjected to the project activity	Deadwood	No	Excluded	Woody	No	Excluded	OK	OK
Carbon Pools	Selected	Justification / Explanation																	
Above-ground	Yes	Major carbon pool subjected to the project activity																	
Below-ground	Yes	Major carbon pool subjected to the project activity																	
Deadwood	No	Excluded																	
Woody	No	Excluded																	



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)			Draft Concl.	Final Concl.						
		<table><tr><td>Litter</td><td></td><td></td></tr><tr><td>Soil organic carbon</td><td>No</td><td>Excluded</td></tr></table>	Litter			Soil organic carbon	No	Excluded				
Litter												
Soil organic carbon	No	Excluded										
		<p>The selected carbon pools are in line with the applied methodology.</p> <p><i>Validator's action:</i></p> <p>The validation team reviewed supporting documentation and made physical assessment of project area.</p> <p><i>Conclusion:</i></p> <p>The selected carbon pools included and excluded are in line with the applied methodology and evidenced</p>										
<b>B.4. Baseline Identification</b>  <i>The choice of the baseline scenario will be validated with focus on whether the baseline is a likely scenario, and whether the methodology to define the baseline scenario has been followed in a complete and transparent manner.</i>												
B.4.1. Has the baseline scenario been determined according to the methodology?  (VVS, §§ 72 (b), 89, 87(e))	/PDD/ /meth/	<input checked="" type="checkbox"/> The baseline is defined by the applying methodology and the PDD refers to it. If the answer is Yes, continue to B.4.5			OK	OK						

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>Describe how it is validated that the identification of the most plausible baseline scenario is carried out in accordance with the applied methodology and applied methodological tools. Please refer to table A-2.</i>		<input type="checkbox"/> The baseline is not directly defined by the applying methodology.  For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2. <input type="checkbox"/> The determination has been carried out as per the procedure contained in the applied methodology. <input type="checkbox"/> The following CARs / CLs have been identified with respect to the selection of the baseline scenario:		
<b>B.4.2. Is the list of alternatives complete?</b> (VVS, § 90) <i>Describe how it was validated that all alternatives are plausible and that any scenarios that are supplementary to those required by the methodology are realistic and credible in the context of the project activity and that no alternative scenarios have been excluded.</i> <i>Fill in all alternatives in table A-2.</i>		<input type="checkbox"/> All plausible alternative scenarios listed in the approved methodology have been considered. In the course of document review and site visit, it has been validated that no other alternatives which supply comparable outputs and / or services are to be taken into consideration. Thus no plausible scenario has been excluded. <input type="checkbox"/> The following alternative scenarios/options have been omitted. Corresponding CAR(s)/CL(s) has /have been issued	N/A	N/A
<b>B.4.3. Is the identified baseline scenario reasonable and has the baseline scenario been determined using conservative assumptions where possible, including relevant references and sources?</b> (VVS, § 91) <i>Describe whether the choice of the identified baseline scenario is reasonable by validating the <u>key assumptions, calculations and</u></i>		<input type="checkbox"/> The baseline scenario is reasonable and has been determined using conservative assumptions where possible. Please refer to comments in table A-2. <input type="checkbox"/> The following CARs / CLs have been issued because assumptions used in the baseline determination have been assessed to be not conservative	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>rationales used in the PDD. Describe whether these are listed, relevant and conservatively interpreted in the PDD.</i>				
<p>B.4.4. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector.?</p> <p>(VVS, § 93)</p> <p><i>Describe whether the PP has shown that all relevant policies and circumstances have been identified and correctly considered in the PDD. Two (2) types of national and/or sectoral policies have to be taken into account:</i></p> <p><b>(a)</b> <i>National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels, known as E+ policies. For this type of national and/or sectoral policies or regulations, only those that have been implemented before adoption of the Kyoto Protocol by the COP (decision 1/CP.3, 11 December 1997) shall be taken into account</i></p> <p><b>(b)</b> <i>National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes), known as E- policies. For this type of national and/or sectoral policies or regulations, those that have been implemented since the adoption by the COP of the CDM M&amp;P (decision 17/CP.7, 11 November 2001) need not be taken into account in identifying a baseline scenario.</i></p>		N/A	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>B.4.5. What has been identified as the baseline scenario? Does the PDD contain a <i>verifiable</i> description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity?.</p> <p>(VVS, § 88)</p>	<p>/meth/ /PDD/ /GIS/ /XLS/</p>	<p><i>Description:</i></p> <p>PP shows that prior to the implementation of the proposed project activity and in 31st December 1989 was waste land / degraded land which was not put to use till the start of the project activity. In the absence of the project activity the land area would have remained barren.</p> <p><i>Validator's action:</i></p> <p>PDD and meth are referred.</p> <p><i>Conclusion:</i></p> <p>Thus the PDD contain a verifiable description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity</p> <p>However CAR B2 CAR B5 CAR B11 and CL B2 are raised in this regard</p>	<p>CAR B2 CAR B5 CAR B11 CL B2</p>	OK
<p><b>B.5. Additionality Determination</b></p> <p><i>The assessment of additionality will be validated with focus on whether the project itself is not a likely baseline scenario.</i></p>				
<p><b>B.5.1. Methodology</b></p>				
<p>B.5.1.1. Does the PDD describe how the project is additional and does the additionality justification follow the requirements of the</p>	<p>/PRA/ /PDD/ /meth/</p>	<p><i>Description:</i></p> <p>Additionality of the proposed SSC A/R CDM project activity is proven using the "Assessment of additionality" contained in the Appendix 1</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>applied methodology and/or methodological tools?</p> <p>(VVS, §§ 72 (d), 101-103)</p> <p><i>Describe how it is validated that additionality justification is carried out in accordance with the applied methodology and/or applied methodological tools. Further focus your assessment on the reliability and credibility of data, rationales and assumptions, justifications and documentations provided by the PP.</i></p>	<p>/IM01/ /IM02/ /IM03/</p>	<p>of the methodology</p> <p><i>Validator's action:</i></p> <p>The PP demonstrated the additionality using paragraph (a) and (g) of the applied methodology and demonstrated the prevalence of barriers through the PRA exercise conducted. The same is observed during the on-site interviews</p> <p><i>Conclusion:</i></p> <p>Thus the additionality justification is as per the applied methodology</p>		
<b>B.5.2. Consideration of CDM before project start</b>				
<p>B.5.2.1. In case the project start date is on or after 2<sup>nd</sup> August 2008 has the PP informed the DNA and UNFCCC about the intention to seek CDM status?</p> <p>(VVS, § 112)</p> <p><i>Describe whether such a notification has been provided by the project participants within 180 days to the UNFCCC and host Party DNA and that further notifications, if necessary (two years from CDM Prior Notification letter without having published the PDD), have been sent to the UNFCCC. If NOT it shall be determined that the CDM was not seriously considered.</i></p> <p><i>Assess the project starting date in section C.1</i></p>	<p>/PDD/ /SD/</p>	<p><i>Description:</i></p> <p>The project start date is after 02.08.2008</p> <p><i>Validator's action:</i></p> <p>Section C.1 of the PDD is checked and mentioned as 01/01/2012, which is the date of preparation and submission of PDD for validation,</p> <p><i>Conclusion:</i></p> <p>So it is concluded the start date is after 02.08.2008.</p> <p>However CAR C1 is raised</p>	CAR C1	OK
In case the project starting date has been correctly defined on or after 2 <sup>nd</sup> August 2008, go to B.5.2.4				

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>B.5.2.2. In case the project start date is before commencing of validation and 2<sup>nd</sup> August 2008, was the incentive from the CDM seriously considered by the project participants and the benefits of CDM were considered a decisive factor in the decision to proceed with the project?</p> <p>(VVS, § 108 (a)) Describe whether the evidences to support such considerations are adequately and transparently described in the PDD. Include an assessment on how was the CDM involved in the decision making process, as well as how and when the decision to proceed with the project activity was taken and whether the decision to proceed with the project was taken by a person which has the authority to do so. Include an assessment of the authenticity of the evidences.</p>		<p>Description: N/A</p> <p>Validator's action:</p> <p>Conclusion:</p>	N/A	N/A
<p>B.5.2.3. Does the documented evidence provided doubtlessly prove that continuous and real actions were taken in order to secure the CDM status?</p> <p>(VVS, §§ 108;(b), 109, 110) Include an assessment on the gap between the documented evidences to secure the CDM status. When the gap is greater than two years and less than three, it has to be assessed whether continuing and real actions were taken to secure CDM status for the project activity.</p>		<p>Description: N/A</p> <p>Validator's action:</p> <p>Conclusion:</p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><i>If the gap is greater than three years, it must be concluded that continuing and real actions were not taken to secure CDM status for the project activity).</i></p> <p><i>Describe the steps taken to validate that the real documented evidences are reliable and authentic.</i></p>				
<p><b>B.5.2.4. Does the proposed project activity comply with all applicable requirements related to the prior consideration of the CDM?</b></p> <p>(VVS, § 113)</p> <p><i>Describe whether or not the project would have been undertaken without the incentive of the CDM.</i></p>	<p>/PDD/ /UNFCCC/ /dna/</p>	<p><i>Description:</i></p> <p>The section about prior consideration is missing in the PDD.</p> <p><i>Validator's action:</i></p> <p>PDD is checked</p> <p><i>Conclusion:</i></p> <p>CAR B4 is raised</p>	CAR B4	OK
<p><b>B.5.3. Identification of alternatives Step 1</b></p> <p>(in case of SSC projects pl. skip steps 1 and 2 if appropriate; in cases where the baseline scenario is prescribed in the approved methodology, skip step 1, (VVS, § 115))</p>				
<p><b>B.5.3.1. Does the list of alternatives contain the status-quo situation, the project not undertaken as a CDM project as well as all other viable alternatives for supplying the outputs or services that are to be supplied by the proposed CDM project activity? Do all identified alternatives comply with enforced legislations?</b></p> <p>(VVS, §§ 114, 116)</p>		<p><i>Description:</i></p> <p>The baseline scenario is defined by the methodology. Hence this is not applicable and step 1 is skipped.</p> <p><i>Validator's action:</i></p> <p><i>Conclusion:</i></p>	N/A	N/A



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><i>Describe whether the list of alternatives is credible and complete. Describe how it is validated that the list of alternatives is complete, realistic and that the alternatives are credible and that all alternatives comply with the existing and enforced legislation.</i></p> <p><i>Describe the steps taken to validate this issue on the basis of your local and sectoral knowledge.</i></p>				
<p><b>B.5.4. Investment analysis Step 2</b></p> <p><i>In case the investment analysis as per step 2 is chosen to justify the additionality Annex 4 "Assessment of Financial Parameters" has to be used to provide additional details of the the calculation parameters..</i></p>				
<p>B.5.4.1. Does the PDD provide evidence that the project would not be the most economically or financially attractive alternative or economically / financially feasible without the revenues from the sale of CERs?</p> <p>(VVS, § 117)</p> <p><i>In cases where the project activity would produce no financial or economic benefits other than CDM-related income, describe how it has been validated that at least one of the alternatives identified is less costly than the proposed project activity.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.2. Is a clear, viewable and unprotected Excel spreadsheet available for the investment calculation?</p> <p>(EB 62 Annex 5, §8)</p>	/PDD/	<p><input type="checkbox"/> Yes, a clear, viewable and unprotected Excel spreadsheet is available.</p> <p><input type="checkbox"/> No, a respective Excel spreadsheet needs to be made available for investment calculation.</p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>Describe the steps taken to validate this issue.</i>		In this context the following additional findings have been identified: N/A		
<p>B.5.4.3. Does the period chosen for the investment analysis reflect the technical lifetime of the project activity or in case a shorter period is chosen, is the fair value of the project activity's assets at the end of the investment analysis period (as a cash inflow) included?</p> <p>(EB 62 Annex 5, § 3)</p> <p><i>Describe how the technical lifetime / period chosen for calculating financial parameter(s) is reviewed and which documents were utilised in the course of review. Describe furthermore the approach used to check the inclusion of a potential fair value.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.4. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice?</p> <p>(EB 62 Annex 5, § 4)</p> <p><i>State the accounting regulations applied for calculating the fair value and describe why these are applicable under the project specific circumstances. Describe potential mismatches between regulations and the approach applied for calculating the fair value.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.5. Is the book value as well as the expectation of the potential profit or loss included in the fair value calculation?</p> <p>(EB 62 Annex 5, § 4)</p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
		Published PDD was reviewed  <i>Conclusion:</i> Checklist item is not applicable		
<p>B.5.4.6. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)?</p> <p>(EB 70 Annex 8, EB 62, Annex 5, §19)</p> <p><i>Describe why the selected analysis method is appropriate under consideration of potential revenues and costs, potential project alternatives and potential available benchmark values.</i></p> <p><i>Assess whether the alternative to the project activity is to supply the same or substitute products or services. In this case, an investment comparison analysis shall be used.</i></p>	/PDD/	<p><i>Description:</i> Investment analysis is not carried out</p> <p><i>Validator's action:</i> Published PDD was reviewed</p> <p><i>Conclusion:</i> Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.7. Were the input values used in the investment analysis valid and applicable at the time of the investment decision?</p> <p>(EB 62 Annex 5, § 6)</p> <p><i>Describe the steps taken to validate this issue</i></p>	/PDD/	<p><i>Description:</i> Investment analysis is not carried out</p> <p><i>Validator's action:</i> Published PDD was reviewed</p> <p><i>Conclusion:</i> Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.8. Did implementation of the project ceased after its commencement and did implementation recommence after</p>	/PDD/	<p><i>Description:</i> Investment analysis is not carried out</p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>consideration of the CDM?</p> <p>(EB 62 Annex 5, § 7)</p> <p><i>Describe the reasons for ceasing the project and explain why the incentive from CDM was necessary to recommence the implementation.</i></p> <p><i>Assess whether the investment analysis reflects the economic decision-making context at point of the decision to recommence the project, i.e. capital costs incurred prior to the recommencement of the project are to be limited to the potential reuse/resale of tangible assets, demonstrating the value through assessment done by chartered specialists.</i></p>		<p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>		
<p>B.5.4.9. Are the input parameters based on values from Feasibility Study Reports that are approved by national authorities for proposed project activities?</p> <p>(VVS, § 122)</p> <p><i>In case the basis for input values is a Feasibility Study Report (FSR) describe how it has been ensured that the period in time between the finalisation of the FSR and the investment decision is sufficiently short so that it is unlikely that input values would have materially changed. Further confirm the consistency of values in FSR and PDD.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.10. Have the input parameters (esp. the tariff) applied in the investment analysis been affected by any national and/or sectoral policies and if so are these policies E<sup>+/-</sup> policies?</p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
(EB 53, Annex 32, EB 73, Para 70)		<i>Conclusion:</i> Checklist item is not applicable		
In case a simple cost analysis has been done, go to B.5.5;				
B.5.4.11.Has been a suitable financial indicator chosen by the project participants? (VVS, § 120 (a))  <i>Describe the steps taken to validate this issue.</i>	/PDD/	<i>Description:</i> Investment analysis is not carried out <i>Validator's action:</i> Published PDD was reviewed <i>Conclusion:</i> Checklist item is not applicable	N/A	N/A
B.5.4.12.Are depreciation and other non-cash related items only considered in the tax calculation and not as cash outflow? (EB 62 Annex 5, § 5)	/PDD/	<i>Description:</i> Investment analysis is not carried out <i>Validator's action:</i> Published PDD was reviewed <i>Conclusion:</i> Checklist item is not applicable	N/A	N/A
B.5.4.13.Is the plant load factor (PLF) chosen in a conservative manner, taking into account that the PLF may be different in the framework of demonstrating additionality and calculating the ex-ante ER?	/PDD/	<i>Description:</i> Investment analysis is not carried out <i>Validator's action:</i> Published PDD was reviewed	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
(EB 48, Annex 11)		<i>Conclusion:</i> Checklist item is not applicable		
B.5.4.14.Does the PDD and related spreadsheets contain a sensitivity analysis and does the same contain variation of parameters which may vary throughout the project lifetime,  (EB 62 Annex 5, § 20-21) <i>Describe relevance of parameters used in the sensitivity analysis as well as their likeliness to vary during the project's lifetime. Parameters which are fixed on the basis of contracts, PPAs etc. may not be subject to variation and not adequate.</i>	/PDD/	<i>Description:</i> Investment analysis is not carried out  <i>Validator's action:</i> Published PDD was reviewed  <i>Conclusion:</i> Checklist item is not applicable	N/A	N/A
B.5.4.15.Were only variables that constitute more than 20% of either total project costs or total project revenues subjected to reasonable variation?  (EB 62 Annex 5, § 20)	/PDD/	<i>Description:</i> Investment analysis is not carried out  <i>Validator's action:</i> Published PDD was reviewed  <i>Conclusion:</i> Checklist item is not applicable	N/A	N/A
B.5.4.16.Have parameters, constituting less than 20% of total project costs or revenues, been identified with potential material impact on the financial parameter?  (EB 62 Annex 5, § 20) <i>Describe whether those parameters are considered in the</i>	/PDD/	<i>Description:</i> Investment analysis is not carried out  <i>Validator's action:</i> Published PDD was reviewed  <i>Conclusion:</i>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>sensitivity analysis?</i>		Checklist item is not applicable		
<p>B.5.4.17. Is the range of variation reasonable in the specific context of the project activity, taking into consideration historic trends in the business sector?</p> <p>(EB 62 Annex 5, § 21)</p> <p><i>Describe whether the range of variation is appropriate with focus on historic developments, e.g. price of oil / labour etc., energy potential in the region in question.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.18. In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR?</p> <p>(EB 62 Annex 5, § 9)</p>		<p><input type="checkbox"/> N/A</p> <p><input type="checkbox"/> Yes, the costs of financing expenditures have been excluded.</p> <p><input type="checkbox"/> No, this requirement is not met.</p> <p>In this context the following additional findings have been identified:</p> <p>N/A</p>	N/A	N/A
<p>B.5.4.19. In case of equity IRR: Is the part of the investment costs, which is financed by equity, considered as net cash outflow and is the part financed by debt excluded in net cash outflow?</p> <p>(EB 62 Annex 5, § 10)</p>		<p><input type="checkbox"/> N/A</p> <p><input type="checkbox"/> Yes, in- and outflows have been considered correctly.</p> <p><input type="checkbox"/> No, this requirement is not met.</p> <p>In this context the following additional findings have been identified:</p> <p>N/A</p>	N/A	N/A



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
In case a comparison analysis has been done, go to B.5.5				
<p>B.5.4.20. Is the type of benchmark chosen appropriate for the type of IRR calculated (e.g. local commercial lending rates or weighted average costs of capital for project IRR; required/expected returns on equity for equity IRR)?</p> <p>(EB 62 Annex 5, § 12)</p> <p><i>Describe the steps taken to validate this issue.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p>B.5.4.21. Is a pre-tax benchmark applied in case of project IRR is calculated? In cases where a post-tax benchmark is applied, assess whether actual interest payable is taken into account in the calculation of income tax.</p> <p>(EB 62 Annex 5, § 11)</p> <p><i>If this is not the case, ensure that taxation is excluded from the investment analysis.</i></p> <p><i>As per the guidance it is recommended to select a pre tax benchmark in order to describe the steps taken in assessing this requirement.</i></p>		<p><input type="checkbox"/> N/A</p> <p><input type="checkbox"/> A pre-tax benchmark is applied</p> <p><input type="checkbox"/> The benchmark is post-tax and the interest has been taken into account for the calculation</p> <p><input type="checkbox"/> No, this requirement is not met.</p> <p>In this context the following additional findings have been identified:</p> <p>N/A</p>	N/A	N/A
<p>B.5.4.22. Have both benchmark and cash flows expressed consistently, i.e. real terms (excluding the effect of inflation) or nominal</p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><b>terms?</b></p> <p><i>Describe the steps taken to validate this issue.</i></p>		<p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>		
<p><b>B.5.4.23.</b>Is the benchmark value suitable for the project activity and is it reasonable to assume that no investment would be made at a rate of a lower return than the benchmark?</p> <p>(VVS, § 121 (c))</p> <p><i>Describe whether it is reasonable to assume that a lower rate of return would consequently result in the baseline scenario.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A
<p><b>B.5.4.24.</b>Is the benchmark applied based on parameters that are available and standard in the market?</p> <p>(VVS, 121 (b), EB 62 Annex 5, §§13, 15, 16, 18)</p> <p><i>Assess whether company-specific benchmarks or benchmarks based on parameters that are available in the market are suitable to the project activity. A benchmark that includes the subjective profitability expectations or risk profile of the project developer (size risk premiums, company own risk premium, etc) is not suitable for project activities open to be developed by other entities.</i></p> <p><i>If cost of equity is applied, assure that best financial practices are used and are based on data sources which can be cross-checked against third-party or publicly available sources.</i></p>	/PDD/	<p><i>Description:</i></p> <p>Investment analysis is not carried out</p> <p><i>Validator's action:</i></p> <p>Published PDD was reviewed</p> <p><i>Conclusion:</i></p> <p>Checklist item is not applicable</p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><i>If cost of debt is used for the calculation of the benchmark, ensure that it is calculated as the cost of financing in the capital markets (e.g: commercial lending rates)</i></p> <p><i>If the cost/equity financing structure of the project is not yet available, 50% equity, 50% debt financing may be assumed as default.</i></p>				
Following checklist is intended for cases where intern company benchmarks are applied, otherwise go to B.5.5				
<p>B.5.4.25.Is it ensured that the project cannot be developed by other developers than the PP, so that internal company benchmarks or expected returns are suitable for the project activity?</p> <p>(EB 62 Annex 5, §§ 13 – 14)</p> <p><i>Describe how it has been validated that there is only one possible project developer.</i></p>		<p><i>Description: N/A</i></p> <p><i>Validator's action:</i></p> <p><i>Conclusion:</i></p>	N/A	N/A
<p>B.5.4.26.Was the benchmark consistently used in the past by the same company for similar projects with similar risks?</p> <p>(EB 62 Annex 5, § 14)</p> <p><i>If applicable, assess the past financial behaviour of the entity during the last 3 years in relation to similar projects.</i></p>		<p><i>Description: N/A</i></p> <p><i>Validator's action:</i></p> <p><i>Conclusion:</i></p>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>B.5.4.27. Was the cost of debt calculated based on the weighted average cost of debt financing of the legal entity owning the CDM project activity? (EB 62 Annex 5, § 16)</p> <p><i>If applicable, assess whether loans, bonds or debt financing from a parent company are calculated according to the latest "Guidance on Investment Analysis".</i></p> <p><i>In case that the debt structure of the project is not yet available, the cost of debt can be assumed as the commercial lending rate in the company or the yield of a 10-year bond issued by the government of the host country.</i></p>		<p><i>Description: N/A</i></p> <p><i>Validator's action:</i></p> <p><i>Conclusion:</i></p>	N/A	N/A
<p>B.5.4.28. Does the equity/debt ratio of the project reflect the long-term debt/equity finance structure of the legal entity owning the assets of the project activity? (EB 62 Annex 5, § 17)</p> <p><i>Assess the latest balance sheets of the legal entity owning the assets of the project activity, in case these are available and audited by a third party within two years prior to the submission of the PDD for validation, and the accounting books reflect the total value of all assets needed for the project activity.</i></p> <p><i>If debt/equity financing structure is not available, 50% equity, 50% debt shall be considered as default.</i></p>		<p><i>Description: N/A</i></p> <p><i>Validator's action:</i></p> <p><i>Conclusion:</i></p>	N/A	N/A
<b>B.5.5. Barrier analysis Step 3 or SSC additionality assessment</b>				

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>B.5.5.1. Are there any barriers given which have a clear and direct impact on the financial returns of the project?</p> <p>(VVS, § 133)</p> <p><i>In case of LSC projects those issues <u>cannot be considered</u> as barriers and shall be assessed in the investment analysis. In case of SSC projects the same fundamentals as for LSC projects shall apply, i.e. the assessment of the investment barrier according to EB 62 Annex 5. Only unavailability of sources of finance and/or risk related barriers, for example, the risk related to technical failure that could have negative impact on financial performance are acceptable as barriers.</i></p>	<p>/PDD/ /meth/ /IM01/</p>	<p><i>Description:</i></p> <p>The PP demonstrated the barrier due to local ecological conditions like Degraded Soil, Unfavourable environmental conditions and Pervasive opportunistic species as well as barrier due to Social conditions like widespread illegal practices and investment barriers other than economic/financial barriers as per the appendix 1 of the methodology and demonstrated Ecological barrier to the project activity.</p> <p><i>Validator's action:</i></p> <p>The PDD, methodology, are checked and interview during site visit.</p> <p><i>Conclusion:</i></p> <p>CAR B3 raised as PRA exercise document is not submitted to conclude the presence of those barriers.</p>	CAR B3	OK
<p>B.5.5.2. Has the unavailability of means of finance for the project been described and adequately substantiated? Do evidences doubtlessly prove that the financing of the project was assured only due to the benefit of the CDM?</p> <p>(EB 50 Annex 13, § 9)</p>	<p>/PDD/ /UPFD/</p>	<p><i>Description:</i></p> <p>The project got JICA loan to start the project. The loan was sanctioned only after the consideration if the benefits from CDM revenues.</p> <p><i>Validator's action:</i></p> <p>The JICA document is checked.</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded the project finance is assured only due to the benefit of the CDM..</p>	OK	OK
<p>B.5.5.3. Would provision of additional financial means lead to the mitigation of the barrier(s)</p>	<p>/PDD/</p>	<p>PP has mentioned in the webhosted PDD that CDM revenue will mitigate some of the barriers with respect to lack of availability of</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
demonstrated? (EB 50 Annex 13, § 7) <i>Describe why provision of additional financial means would not lead to mitigation of the barrier(s) demonstrated and hence analysing the project's additionality within the framework of an investment analysis is inappropriate. .</i>	/IM01/	credit to overcome the ecological barriers mentioned in the PDD and as observed during the site visit		
B.5.5.4. How is it justified and evidenced that the barriers given in the PDD are real? (VVS, § 133(a))	/PDD/ /PRA/ /IM01/ /GIS/	<i>Description:</i> PDD mentions the presence of ecological barrier to the project activity <i>Validator's action:</i> The PDD is checked and the basis is referred to the PRA exercise. The same is observed during site visits, analysis of GIS data and interviews <i>Conclusion:</i> CAR B3 raised as PRA exercise is not submitted	CAR B3	OK
B.5.5.5. How is it justified that one or a set of real barriers prevent(s) the implementation of the project activity and do not prevent the implementation of at least one of the alternatives? (VVS, § 133 (b))	/PDD/	<i>Description:</i> Alternative selection is not carried out <i>Validator's action:</i> Published PDD was reviewed. <i>Conclusion:</i> Checklist item is not applicable.	N/A	N/A
B.5.5.6. Does the review of relevant background information on the nature of the company(ies) and entity(ies) involved in the financing and implementation of the project		<i>Description:</i> <i>Validator's action:</i>	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
sufficiently justify that the barriers related to the lack of access to capital, technologies and skilled labour are real? (EB 50 Annex 13, § 4)		<i>Conclusion:</i>		
B.5.5.7. Has it been demonstrated in an objective way how the CDM alleviates each of the identified barriers to a level that the project is not prevented anymore from occurring by any of the barriers? (EB 50 Annex 13, § 5)		<i>Please refer B.5.5.1 above.</i>	OK	OK
<b>B.5.6. Common practice analysis Step 4</b> (in case of SSC projects or first-of-its-kind LSC projects skip this step)				
B.5.6.1. Is the defined region for the common practice analysis appropriate for the technology/industry type? (VVS, § 129(a)) <i>Describe why the project activity is not common practice in a transparent and unambiguous manner. If a region other than the entire host country is chosen, describe why this region is more appropriate.</i>	/PDD/	N/A for SSC projects	N/A	N/A
In case of projects activities applying ACM002, go to B.5.6.4				



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>B.5.6.2. To what extent similar projects have been undertaken in the relevant region?</p> <p>(VVS, § 129(b))  <i>Similar projects are considered those that take place in a comparable environment w.r.t. regulatory framework, investment climate, access to technology and financing, etc. Registered CDM PA and PA that have been published on the UNFCCC website are not to be considered as similar.</i></p>	/PDD/	N/A for SSC projects	N/A	N/A
<p>B.5.6.3. In case similar projects are identified, are there any key differences between the proposed project and existing or ongoing projects and what kind of differences are observed?</p> <p>(VVS, § 129(c))</p>	/PDD/	N/A for SSC projects	N/A	N/A
<p>B.5.6.4. In case of projects activities applying ACM002:</p> <p>Has an output range as +/- 50% of the design output of the project activity been calculated in order to define the capacity range for "similar" projects?</p> <p>(EB 69 Annex 8, § 5)</p>	/PDD/	N/A for SSC projects	N/A	N/A
<p>B.5.6.5. In case of projects activities applying ACM002:</p> <p>Does N<sub>all</sub> include only plants that have</p>	/PDD/	N/A for SSC projects	N/A	N/A

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>started commercial operation before the the start date of the project and are within the applicable output range?</p> <p>(EB 69 Annex 8, § 7)</p> <p><i>Under <math>N_{all}</math>, registered CDM projects and projects undergoing validation are not to be included.</i></p>				
<p><b>B.5.6.6. In case of projects activities applying ACM002:</b></p> <p>Does <math>N_{diff}</math> include only plants that apply different “technology” than the project activity?</p> <p>(EB 69 Annex 8, §§ 4, 8)</p> <p><i>The term “technology” refers to energy fuel, investment climate (access to technology, subsidies, legal regulations, etc...) or unit cost of output.</i></p> <p><i>Assess how the essential distinctions to identify the different measures have been carried out.</i></p>	/PDD/	N/A for SSC projects	N/A	N/A
<p><b>B.5.7. Algorithms and/or formulae used to determine emissions reductions</b></p> <p><i>It is assessed whether the steps taken and the equations and parameters applied in the PDD to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected methodology including</i></p>				

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>applicable tool(s).</i>				
<p>B.5.7.1. Are the equations applied correctly according to the applied approved methodology?</p> <p>(VVS, §§ 72(c), 96)</p> <p><i>Describe clearly the steps taken to assess whether the methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. Further take into consideration that all estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD.</i></p>	/PDD/ /meth/	<p><input type="checkbox"/> The equations applied for calculation are correctly applied according to the approved methodology.</p> <p><input checked="" type="checkbox"/> The following mistakes have been identified in this context:</p> <p>CAR B6 and CAR B7 are raised.</p> <p><i>Description:</i></p> <p><i>Validator's action:</i> PDD and methodology is checked</p> <p><i>Conclusion:</i> CAR B6 and CAR B7 raised</p>	CAR B6  CAR B7	OK
<p>B.5.7.2. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological choices (i.e. baseline identification)?</p> <p>(VVS, §§ 97, 98)</p> <p><i>Assess the correct selection and application of methodological choices. Describe whether proper justification has been provided (based on the choice of the baseline scenario, context of the project activity and other evidence provided) and whether the correct equations have been used reflecting the relevant methodological choices.</i></p>	/PDD/ /meth/	<p><i>Description:</i></p> <p>The PDD uses the equation as per the methodology but the notations are wrongly mentioned</p> <p><i>Validator's action:</i></p> <p>The PDD and the reference are checked</p> <p><i>Conclusion:</i></p> <p>CAR B10 is raised</p>	CAR B10	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>B.5.7.3. Have conservative assumptions been used when calculating the emission reductions?</p> <p>(VVS, §§ 98, 99(a))</p> <p><i>Describe clearly the steps taken to assess whether all the assumptions and data used by the PP are listed in the PDD including references and sources and are conservatively interpreted in the PDD.</i></p>	/PDD/ /FSI/ /VOL/	<p><i>Description:</i></p> <p>The PP used the volume equations as per the host country data (FSI Report and volume equations and the productivity data for the species as prescribed by the expert committee recommendations)</p> <p><i>Validator's action:</i></p> <p>The PDD and the reference are checked</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded that the conservative values are used to estimate the emission reductions</p>	OK	OK
<p>B.5.7.4. Are all data sources and assumptions appropriate and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions?</p> <p>(VVS, § 98)</p> <p><i>Describe clearly the steps taken to assess whether the values used for the fixed parameters are considered reasonable, correct and applicable in the context of the project activity. Check esp. chapter 6.2 of the PDD.</i></p>	/PDD/ /meth/	<p><i>Description:</i></p> <p>The ex-ante parameters remain fixed throughout the crediting period is in line with the methodology</p> <p><i>Validator's action:</i></p> <p>The PDD section B.7.2 is checked</p> <p><i>Conclusion:</i></p> <p>CAR B6 is raised</p>	<del>CAR</del> B6	OK
<p>B.5.7.5. Are all ex-ante calculation values for monitoring parameters (as defined as per chapter B.7.1 of PDD) reasonable?</p> <p>(VVS, § 98)</p>	/PDD/ /meth/	<p><input checked="" type="checkbox"/> All "Values of data to be applied for the purpose of calculating expected emissions reductions" are considered to be reasonable, applicable and conservative.</p> <p><input type="checkbox"/> The following mistakes have been identified in this</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>Describe clearly the steps taken to assess whether the values used for the monitoring parameters are considered reasonable, applicable and conservative in the context of the project activity</i>		context:		
<p><b>B.5.7.6.</b> Are the emission reductions real, measurable and give long-term benefits related to the mitigation of climate change.</p> <p><i>Describe the steps taken to validate this issue.</i></p>	<p>/PDD/ /XLS/ /meth/</p>	<p><i>Description:</i></p> <p>The ER calculation in the PDD is traceable and hence the emission reductions are considered, measurable and give long-term benefits related to the mitigation of climate change.</p> <p><i>Validator's action:</i> Validation team has cross checked the PPD, calculations with the methodology.</p> <p><i>Conclusion:</i> However CAR B8 and CAR B11 are raised in this regard.</p>	<p>CAR B8 <del>CAR B11</del></p>	OK
<p><b>B.5.8. Monitoring of Emission Reductions</b></p> <p><i>It is assessed whether the monitoring plan is appropriate for the project activity and in line with the applied methodology.</i></p>				
<p><b>B.5.8.1.</b> Are all monitoring parameters required by the applied methodology contained in the monitoring plan?</p> <p>(VVS, §§ 72 (e), 131, 132 (a) (i))</p> <p><i>Assess whether all applicable parameters listed in the methodology are included in the monitoring plan.</i></p>	<p>/PDD/ /meth</p>	<p><i>Description:</i> The following parameters are to be monitored as contained in the monitoring plan.</p> <ol style="list-style-type: none"> <li>1. Area of stratum I (<math>A_i</math>)</li> <li>2. Diameter at breast height of tree (DBH)</li> <li>3. Height of the tree (H)</li> <li>4. Number of Baseline Trees (<math>B_{Trees}</math>)</li> <li>5. Total number of possible sample plots within the project</li> </ol>	<p><del>CAR B8</del></p>	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.																				
<p><i>Pl. check further whether the selection of parameters not to be monitored (section B.6.2) is appropriate and in line with the applied methodology.</i></p> <p><i>In case of different approaches can be chosen acc. to the methodology assess whether the selection of parameters is justified and correct.</i></p>		<p>boundary (N)</p> <p>6. Relative weight of the area of stratum I (<math>w_i</math>)</p> <p>7. Variance of tree biomass per ha in stratum i</p> <p><i>Validator's action:</i></p> <p>The section B.7.3 of the PDD and methodology is checked.</p> <p><i>Conclusion:</i> All the applicable parameters as per the methodology are included in the monitoring plan. It is appropriate and in line with the applied methodology. Hence all the parameters considered for emission reduction calculation are included in the monitoring plan of the PDD.</p> <p>However CAR B8 is raised in this regard</p>																						
<p>B.5.8.2. Are the means of monitoring of all parameters contained in the monitoring plan feasible within the project design?</p> <p>(VVS, §§ 132 (b) (i), 133(b))</p> <p><i>Describe the steps undertaken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the project design.</i></p>	<p>/PDD/</p> <p>/XLS/</p>	<p><i>Description:</i></p> <p>The monitoring plan refers to the selection of sample plots</p> <p><i>Validator's action:</i></p> <p>PDD is checked</p> <p><i>Conclusion:</i></p> <p>CAR B8 is raised in this regard</p>	CAR B8	OK																				
<p>B.5.8.3. [Name of the Monitoring Parameter, e.g, EG<sub>y</sub>]</p> <p>(VVS, § 132 (a) (ii))</p> <p><i>Indicate whether the provided information for the monitoring parameter complies with the approved methodology including applicable tool(s) in the aspects listed.</i></p> <p><i>For checking the use of international standards in the</i></p>	<p>/PDD/</p>	<table> <tr> <th>Requirement</th> <th>OK</th> <th>Not OK</th> <th>N/A</th> </tr> <tr> <td>Label</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Data Unit</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Description</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Source of data</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Requirement	OK	Not OK	N/A	Label	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Data Unit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Description	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Source of data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CAR B10	OK
Requirement	OK	Not OK	N/A																					
Label	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																					
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Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><i>nomenclature, consider:</i></p> <p>a) Standard format (e.g. 1,000 representing one thousand and 1.0 representing one).</p> <p>b) Values shall be directly given in SI units – or additionally to original units transferred to SI.</p> <p>c) Short scale naming system: (Only) million = <math>10^6</math> and billion <math>10^9</math> shall be used.</p>		<p>Measurement equipment / measure method <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>Monitoring frequency <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>QA/QC procedures <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>Purpose of data <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>Standard format <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>SI units <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>Short scale naming <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>		
<p><b>B.5.8.4.</b> Have all means of implementing the monitoring plan, e.g. equations necessary for ex-post emission reduction calculation, been described clearly and in line with the methodology?</p> <p>(VVS, § 131)</p> <p><i>Check whether all necessary equations have been provided in the PDD. Pl. consider that ex-post and ex-ante calculations might be different.</i></p> <p><i>Please consider that additional equations might be necessary to calculate auxiliary parameters.</i></p>	/PDD/ /meth	<p><i>Description:</i></p> <p>All the equations necessary for ex-post emission reduction calculation have not been described clearly.</p> <p><i>Validator's action:</i></p> <p>PDD and methodology is checked</p> <p><i>Conclusion:</i> CAR B7 and CAR 10 is raised</p>	CAR B7 CAR B10	OK
<p><b>B.5.8.5.</b> Is it likely that the monitoring arrangements described in the PDD can properly be implemented in the context of the project activity?</p>	/PDD/ /meth/	<p><i>Description:</i></p> <p>The organisation structure and sampling plan are not given properly</p> <p><i>Validator's action:</i></p>	CAR B8 CAR B9	OK



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
(VVS, § 132 (b) (i)) <i>Assess whether the described monitoring arrangements are sufficient and realistic to enable a thorough monitoring. Pl. consider also special monitoring conditions, e.g. downtimes of monitoring equipment etc.</i>		PDD is checked  <i>Conclusion:</i> CAR B8 and CAR B9 raised		
B.5.8.6. Are the QA/QC procedures appropriate sufficient to ensure the emission reductions achieved from the project activit can be reported ex-post and verified?  (VVS, § 132 (b) (ii)) <i>Please consider the description given in section B.7.2. Describe which QA/QC provisions are considered. Address Quality Management System provisions, calibration and maintenance of equipment. Address further any review procedures.</i>	/PDD/	<i>Description:</i> The QA/ QC procedures are not mentioned clearly <i>Validator's action:</i> PDD is checked  <i>Conclusion:</i> CAR B8 raised	CAR B8	OK
B.5.8.7. Are procedures identified for data management?  (VVS, § 132 (b) (ii)) <i>Check whether appropriate provisions are considered for data management including responsibilities, what records to keep, storage area of records and how to process performance documentation</i>  <i>Check further the data archiving provisions for the project activity and ensure that provisions are made to archive data for the whole crediting period + 2 years.</i>	/PDD/	<i>Description:</i> The procedure for data management is not mentioned clearly <i>Validator's action:</i> PDD is checked  <i>Conclusion:</i> CAR B8 is raised	CAR B8	OK
<b>C. Duration and Crediting Period</b>				

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>It is assessed whether the temporary boundaries of the project are clearly defined.</i>				
<p>C.1.1. Is the project start date consistent with the available evidences?</p> <p>(VVS, § 106)</p> <p><i>Describe the evidence assessed regarding the prior consideration of the CDM (if necessary). Describe whether the evidence to support such consideration is adequately and transparently described in the PDD.</i></p>	/PDD/ /SD/	<p><i>Description:</i></p> <p>The start date of the project is mentioned as 01/01/2012</p> <p><i>Validator's action:</i></p> <p>PDD and evidences for start date are referred.</p> <p><i>Conclusion:</i> The project start date is consistent with the available evidences However CAR C1 is raised to get the clarification on the the determination of the start date</p>	CAR C1	OK
<p>C.1.2. Is the project's operational lifetime clearly defined and evidenced?</p> <p><i>Check whether the project lifetime is correctly defined. Consider the latest "Guidance on the assessment of investment analysis".</i></p> <p><i>Check in case of phased implementation this has been reflected throughout the whole PDD incl. the financial assessment, if applicable.</i></p>	/PDD/	<p><i>Description:</i></p> <p>The operational lifetime of the project is mentioned as 60 years</p> <p><i>Validator's action:</i></p> <p>PDD is checked</p> <p><i>Conclusion:</i> CAR C1 point 2 is raised</p>	CAR C1	OK
<p>C.1.3. Is the start of the crediting period clearly defined and reasonable?</p> <p><i>Check whether the envisaged starting date of the crediting period is realistic, taking into consideration the times needed for validation and registration.</i></p>	/PDD/	<p><i>Description:</i></p> <p>The start date of the crediting period is the start date of the project activity for AR CDM project activity which is 01/01/2012.</p> <p><i>Validator's action:</i></p> <p>PDD is checked</p> <p><i>Conclusion:</i> However CAR C1 point 3 is raised in this regard</p>	CAR C1	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<b>D. Environmental Impacts</b> <i>Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the DOE.</i>				
D.1.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)? (VVS, § 134-135) <i>Check the host party regulations regarding EIA. If no requirements for an EIA exist, discuss whether the project participants conducted an analysis of the environmental impacts of the project activity.</i>	/PDD/ /MoEF/	<i>Description:</i> As per the schedule 1 of the EIA notification 2006, given by the MoEF under the environment protection act 1986, the proposed project do not fall on the list of activities requiring EIA. <i>Validator's action:</i> Validation team assessed the relevant documents <i>Conclusion:</i> Thus, it is concluded that the EIA is not required by the host party.	OK	OK
D.1.2. In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been carried out in accordance with the host Party procedures? (VVS, § 135) <i>Check the EIA and its approval, if applicable.</i>	/PDD/ /MoEF/	<i>Description:</i> Refer to checklist item D.1.1 <i>Validator's action:</i> EIA notification is checked. <i>Conclusion:</i> The Checklist item is not applicable.	OK	OK
D.1.3. Are transboundary environmental impacts considered in the analysis? (VVS, § 134)	/PDD/	Not applicable. The boundary limit of the project activity is in host country only.	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>Check the documents and local official sources / expertise regarding transboundary environmental impacts.</i>				
<b>E. Stakeholder Comments</b> <i>The DOE should ensure that stakeholder comments have been invited with appropriate media and that due account has been taken of any comments received.</i>				
<p>E.1.1. Have relevant local stakeholders been invited to consultation prior to the publication of the PDD?</p> <p>(VVS, § 138-140)</p> <p><i>Check by means of document review and interviews with local stakeholders if and when a local stakeholder consultation process has been carried out.</i></p>	<p>/PDD/ /IM01/ /PRA/</p>	<p><i>Description:</i></p> <p>Identification of local stakeholders for the local stakeholder consultation process has to be explained in the PDD which is the part of the PRA exercise</p> <p><i>Validator's action:</i></p> <p>PDD is checked and site visit interviews</p> <p><i>Conclusion:</i></p> <p>CL D1 is raised</p>	CL-D1	OK
<p>E.1.2. Can the local stakeholder consultation process be assessed as adequate?</p> <p>(VVS, § 138-140)</p> <p><i>Describe what assessment steps have been undertaken to assess the adequacy of the stakeholder consultation process. Give a final opinion on the adequacy.</i></p> <p><i>Please consider the following requirements in this context:</i></p> <p>(a) Comments by local stakeholders that can reasonably be</p>	<p>/PDD/ /IM01/ /PRA/</p>	<p><i>Description:</i> The PP identified the stakeholders and conducted the PRA exercise for getting the baseline. Various stakeholders are consulted and filled in questionnaires are collected from them during October 2013</p> <p><i>Validator's action:</i></p> <p>The PDD is checked.</p> <p><i>Conclusion:</i></p> <p>CL D1 and CL E1 are raised as PRA exercise is not submitted and socio economic impacts outside the boundary are not addressed.</p>	CL-D1 CL-E1	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p><i>considered relevant for the proposed CDM project activity, have been invited;</i></p> <p><i>(b) The summary of the comments received as provided in the PDD is complete;</i></p> <p><i>(c) The project participants have taken due account of any comments received and have described this process in the PDD.</i></p>				
<b>F. Others</b>				
<p><b>F.1. Approval – Contribution to Sustainable Development</b></p> <p><i>The written approval of the parties involved is a mandatory requirement.</i></p>				
<p>F.1.1. Have written approvals of all parties involved been provided to the validation team?</p> <p>(VVS, § 38)</p> <p><i>Indicate whether a letter of approval has been received, with a clear reference to the supporting documentation.</i></p> <p><i>Indicate whether this letter was provided to the DOE by the project participants or directly by the DNA</i></p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i> The Ministry of Environment and forest, Government of India, is the host party DNA and issued the Letter of Approval (HCA) No. no 4/17/2014—CCC dated 11 February 2014 was provided by the PP to the validation team.</p> <p><i>Validator's action:</i> PDD and HCA are checked.</p> <p><i>Conclusion:</i> HCA does not mention any reference documentation and it is concluded that the only party involved is the host party, India which provided the written approval for this project activity.</p>	OK	OK
F.1.2. Are the approvals issued from organisations	/PDD/	<i>Description:</i>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<p>listed as DNAs on the UNFCCC CDM website?</p> <p>(VVS, §§ 41)</p> <p><i>Indicate the means of validation employed to assess the authenticity, i.e. in case of doubt whether LoA has been verified with the DNA. Further describe which entity submitted the LoA for validation.</i></p>	<p>/HCA/ /UNFCCC/ C/</p>	<p>The Ministry of Environment, as per the below link <a href="http://maindb.unfccc.int/public/country.pl?country=IN">http://maindb.unfccc.int/public/country.pl?country=IN</a> is listed in the UNFCCC website as the DNA in India</p> <p><i>Validator's action:</i></p> <p>PDD and UNFCCC web site are checked along with the HCA</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded that the approval issued is from the organisation listed as DNA on the UNFCCC CDM website</p>		
<p>F.1.3. Do the written approvals confirm that the corresponding party is a Party to the Kyoto Protocol?</p> <p>(VVS, § 39(a))</p>	<p>/PDD/ /HCA/ /UNFCCC/ C/</p>	<p><i>Description:</i></p> <p>The host country India is a party to the Kyoto Protocol. The following web link has been verified <a href="http://unfccc.int/files/essential_background/kyoto_protocol/application/pdf/kpstats.pdf">http://unfccc.int/files/essential_background/kyoto_protocol/application/pdf/kpstats.pdf</a></p> <p><i>Validator's action:</i></p> <p>PDD and UNFCCC web site are checked along with the HCA</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded that the written approval confirm that the Host party India is party to Kyoto Protocol.</p>	OK	OK
<p>F.1.4. Do the written approvals confirm that the participation is voluntary?</p> <p>(VVS, § 39(b))</p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i></p> <p>The proposed project activity is A/R CDM project activity and it is a voluntary initiation by the project proponent. The host country approval letter mentions the participation as voluntary.</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
		<p><i>Validator's action:</i></p> <p>Letter of approval bearing number 4/17/2014–CCC dated 11 February 2014 from the Host country has been submitted and verified</p> <p><i>Conclusion:</i></p> <p>The HCA submitted by the PP confirms that the project is a voluntary initiation in proposed CDM project activity</p>		
<p>F.1.5. Does the written approval from the host country confirm that the project contributes to the sustainable development in the country?</p> <p>(VVS, § 39(c))</p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i></p> <p>The DNA, in its Host Country Approval issued for this project confirms vide point (iii) that the project contributes to sustainable development of India</p> <p><i>Validator's action:</i></p> <p>Letter of approval bearing number 4/17/2014–CCC dated 11 February 2014 from the Host country has been submitted and verified</p> <p><i>Conclusion:</i></p> <p>The letter confirms that the project contributes to Sustainable Development of India.</p>	OK	OK
<p>F.1.6. Do the written approvals refer to the precise project title in the PDD submitted for registration or an additional specification of the project activity, e.g. PDD version number?</p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i></p> <p>The project title mentioned in the HCA is same as the title mention in the PDD submitted for registration. The title of the project is "Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest</p>		



Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
(VVS, §§ 39(d))		<p>Division, Uttar Pradesh, India.“</p> <p><i>Validator's action:</i></p> <p>PDD and Letter of approval bearing number 4/17/2014–CCC dated 11 February 2014 from the Host country has been submitted and verified</p> <p><i>Conclusion:</i></p> <p>The host country approval letter has been verified for project title. Thus the validation team concludes that the project title mentioned in the HCA and PDD which is submitted for RfR are same.</p>		
<p>F.1.7. Are the written approvals unconditional with regard to F.1.3 to F.1.6?</p> <p>(VVS, § 40)</p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i></p> <p>From the written approval i.e., the HCA, it is confirmed that the requirements with respect to the following are found to be unconditional.</p> <ul style="list-style-type: none"> <li>• A.1.3-Whether corresponding party is a party to the Kyoto Protocol?</li> <li>• A.1.4-Whether written approvals confirm that the participation is voluntary?</li> <li>• A.1.5-Whether the project contributes to sustainable development in the host country?</li> <li>• A.1.6-Whether the HCA refer to the precise project title mentioned in the PDD submitted for registration?</li> </ul> <p><i>Validator's action:</i></p> <p>PDD and Letter of approval bearing number 4/17/2014–CCC dated</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
		<p>11 February 2014 from the Host country has been submitted and verified and unconditionally states that:</p> <ul style="list-style-type: none"> <li>• Government of India has ratified the Kyoto Protocol in August 2002;</li> <li>• It is in approval of the voluntary participation of the proposed CDM project activity;</li> <li>• The project contributes to Sustainable Development in Sri Lanka; and</li> <li>• The title of the small scale CDM project activity is “Small scale Obra JFM A/R CDM Project on degraded lands in Obra Forest Division, Uttar Pradesh, India.” which is in congruence to the project title as is mentioned in the PDD submitted to the DOE for Registration.</li> </ul> <p><i>Conclusion:</i></p> <p>Pursuant to the justification of evidences provided above, the requirement that the written approvals are unconditional with respect to A.1.3 to A.1.6 is positively validated.</p>		
<p>F.1.8. Is the information regarding the project participants listed in tabular form in PDD and is internally consistent with the information provided in the section that contains the contact information of the project participants?</p> <p>(VVS, § 46)</p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i></p> <p>Information regarding the project participants provided in first page, Section A.5 and Appendix 1 of the PDD is totally consistent. The name of the project participant is Divisional Forest Officer, Obra Forest Division</p> <p><i>Validator's action:</i></p> <p>PDD and Letter of approval bearing number 4/17/2014–CCC dated 11 February 2014 from the Host country has been submitted and</p>	<p>OK</p>	<p>OK</p>

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
		<p>verified</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded that the information regarding the project participants listed in section A.5 and in Appendix 1 of the PDD is consistent with the information provided in the contact information details of the HCA.</p>		
<p><b>F.1.9.</b> Are all project participants listed in the PDD approved at least by one Party involved?</p> <p>(VVS, § 45)</p> <p><i>Indicate whether the participation of the project participant(s) has been approved by a Party to the Kyoto Protocol.</i></p> <p><i>Describe the means of validation employed to draw this conclusion.</i></p>	<p>/PDD/ /HCA/</p>	<p><i>Description:</i></p> <p>In the PDD it is mentioned that the participant in the Project activity is Divisional Forest Officer, Obra Forest Division, UP.</p> <p><i>Validator's action:</i></p> <p>PDD Letter of approval bearing number 4/17/2014–CCC dated 11 February 2014 from the Host country has been submitted and verified</p> <p><i>Conclusion:</i></p> <p>Thus it is concluded that the project participant listed in the PDD is approved by the host party.</p>	OK	OK
<p><b>F.1.10.</b> Are any other project participants than those authorized as project participants listed in the PDD?</p> <p>(VVS, § 47)</p>	<p>/PDD/ /HCA/</p>	<p>N/A, as only one project proponent is mentioned in the PDD as well as in HCA</p>	N/A	N/A
<p><b>F.2. Modalities of Communication Statement</b></p> <p><i>A due diligence on the Modalities of Communication statement in accordance with the requirements</i></p>				

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
<i>established in the VVS is mandatory.</i>				
<p>F.2.1. Has a valid Modalities of Communication (MoC) been provided to the validation team from a project participant with whom the DOE has a contractual relationship? (VVS, § 55)</p> <p><i>Indicate whether a MoC has been received, with a clear reference to the contractual relationship of the project participant with the DOE.</i></p>	<p>/PDD/ /MOC/</p>	<p><i>Description:</i> The MOC is received from the project participant with whom the DOE has a contractual agreement</p> <p><i>Validator's action:</i> MOC and Contract proposal are checked</p> <p><i>Conclusion:</i> Thus it is concluded the MOC is received from participant who has given the works contract for this project.</p>	OK	OK
<p>F.2.2. Has the MoC been signed by a duly authorized person on behalf of the respective project participant? (VVS, §§ 54, 56)</p> <p><i>Please Indicate how the personal and corporate identities of all project participants and focal points included in the MoC statement have been validated.</i></p>	/MOC/	<p>The personal and corporate identities of all project participants and focal points included in the MoC were validated by:</p> <p><input type="checkbox"/> Directly checking evidence for corporate and personal entity</p> <p><input type="checkbox"/> Notarized documentation</p> <p><input checked="" type="checkbox"/> Written confirmation from the project participant that all corporate and personal details are accurate and valid. , including specimen signatures and employment status of their signaries whether a letter of approval has been received, with a clear reference to the supporting documentation</p>	OK	OK
F.2.3. Has the MoC statement correctly been	/MOC	<input checked="" type="checkbox"/> The latest version of the form (F-CDM-MOC) has been used	OK	OK

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
completed? (VVS, §§ 59, 60)		<input checked="" type="checkbox"/> Annex 1 of the MoC is correctly completed  <input checked="" type="checkbox"/> The project participants' authorized signatories signing the MoC are also listed in Annex 1 of the MoC.		
<b>F.3. PDD editorial aspects</b>  <i>The PDD used as a basis for validation shall be prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website.</i>				
F.3.1. Has the latest version of the PDD form been applied?  (VVS, § 62)	/PDD/  /PDD-T/	<i>Description:</i> The PP used the CDM-SSM—AR-PDD-Form version 3 in the webhosted PDD  <i>Validator's action:</i> PDD and PDD template are checked  <i>Conclusion:</i> During the time of validation the version was updated and PP updated to the latest version 4 available in the UNFCCC website	OK	Ok

Checklist Item (incl. guidance for the validation team)	Reference	Validation Team Comments (justification and substantiation of information, data and evidences)	Draft Concl.	Final Concl.
F.3.2. Has the PDD been duly filled in accordance with the latest guidance(s)?  (VVS, § 63)	/PDD/  /PDD-T/	<p><i>Description:</i></p> <p>The PP used the CDM-SSM—AR-PDD-Form version 3 and its filling guidelines in the webhosted PDD</p> <p><i>Validator's action:</i></p> <p>PDD and PDD template are checked</p> <p><i>Conclusion:</i></p> <p>During the time of validation the version was updated and PP updated to the latest version 5 available in the UNFCCC website</p>	OK	OK

## ANNEX 2: ASSESSMENT OF APPLICABILITY CRITERIA

**Table A-2:** Assessment of Applicability Criteria (VVS §§ 70 – 76)

Applicability Criteria	Evidence used	met	not met	N/A	Assessment of validation team (results and means of assessment)
The land subject to the project activity does not fall in wetland category;	/IPCC/ /LULUCF/	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>As per the IPCC GPG LULUCF 2003<sup>8</sup>, wetlands are defined as lands that are covered or saturated by water for all or part of the year (e.g., peat land) and that does not fall into the forest land, crop land, grass land or settlements categories including reservoirs, natural rivers and lakes.</p> <p>The entire project area falls under Obra district of Uttar Pradesh state. The district website <a href="https://en.wikipedia.org/wiki/Obra,_Uttar_Pradesh">https://en.wikipedia.org/wiki/Obra,_Uttar_Pradesh</a> is checked and found that it lies in subtropical humid climatic zone. Also the project area does not fall under the Yamuna and Ganga doab eliminating the chances of wetland. The PRA exercise done by the PP and submitted to the validation team and inferred that the area is completely degraded without or with very minimal vegetation for ages.</p> <p>Hence this criterion is satisfied.</p>

<sup>8</sup> [http://www.ipccnggip.iges.or.jp/public/gpglulucf/gpglulucf\\_files/Glossary\\_Acronyms\\_BasicInfo/Glossary.pdf](http://www.ipccnggip.iges.or.jp/public/gpglulucf/gpglulucf_files/Glossary_Acronyms_BasicInfo/Glossary.pdf)



<p>B) Soil disturbance attributable to the project activity does not cover more than 10 per cent of area<sup>9</sup> in each of the following types of land, when these lands are included within the project boundary</p>	<p>/IPCC/ /PRA/ /IM01/</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>It proposed to have 488 pits with a length and breadth of 0.45 m X 0.45 m for the planting and 200 trenches of 3 m X 0.6 m. Thus the surface area for pitting will be 98.82 m<sup>2</sup> and for trenching is 360 m<sup>2</sup>. Thus total surface area disturbed is 299.07 m<sup>2</sup> which is less than 10% per Ha which is 1000 m<sup>2</sup> as per the methodology. Hence, this applicability condition has been fulfilled.</p> <p>The proposed project activity area is on degraded land and is left fallow and no agriculture activity is being carried out in the selected area. This is verified from the PRA exercise carried out by the PP and also during the site visit interviews with the JFMC members and local elders.</p> <p>Thus the land in the baseline does not fall in the categories of grassland and cropland and methodology Appendix 2 and Appendix 3 are not applicable.</p>
<p>a. Land containing organic soils as defined in "Annex A: Glossary" of the IPCC GPG LULUCF 2003;</p>					
<p>b. Land which, in the baseline, is subjected to land-use and management practices and receives inputs as listed in appendix 2 and appendix 3 to this methodology.</p>					

<sup>9</sup> For example, digging pits of size 0.50 m x 0.50 m (length x width) at a spacing of 3 m x 3 m is equal to a coverage of 2.78 per cent; continuous ploughing of land is equal to a coverage of 100 per cent.

## ANNEX 3: ASSESSMENT OF BASELINE IDENTIFICATION

**Table A-3:** Assessment of Baseline Identification (VVS §§ 88 – 95)

<input checked="" type="checkbox"/>	Baseline is pre-defined by the methodology
<input type="checkbox"/>	Assessment of baseline alternatives see below

Baseline Alternatives identified	In line with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	DOE Assessment	
					Appropriateness of elimination	Assessment of validation team (results and means of assessment)
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	

## ANNEX 4: ASSESSMENT OF FINANCIAL PARAMETERS

**Table A-4:** Assessment of Financial Parameters (VVS, §§ 120, 121 / in case financial parameters stem from FSR §122)

<input checked="" type="checkbox"/>	No financial parameters are used for additionality justification					
<input type="checkbox"/>	Assessment of all financial parameters see below					
Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT	
					Correctness of value applied	Comment
				//	<input type="checkbox"/>	L1: L2: L3:

## ANNEX 5: ASSESSMENT OF BARRIER ANALYSIS

**Table A-5:** Assessment of Barrier Analysis (VVS, §§ 124-127)

<input type="checkbox"/>		No barrier parameters are used for additionality justification		
<input checked="" type="checkbox"/>		Assessment of barriers see below		
Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of validation team	
			Appropriateness of information source	Explanation of final result
Barriers due to local ecological conditions	Degraded Soil	/PRA/ /IM01/ /GIS/	<input checked="" type="checkbox"/>	The PRA exercise conducted and submitted by the PP is referred in this regard and the project area is degraded for the last 25 years. Also during the on-site interview with the local persons and JFMC members it was informed that the land was plain for more than 3 decades.
	Unfavourable environmental conditions			Obra has a humid subtropical hot summer climate that is mild with dry winters, hot humid summers and moderate seasonality, <a href="http://www.allahabad.climateemps.com/#ixzz3U9lqGCj9">http://www.allahabad.climateemps.com/#ixzz3U9lqGCj9</a> , (the website showing the overall climate profile of the area) thus summers are prone to forest fires and the precipitation is also less in this area. Also the district map is checked and there is no major rivers flowing near to the project area. Hence drought is predominant in the project area

	Pervasive opportunistic species			During the site visit the land near to the project area and some parcels of the project area is highly inundated with the pervasive species like Van tulsi and Lantana camara even Parthenium weeds. These species will affect the survival rate of the plantations which requires extra care and investment.
Barrier due to Social conditions	Widespread illegal practices			The demand for fuel wood, timber and fodder is very high in the region. This is evident from the following web link <a href="http://indiatoday.intoday.in/story/uttar-pradesh-forest-department-lays-down-strict-rules-but-has-no-means-to-enforce-them/1/330171.html">http://indiatoday.intoday.in/story/uttar-pradesh-forest-department-lays-down-strict-rules-but-has-no-means-to-enforce-them/1/330171.html</a> (accessed as on 15-11-2015) that the illegal practices are predominant in the region. Also the following literature Joint Forest management :Policy , practices and prospects by Aravind Khare and others in collaboration with WWF-India and IIED United kingdom, in the year 2000, (page 32 section 2.4.4 fodder) states that the grazing takes place in 83% of the forest land in the state of Uttar Pradesh
	Investment barriers other than economic/financial barriers			During the site visit interview, it was evident that the Loan by JICA for reforesting the degraded land was sanctioned along with the consideration of CDM revenues. Secondly the history of Uttar Pradesh forestry is referred from the following web link <a href="http://upforest.gov.in/StaticPages/History2.aspx">http://upforest.gov.in/StaticPages/History2.aspx</a> for the progress of forestry activities but still the targets are not achieved

## ANNEX 6: OUTCOME OF THE GSCP


**Table A-6:** Outcome of the Global Stakeholder Consultation Process

(VVS, §§ 34- 37)

<input checked="" type="checkbox"/>	No comments were received during the global stakeholder consultation period					
<input type="checkbox"/>	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the validation team are presented below:					
Comment No.:	Comment by:	Inserted on:	Subject	Comment <sup>*)</sup>	Action taken by the validation team to take due account on the comment <sup>*)</sup>	Conclusion (incl. CARs CLs or FARs)

<sup>\*)</sup> In case clarifications have been requested by the validation team corresponding rows shall be added

## ANNEX 7: STATEMENTS OF COMPETENCE OF INVOLVED PERSONNEL



**Statement of Competence**  
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

**Mr. Ezhilarasu G.**

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification)	2017-02-06
VCS / ISO 14064-2	Senior Assessor	2017-02-06


Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewable Energies
3.1	Energy Demand
13.1	Waste Handling and Disposal

130 - Rev. 3, Date: 2014-02-07

130\_501-VA005-F20\_2014-02-07\_rw3.doc

501-VA005-F20\_rw3 / 2013-10-25



**Statement of Competence**  
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

**Mr. Indrapal Parmar**

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2018-01-06
VCS / ISO 14064-2	Lead Assessor	2018-01-06


Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
1.2	Renewable Energies	

191 - Rev. 4, Date: 2015-01-07

191\_501-VA005-F20\_2015-01-07\_rw4.doc

501-VA005-F20\_rw3 / 2012-10-25



**Statement of Competence**  
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

**Ms. Sudha Padmanabha**

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
14.1	Forestry	

345 - Rev. 0 Date: 2014-08-01

501-VA005-F20\_rw4\_0\_2014-08-01.doc

501-VA005-F20\_rw3 / 2013-10-25





### Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

**Mr. Kundan Kumar Burnwal**

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
14.1	Forestry	

346 - Rev. 0, Date: 2014-10-20

SD1-VA060-F20\_346\_Kundan\_Kumar\_Burnwal.doc

SD1-VA060-F20-wch / 2010-10-25



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### Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

**Ms. Alexandra Nebel**

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2016-03-03
J1	Senior Assessor Technical Reviewer	2016-03-03
VC5 / ISO 14064-2	Senior Assessor Technical Reviewer	2016-03-03

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
14.1	Afforestation and reforestation

095 - Rev. 5, Date: 2015-10-14

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