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Validation Report

Haryana CDM Variksh Kisan Samiti, Ellenabad, Sirsa

VALIDATION OF THE CDM-PROJECT:
SMALL SCALE COOPERATIVE AFFORESTATION
CDM PILOT PROJECT ACTIVITY ON PRIVATE
LANDS AFFECTED BY SHIFTING SAND DUNES
IN SIRSA, HARYANA; INDIA

REPORT NO. 1177278

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TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

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Subject: Validation of a CDM Project	
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany	TÜV SÜD Contract Partner: TUV SUD South Asia C-153/1, Okhla Industrial Estate Phase- 1 New Delhi – 110020 India
Project Participant: Haryana CDM Variksh Kisan Samiti, Ellenabad, Sirsa Forest Complex Sirsa, Sirsa Haryana, 125 055 India	Project Site(s): State of Haryana, Sirsa district, Area of Elenabad, India (GPS coordinates: several polygonos, confirmed geographic positions included to PDD)
Project Title: Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana; India	
Applied Methodology / Version: AR-AMS0001 / Version 04.1	Scope(s): 14
First PDD Version: Date of issuance: 15-01-2008 Version No.: 01 Starting Date of GSP 17-04-2008	Final PDD version: Date of issuance: 13-12-2008 Version No.: 03
Estimated Annual Emission Reduction:	11,596 tCO ₂ e
Assessment Team Leader: Thomas Kleiser	Further Assessment Team Members: Hubertus Schmidtke
Summary of the Validation Opinion:	
<input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.	
<input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.	

Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
AMS	Approved Methodology Small scale
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
CR / CL	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	GreenHouse Gas(es)
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
IRR	Internal Rate of Return
KP	Kyoto Protocol
MP	Monitoring Plan
NGO	Non Governmental Organisation
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM Executive Board (CDM-EB). The ultimate decision on the registration of a proposed project activity rests at the CDM-EB and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title: Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana.

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- The Kyoto Protocol, in particular § 12 and modalities and procedures for the CDM
- Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM (e.g. decisions 4-8/CMP.1)
- Decisions and specific guidance by the EB published under <http://cdm.unfccc.int>
- Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- Baselines and monitoring methodologies (including GHG inventories)
- Management systems and auditing methods
- Environmental issues relevant to the sectoral scope applied for
- Applicable environmental and social impacts and aspects of CDM project activity
- Sector specific technologies and their applications
- Current technical and operational knowledge of the specific sectoral scope and information on best practice

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

Once TÜV SÜD receives a first PDD version, it is made publicly available at the UNFCCC webpage and at TÜV SÜD's webpage for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP could be repeated) and the final PDD will form the basis for the final evaluation as presented in this report. Information on the first and the final PDD version is presented in page 1.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD cannot be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

2 METHODOLOGY

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the project participants. The assessment is based on the “Clean Development Mechanism Validation and Verification Manual” version 01. The work starts with appointment of team covering the technical scope(s), sectoral scope(s) and relevant host country experience for evaluating the CDM project activity. Once the project is made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up actions, resolution of issues identified and finally preparation of the validation report. The prepared validation report and other supporting documents then undergo an internal quality control by the CB “climate and energy” before submission to the CDM-EB.

In order to ensure transparency, assumptions are clear and explicitly stated; the background material is clearly referenced. TÜV SÜD developed methodology-specific checklists and protocol customised for the project. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

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

The validation protocol consists of three tables. The different columns in these tables are described in the figure below. The completed validation protocol is enclosed in Annex 1.

Validation Protocol Table 1: Conformity of Project activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further sub-divided. The lowest level constitutes a checklist question / criterion.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.</i>	<i>The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column</i>	<i>Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (<input checked="" type="checkbox"/>) , or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification. Forward action request to highlight issues related to project implementation that require review during the first verification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version and further documents including assumptions presented in the documentation.</i>



Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarification and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action, a Clarification or a Forward action Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the issue is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the discussion on and revision to project documentation together with the validation team's responses and final conclusions. The conclusions should be reflected in Table 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion with a clear reference to the requirement which is not complied with.</i>

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body (CB) ensuring that the required skills are covered by the team. The CB TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Abhishek Goyal (initial)	ATL			<input checked="" type="checkbox"/>
Thomas Kleiser (final)	ATL			
Hubertus Schmidtke	GHG-A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Abhishek Goyal was an Assessment Team Leader for CDM/JI projects and environment/ energy expert at TÜV SÜD Industrie Service GmbH. Before joining the TÜV SÜD Industrie Service GmbH he had worked on development of PDDs and methodologies for several energy efficiency, renewable energy, and waste to energy projects. He has extensive experience in CDM in India. Mr. Goyal left the company recently.

After the initial finalisation of the validation report, a further update became necessary due to the publication of the VVM. Mr. Kleiser complied with the role of ATL after the initially involved Mr Goyal had left the TÜV SÜD in this final stage of the audit.

Thomas Kleiser is an Assessment Team Leader for CDM/JI projects and head of division CDM/JI within TÜV SÜD Industrie Service GmbH. In this position he is responsible for the implementation of verification and certifications processes for GHG mitigation projects. He has participated in more than one hundred CDM and JI project assessments.

Hubertus Schmidtke is GHG auditor for forestry projects. He is an expert for forest inventory design with respect to monitoring of carbon pools in afforestation and reforestation projects. He has received extensive training in CDM related issues and participated in AR-CDM project assessments as a trainee auditor and technical expert.

2.2 Review of Documents

A first version of the PDD was submitted to the DOE in April 2008. The first PDD version submitted by the PP (used for publication, Section 4) and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility and interpretation of the presented information, furthermore a cross check between information provided and information from other sources (if available) have been done as initial step of the validation process.

A complete list of all documents and proofs reviewed as part of the audit is attached as Annex 2 to this report.

2.3 Follow-up Interviews

During April 23 to 27, 2008 TÜV SÜD performed interviews, telephone conferences and physical site inspection with project stakeholders to confirm relevant information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in this context.

Name	Function / Organisation
Mr. V.S. Tanwar IFS	Conservator of Forests, Haryana Forest Department, HCFP Hisar
Mr. S.S. Sheoran	DFO, Haryana Forest Department, HCFP Hisar
Mr. R.K. Chugh	SDO, Haryana Forest Department, HCFP Sirsa
Mr. Kundan K. Burnwal	Research associate, Institute for Global Warming and ecological studies IGWES, Nodia
Mr. Ashwin A.S.	Research associate, Institute for Global Warming and ecological studies IGWES, Nodia
Mr. Xiaoguan Zhang	CDM-Advisor, Chinese Academy of Forestry
Mr. Ravi Khod	Farmer, President of CDM project Society
Mr. Jeet Ram	Project director, Haryana Forest Department, HCFP Chandigar
Mr. Sharma	DFO, Haryana Forest Department, Headquater Panchkula
Mr. Promote Kant	Consultant, Director, Institute for Global Warming and ecological studies IGWES
Mr. Göran Jonsson	Team Leader, Community Forestry Project
6 farmers participating in the scheme, out of 20 present in the meeting (village Gudia Khera)	
7 farmers participating in the scheme, out of 20 present in the meeting (village Podka)	
11 farmers participating in the scheme, out of 25 present in the meeting (village Neemla)	

2.4 Further cross-check

During the validation process, the team makes reference to available information related to similar projects or technologies as the CDM project activity.

The documentation has also been reviewed against the approved methodology/ies applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's conclusion on the project design. The CARs and CRs raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are documented in more detail in the validation protocol in Annex 1.

The final PDD version that was submitted in December 2008 serves as the basis for the final assessment presented herewith. Changes are not considered to be significant with respect to the qualification of the project as a CDM project based on the two main objectives of the CDM, i.e. to achieve a reduction of anthropogenic GHG emissions and to contribute to a sustainable development.

2.6 Internal Quality Control

As final step of a validation the final documentation including the validation report and the protocol have to undergo an internal quality control by the CB "climate and energy", i.e. each report has to be finally approved either by the head of the CB or the deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

After confirmation of the PP the validation opinion and relevant documents are submitted to the EB through the UNFCCC web-platform.

In this particular case, the review process by the Certification Body was carried out by Mr. Javier Castro and Mr Martin Schröder. Mr. Schröder is an appointed forestry auditor of the certification body, who complied in this case the role of a Veto Person.

3 SUMMARY

The assessment work and the main results are described below in accordance with the VVM reporting requirements. The reference documents indicated in this section and the validation checklist (Annex 1) are included to the Information Reference List (IRL) (Annex 2).

3.1 Approval

The project participants are Haryana CDM Variksh Kisan Samiti, Ellenabad, Sirsa of India. The host Party India meets the requirements to participate in the CDM.

The DNA of the India has issued a LoA (Annex 2, IRL item 3) on April 9, 2008 authorizing Haryana CDM Variksh Kisan Samiti, Ellenabad, Sirsa as a project participant. TÜV SÜD received these letters from the project participants directly and considers the provided letters as authentic.

The India LoA has further been double-checked with the CDM project webpage sponsored by the DNA (<http://cdmindia.nic.in/cdmindia/projectList.jsp?n=y&off=61>), which further confirms the approval of this CDM project.

Furthermore, after checking the provided LoA, TÜV SÜD confirms that the letter refers to the precise proposed CDM project activity title in line with the title in the PDD “Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana”.

The letter also indicates that India is a Party to the Kyoto Protocol, and that the participation in the “Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana” project is voluntary. The India LoA also confirms that the proposed CDM project activity contributes to the sustainable development of India (host country). Based on the information given in these letters, TÜV SÜD considers the approval as unconditional with respect to these items.

The LoA has been issued by the respective Party’s DNA, National Clean Development Mechanism (CDM) Authority, Member Secretary, Ministry of Environment and Forests, 115 Parvathan Bhawan, CGO Complex, Lodhi Road, New Delhi, India.

TÜV SÜD considers the requirements of the VVM (§§ 45-48) to be complied with.

The LoA does not specify a version number of the PDD or validation report. The corresponding references included to LoA, PDD and validation report are consistent.

3.2 Participation

The participants of the project activity have been approved by the corresponding Parties, which is confirmed by the issued LoA. The means of validation were equivalent to those described in section 3.1 in regard to the approval process of the project activity.

3.3 Project design document

The PDD is compliant with relevant form and guidance as provided by UNFCCC. The most recent version of the PDD form was used.

TÜV SÜD considers that the guidelines for the completion of the PDD in their most recent version have been followed. Relevant information has been provided by the participants in the applying PDD sections. Completeness was assessed through the checklist included to Annex 1 of this report.

3.4 Project description

The following description of the project as per PDD was verified during the on-site audit:

The project focuses on the reforestation of 369.87 ha of arid lands without forest cover in the Indian state of Haryana. One key purpose is the fixation of sand dunes, as the project area is located in relative vicinity to the Great Indian Thar desert. The reforestation area is divided into 239 discrete parcels of lands. Lands are in ownership of local smallholders who have opted to participate in the project scheme, hosted by the organisation Haryana CDM Variksh Kisan Samiti, Ellenabad, Sirsa.

The project activity schedules to install reforestations with mutual benefits to the local smallholders, among others also focussing on wood production, avoidance of wind erosion and general improvement of site conditions. The seven species to be planted have been chosen in line with the ecologic conditions and based on the demands of the participating smallholders.

The information presented in the PDD on the technical design is consistent with the actual planning and implementation of the project activity as confirmed by:

- Review of data and information (see Annex 2), the same was cross checked with other sources if available.
- An on-site visit has been performed and relevant stakeholder and personnel with knowledge of the project were interviewed, in case of doubt further cross checks through additional interviews have been done.
- Finally information related to similar projects or technologies as the CDM project activity have been used if available to confirm the accuracy and completeness of the project description.

In light of the above, TÜV SÜD confirms that the project description as included to the PDD is sufficiently accurate and complete in order to comply with the requirements of the CDM.

Beyond the actual project design, the PP has opted for tCERs as approach to address non-permanence over a 20 year, renewable crediting period.

3.5 Baseline and monitoring methodology

3.5.1 Applicability of the selected methodology

Compliance with each applicability condition as listed in the chosen baseline and monitoring methodology AR-AMS0001 / Version 04.1 has been demonstrated.

The assessment was carried out for each applicability criteria and included among others the compliance check of the local project setting with the applicability conditions in regard to baseline setting and eligible project measures. This assessment also included the review of secondary sources which sustain that applicability conditions are complied with.

The Methodology specific protocol included to the Annex 1 documents the assessment process, including the steps taken. The results on the compliance check as well as the relevant evidence are explicitly presented in Annex 1.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the project activity.

Emission sources which are not addressed by the applied methodology and which are expected to contribute more than 1% of the overall expected average annual emissions reduction have not been identified.

3.5.2 Project boundary, pools and eligibility

The project boundary was assessed in the context of physical site inspection, interviews and based on the secondary evidence received on the design of the project.

The project boundary is conformed of several discrete planting areas. The boundary as defined in the field was found to be consistent with the indications in the PDD. A minor deviation was corrected. In the field the boundary delineation was taken with a high level of precision based on GPS. Improved labeling of the numerous discrete parcels in the PDD was requested by the auditing team in order to allow for traceable site identification.

The most relevant documents assessed in order to confirm the project boundary are the following:

- GPS coordinates (Annex 2, IRL item 10)
- Maps of project boundary as also included to the final PDD.

The same have been validated during the validation process using standard audit techniques, further details of any observation are presented in the Annex 1.

In regard to control over the project area, the smallholders signed a contract with the PP on the implementation of the reforestation as part of the AR-CDM project. The entire corresponding documentation was reviewed and found established according to the legal system of the host country. Thus, control over the project area by the PP is considered to be fully established.

However, as the PP is not the owner of the lands it will be necessary that the aspect of maintained contractual relations with the smallholders (on project implementation and carbon rights) is monitored. The Monitoring Plan was adapted therefore in the course of the audit.

Hence, TÜV SÜD confirms that the identified boundary documented in the PDD is adequately defined for the project activity.

The carbon pools and the relevant emissions sources and gases (compare sections on removals and emissions below) have been selected in line with the applicable methodology and this information is included accordingly in the PDD.

In regard to eligibility of lands, the project area was visited by the audit team and found to fully comply with the requirements of the most recent Eligibility Procedure as defined by the EB. Present vegetation was found to be below the forest threshold (according to the DNA definition) and it was assessed that the vegetation prior to project start will not surpass this threshold (at maturity). Among others the assessment was based on the following evidence:

- Participatory Rural Appraisal (PRA) assessment, including analysis of historic land use (Annex 2 IRL item 8)

3.5.3 Baseline identification

In the PDD the following baseline scenario has been defined:

- Continued cropland and grassland

The information presented in the PDD has been validated by a first document review, further confirmation based on the on-site visit and a final step by cross checking the information with similar relevant projects and/or technologies.

The sources referenced in the PDD have been quoted correctly. The information was cross-checked based on verifiable and credible sources, such as:

- Institute of Sustainable Development. Environment Impact Study in Haryana Community Forestry Project Villages, December 2007, which includes a general overview of land use types in the region (Annex 2, IRL item 21).
- India's Forests, 2003 (Annex 2, IRL item 22)

- IPCC Good Practice Guidance LULUCF, 2003 (Annex 2, IRL item 25)

Field visits and interviews sustained the chosen baseline approach as per CDM Modalities and Procedures: *Existing or historical, as applicable, changes in carbon stock in the carbon pools within the project boundary.*

In the case of this project, the historic land use applicable to the project area prior to project start, which is cropland and grassland, would also be the likely future land use in absence of the project.

TÜV SÜD has determined that no reasonable alternative scenario has been excluded. Based on the validated assumptions on calculations TÜV SÜD considers that the identified baseline scenario is reasonable.

TÜV SÜD confirms that all relevant CDM requirements, including relevant and / or sectoral policies and circumstances, have been identified correctly taken into account in the definition of the baseline scenario.

A verifiable description of the baseline scenario has been included to the PDD.

In regard to item 86 of VVM, TÜV SÜD confirms that:

1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
5. The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.

3.5.4 Algorithm and/or formulae used

TÜV SÜD has assessed the calculations of baseline stocks and removals, project emissions, leakage and the expected net anthropogenic GHG removals by sinks. Corresponding calculations were carried out based on calculation spreadsheets. Correctness of calculations can be confirmed as the same have been replicated by the audit team using the information provided.

The values and estimates presented in the PDD are considered reasonable based on the documentation reviewed, further references and the result of the interviews.

Based on the information reviewed it can also be confirmed that the sources used are correctly quoted and interpreted in the PDD. All assumptions and data indicated in the PDD and all relevant sources have been checked and confirmed. Detailed information on the verification of parameters used in the equations can be found in Annex 1.

In essence, the methodology has been correctly applied following the requirements. Hence, the calculation of baseline stocks and removals, project emissions, leakage and the expected net anthropogenic GHG removals by sinks can be considered as correct.

3.5.4.1 Baseline stocks and greenhouse gas removals by sinks

The parameters and equations presented in the PDD and further documentation have been compared with the information and requirements presented in the methodology and respective tools. The equation comparison has been made explicitly following all the formulae presented in the calculation files.

The baseline carbon stocks and removals assessed for the above and belowground carbon pools are based on adequate inventory data as well as defaults that are consistent with the field conditions. Baseline stocks of pre-existing trees and woody perennials as well as grassland have been estimated and considered. Baseline removals have been calculated for individual trees found prior to project start (considered to always remain below forest threshold). Good practice in regard to forest inventory and the applied defaults and sources have been followed in the context of the baseline assessment. Further details are included to Annex 1.

3.5.5 Project emissions

Organic fertilizer is scheduled to be used only in the first year only, which leads to negligible N₂O related emissions (below threshold according to methodology). Hence, the corresponding tool indicated in AR-AMS0001 was not necessary to be applied.

3.5.6 Leakage

Leakage was found not to be relevant for the consideration of the ex-ante removal estimates, as there no substantial activity displacement expected. Leakage was excluded based on profound analysis of the current land use. Exclusion of leakage is considered fully justified in line with the reduced land use present on the project area prior to project start (one crop in three years / no grazing).

3.5.7 Net anthropogenic greenhouse gas removals by sinks

The estimates on the expected anthropogenic removals which are likely to be achieved by the envisioned reforestations under the project scenario were based on yield tables (regional and national sources) and have been carried out in line with methodology requirements. Site conditions are considered in this context. Adequate defaults on root to shoot ratio, biomass expansion factor, and wood density were used (from the Good Practice Guidance for LULUCF) due to the unavailability of local/national data.

The audit team noted that the expected net removals are larger than the cap of 16,000 t CO₂-e p.a. for the last five years of the crediting period. However, the average over the entire crediting period is 11,596 t CO₂-e and with that well below the cap for small scale AR-CDM projects. Inter-annual differences are caused by typical growth performance of trees. The corresponding AR-CDM decisions and guidelines for PDD completion are considered not to rule out that this cap is exceeded in individual years.

3.6 Additionality

The additionality of the project has been presented in the PDD using following approach: Assessment of additionality as per Annex B of the selected methodology.

The approach use in the PDD has been assessed first based on a document review, where following relevant documents have been reviewed:

- Statistics on forest cover change in Haryana: State of Forest Report 2003, Ministry of Environment & Forests, India

On site the additionality has been discussed principally with: Mr. Ravi Khod, President of CDM project society. Furthermore relevant documents have been reviewed on-site (for details see Annex 2) and interviews on this matter have been carried out with stakeholders.

Finally the data, rationales, assumptions, justifications and documentation provided have been checked using local knowledge and sectoral and financial expertise, the same has been cross checked by:

- Interviews with representatives of the forest administration (Annex 2, IRL item 0)

- Interviews with local farmers by audit team and Participatory Rural Appraisal documentation (Annex 2, IRL item 8)
- Evidence on barriers as specified in section 3.6.3 below.

Based on this validation steps we can confirm that the documentation assessed is appropriate for this project.

3.6.1 Start date and prior consideration of the CDM

The project started at July 1, 2008. The starting date of the project activity is determined by the first plantings, which is the actual start of implementation. In order to confirm the starting date the assessment team has reviewed the planting plan.

The chosen starting date is after the GSP and therefore it is confirm that the project complies with the requirement of prior CDM consideration.

3.6.2 Identifications of alternatives

The output of the project is: ecosystem conservation and long term wood production for poor communities (without direct financial return to the PP).

The list of alternatives to the project is presented in the PDD includes the project activity undertaken without being registered as CDM project. The rest of the alternatives presented do include all plausible scenarios taking into account the local and sectoral situations for the outputs mentioned. Hence the list of alternatives is considered to be complete.

3.6.3 Barrier analysis

The project participants have used the barrier analysis in order to demonstrate the additionality of the project. The presented barriers are:

- Investment barrier
- Technological barrier
- Barrier due to social conditions
- Ecological barrier / Natural regeneration would not be possible

The assessment team checked first if any barrier has a clear impact on the financial returns which can be expressed with reasonable certainty in monetary terms. The final PDD does include only barriers without such impact on the financial returns.

The investment barrier has been assessed against official documents such as

- Bank statements in regard to non-availability of credits for community forestry projects
- Confirmation by local Forestry Department in regard to non-availability of state funding for reforestations

Thus, sources from the financial sector (which are accessible to the PP) as well as the forest administration have confirmed that there is no alternative financing available for the project activity. Further details are discussed in Annex 1 (Table 1, section B.7 and Table 2, CAR 8). Relevant evidence is listed in Annex 2 (item 18 and 19).

The audit team was able to confirm the existence of remaining barriers (technological, social, conditions, ecological) through numerous interviews with participating farmers as well as the field inspections carried out (compare Annex 1 for details and references Annex 2, IRL item 0 and 26).

The result of this assessment shows clearly that the barrier presented in the PDD can be considered real.

This barrier does prevent the project activity and would not prevent at least the baseline of the project. This was confirmed based on the documentation review, interviews and local and sectoral expertise of the assessment team. The latter has been i.e. confirmed by the interviewed stakeholders.

Furthermore, based on the review of official statistics on forest resources as well as interviews with the forest administration, no indications of other significant reforestation activities on similar land types have been received by the auditor. The project is also considered the first of its kind as there are no other registered small scale AR-CDM projects in India up to the current date.

Taken into account the description of the validation of the barriers presented above, the assessment team can confirm with reasonable certainty that the barriers are credible and correctly presented to demonstrate the additionality of the project.

In essence, the project is considered additional as marginal sites are reforested by low-income communities which otherwise would have remained cropland or grasslands - among others due to unavailability of funding for such reforestation activities.

3.7 Monitoring plan

The monitoring plan presented in the PDD complies with the requirement of the methodology and the CDM Modalities and Procedures.

The assessment team has checked all the parameters presented in the monitoring plan against the requirements of the methodology; no deviations relevant for the project activity have been found in the plan.

The chosen monitoring frequency of the parameters is considered to be in line with the methodology (frequency in years). Under consideration of the pre-fixed verification frequency of every 5 years (after first verification) and the defined harvesting system it is considered that there is no systematic coincidence of verifications with peaks in carbon stocks.

The procedures have been revised by the assessment team through document review and/or interviews with the relevant personnel; this information together with a physical inspection allows the assessment team to confirm that the proposed monitoring plan is feasible within the project design.

The major parameters to be monitored have been discussed with the PPs inventory processes, the data management and in general the quality assurance and quality control procedures to be implemented in the context of the project.

The audit team considers that further specification of the internal procedures in regard to monitoring may be necessary in the course of project implementation in order to assure full availability of consistent monitoring data at verification.

However, it is expected that the PP will be able to implement the monitoring plan and that the net removals can be reported and verified.

3.8 Sustainable development

The LoA of the Host country clearly present a statement that the project contributes to the sustainable development of the host Party.

The environmental and social impacts of the project are considered to be clearly positive. The latter conclusion was sustained by the results of the field visit of the audit team, the results of the Participatory Rural Appraisal (PRA) exercise as well as positive comments on the project by the consulted stakeholders.

The compliance with the AR-CDM small scale requirements in regard to low income communities have been confirmed by the Indian DNA.

3.9 Local stakeholder consultation

The relevant local stakeholders have been invited via Meetings as part of Participatory Rural Appraisal process. The evidence of these invitations is Annex 2, IRL item 8 and 17. The assessment team has reviewed the documentation in order to validate the inclusion of relevant stakeholders and using the local expertise can confirmed that the communication method used to invite the stakeholders can be considered appropriate. The summary of comments presented in the PDD has been cross check with the documentation of the stakeholder consultation and it is found to be complete.

The relevant comments presented by the local stakeholders have been taken into due account by the PP, the same has been cross check with the information obtained during the interviews.

Hence the local stakeholder consultation has been adequately performed according to the CDM requirements.

3.10 Environmental and socio-economic impacts

The PP has undertaken an analysis of environmental and socio-economic impacts according to the requirements of the guidelines for PDD completion. The assessment team carried out a document review of the information presented.

The Environment Impact Study in Haryana Community Forestry Project Villages (Annex 2, IRL item 21) and the PRA documentation (Annex 2, IRL item 8) confirms the correctness of the approach used by the PPs.

The PP is considered to have followed the requirements of the host country regarding the environmental and socio-economic impact assessment.

In essence, the audit team concluded that the environmental and social impacts of the project are considered to be clearly positive. The latter conclusion was also sustained by the results of the field visit of the audit team as well as positive comments on the project by the consulted stakeholders.

Furthermore, the AR-CDM small scale requirements in regard to low income communities have been confirmed by the DNA for this project (Annex 2, IRL item 20).

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.net/KE/Wegweiser/Guide2_3.aspx?ID=4627&Ebene1_ID=26&Ebene2_ID=1447&mode=0	
Starting date of the global stakeholder consultation process: April 17 of 2008	
Comment submitted by: None	Issues raised: -
Response by TÜV SÜD: -	

5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana.

Standard auditing techniques have been used for the validation of the project. Methodology-specific checklists and protocol customised for the project have been prepared to carry out the audit and present the outcome in a transparent and comprehensive manner.

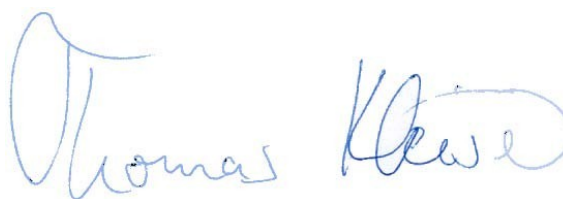
The review of the project design documentation, the subsequent follow-up interviews and the further cross check of references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed following the VVM requirements. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 15.12.2008

Munich, 15.12.2008



Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

Assessment Team Leader



Industrie Service

Annex 1: Validation Protocol

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Project Title: Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana

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Table 1 Requirement Checklist

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A. General Description of the Project Activity					
A.1 Title of the project activity					
Has the project an appropriate title, and does it contain a version number and date?	1	DR	The title is clear. Date and version is indicated. PDD Version 01, 15/01/2008	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2 Description of the project activity					
Has the project been described in terms of purpose and the project proponent's view of the project's contribution to sustainable development?	1	DR	The goal is the reforestation of 369.87 ha, belonging to 227 farmers of poor local communities. The project goals are detailed as well as the project developer's view on the contribution of sustainable development is described (fixation of sand dunes, increasing of water holding capacity of the soils, increasing of humus).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3 Project participants					
Have the Parties and project participants participating in the project been listed in the table as required?	1, 4-7, 13	DR	The table is completed. Party involved is India, which is not project participant. Participant is Haryana Variksh Kisan Samiti, Ellenabad, Sirsa called "Society" The Society is registered. The members of the Society are the land owners who contribute with land to the project. The rules of the society are clearly described in the byelaws. The protocol of the constitutional general meeting indicates the acceptance of the byelaws and the election of	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			<p>the representatives. From each village there are two representatives in the executive board indicated. According to the protocol Mr. Ravi Khod was elected for President of the society.</p> <p>Each farmer signed a contract with the society.</p>		
Have all involved Parties provided a valid and complete letter of approval and have all private/public project participants been authorized by an involved Party?	1, 3, 13	DR	<p>Letter of Approval dated 9 April 2008 is provided.</p> <p>Authorization of the participants either as part of a LoA or with a separate letter of authorization.</p> <p>Modalities of Communication document is necessary at registration (by which all participants jointly define the focal point, also for receiving carbon certificates).</p> <p>The LOA is addressed to Mr. Sh.Ravi Khod, President of the "Society" Haryana CDM Variksh Kisan Samiti, ellenabad, Sirsa. He is indicated in the PDD Annex I as contact person on participants.</p> <p>In this context persons in charge (of signing) on behalf of "The Society" are to be determined. Mr. Ravi Khod is elected for president of the "Society". Decisions are taken by the general body including manner of sharing of benefits including income from carbon credit.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Do all participating Parties fulfil the participation requirements as follows: - Ratification of the Kyoto Protocol - Designated a National Authority	1	DR	<p>The requirements are fulfilled.</p> <p>Compare http://cdm.unfccc.int/DNA/index.html</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl						
- Host Party DNA communicated minimum values for forest definition			<p>India</p> <table border="1"> <tr> <td>Single minimum tree crown cover value between 10 and 30 per cent</td> <td>A single minimum land area value between 0,05 and 1 hectare</td> <td>A single minimum tree height value between 2 and 5 metres</td> </tr> <tr> <td>30</td> <td>0,05</td> <td>5</td> </tr> </table>	Single minimum tree crown cover value between 10 and 30 per cent	A single minimum land area value between 0,05 and 1 hectare	A single minimum tree height value between 2 and 5 metres	30	0,05	5		
Single minimum tree crown cover value between 10 and 30 per cent	A single minimum land area value between 0,05 and 1 hectare	A single minimum tree height value between 2 and 5 metres									
30	0,05	5									
Has a written declaration been issued that the proposed small-scale A/R project activity is developed or implemented by low income communities and individuals as determined by the host Party?	1, 14	DR	<p>A declaration is provided in Annex 3 of the PDD</p> <p>Outstanding Issue:</p> <p>Determination by the Host Party / DNA of low income community. Source of definition of low income community to be provided.</p>	OI	<input checked="" type="checkbox"/>						
A.4 Description of location and Boundary											
A.4.1 Has the location of the project including host Party, region and town/community been defined?	1	DR	<p>Yes, the information is provided.</p> <p>8 communities are listed with geographic coordinates. Overview maps are given.</p> <p>Corrective Action Request No 1</p> <p>The spreadsheet indicates 370.15 ha of the project area while the PDD indicates 369.5 ha. To be clarified and assure consistency.</p>	CAR 1	<input checked="" type="checkbox"/>						
A.4.2 Has an appropriately detailed geographic delineation of the project boundary including a unique identifier been included?	1	DR, FV	<p>Maps are presented with the individual reforestation sites. It is stated in the PDD that there are currently 239 sites.</p>	CAR 2 and 3	<input checked="" type="checkbox"/>						

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			<p>The number of land parcels in the spreadsheet is 270 against 239 in the PDD. The number of farmers or parcels or both in table A.3 differs from the spreadsheet for all villages.</p> <p>All parcels are clearly identifiable in the maps of the PDD. Some minor coordinate and labelling errors were found during field visit like: D20 ploygon is not in the map D15 coordinates are inside D25 D15 (label) in map is D22 in coordinates D27: could not be identified by coordinates In the map of Umedpura the labels are D instead of U</p> <p><u>Corrective Action Request No 2</u> Consistency of parcel labelling is to be clarified and assured in the PDD.</p> <p><u>Corrective Action Request No 3</u> All coordinates measured in the field shall be controlled and crosschecked against the coordinates in the map.</p>		
A.5 Technical description of the SSC AR-CDM project activity					
A.5.1 Type of SSC AR-CDM activity? Is it cropland and/or grassland to forest land?	1	DR, FV	The project activity is converting cropland / grassland to forest land.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.5.2 Has a concise description of items on the present environmental	1,16	DR,	Environmental conditions are described: arid	CR 1	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
conditions of the project area including climate, soils, main watersheds, ecosystems, and the presence of any rare or endangered species and their habitats been included?		IV, FV	<p>climate, 150-200 mm rainfall, sandy soils.</p> <p>No rare or endangered species are indicated</p> <p><u>Clarification Request No. 1.</u></p> <p>The consequences (positive or negative) of the AR CDM project on rare or endangered species shall be described and explained, also effects on wild life. Evidence to be provided.</p>		
A.5.3 Have the species and varieties to be grown been adequately described?	1	DR, IV, FV	<p>The species are indicated.</p> <ul style="list-style-type: none"> - Ailanthus excelsa - Acacia tortilis - Eucalyptus hybrid - Acacia nilotica - Dalbergia sissoo - Zizyphus mauritiana - Prosopis cineraria <p>They are either natural species of the region or species that are adopted to the conditions (drought) or experienced (Eucalyptus hybrid).</p> <p>Examples of already planted areas of the species were demonstrated.</p> <p>The choice of species was also discussed with farmers.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.5.4 Has the technology to be employed (including environmentally safe technologies and know-how) been adequately described?	1, 8, 9, 9a	DR, IV, FV	<p>The technology applied is described.</p> <p>It is structured to</p> <ul style="list-style-type: none"> - Soil preparation 45X45x45 hole. - Plantations of seedlings in containers 1000 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			<p>trees per ha.</p> <ul style="list-style-type: none"> - Gap filling - Short rotation species (10 years 40%) and medium rotation species (20 years 60%) <p>Seedlings will be provided by the Haryana Forest Department from nurseries established in the project villages.</p>		
A.5.5 Has the technology to be transferred (including environmentally safe technologies and know-how with specifications of whether they will be transferred to host Parties) been adequately described? (if applicable)	1	DR, IV	<p>No specific Annex 1 technology will be transferred. Expertise and assistance on planting and management is provided.,</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.5.6 Have the measures to be implemented to minimize potential leakage as applicable been adequately described?	1	IV, FV	<p>Leakage is considered to be zero.</p> <p>In nurseries, compost is used instead of chemical fertilizer.</p> <p>The measures are considered acceptable in consideration of small leakage potential.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.6 A description of the legal title to the land, current land tenure and land use and rights to tCERs / ICERs issue					
Have details of the legal title to the land, current land tenure and land use and sequestration rights been described adequately?	1, 4-8	DR, IV, FV	<p>See questions A3</p> <p>Documented evidence is provided that all land owners who are part of the project scheme have all rights to the land.</p> <p>Based on these documents, the forwarding of the rights on carbon sequestration are sustained by a corresponding contract with the "Society".</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.7 Assessment of eligibility of land					
Has the latest version of the 'Procedure to define the eligibility of lands for A/R project activities' been properly applied?	1	DR FV	<p>It is indicated that eligibility has been checked. The approach is considered to be in line with the EB procedures.</p> <p>Field visit showed that the eligibility criteria were applied consequently.</p> <p>Corrective Action Request No 4 Only one small pocket was found during field visit that has to be excluded from the project area as not eligible. According to the definition of forest the threshold was taken with 0.08 ha and 50% crown coverage (parcel B1, 0.08 ha out of total 2.73 ha).</p>	CAR 4	<input checked="" type="checkbox"/>
A.8 Approach for addressing non-permanence					
Has the approach to address non-permanence been specified in accordance with paragraph 38 of decision 19/CP.9 and paragraph 21 and section C of decision 14/CP.10?	1	DR	tCERs have been chosen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.9 Duration of the proposed SSC A/R CDM project activity / Crediting period					
A.9.1 Does the starting date (DD/MM/YYYY) reflect the date of implementation (or when real action began that resulted in changes to the actual net removals) and has it been adequately justified?	1	DR	<p>Corrective Action Request No 5 The starting date indicated is July 2008. Exact date required in format DD/MM/YYYY</p>	CAR 5	<input checked="" type="checkbox"/>
A.9.2 Has the expected operational lifetime been defined?	1	DR	The operational lifetime is stated to be 60 years.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A.9.3 Is the project fixed or renewable crediting period length defined, and is the duration (years and months) defined in any of both cases?	1	DR	Renewable crediting period has been chosen (20 years).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.10 Estimated amount of net anthropogenic GHG removals by sinks over the chosen crediting period:					
Has the table on estimated net anthropogenic removals over the chosen crediting period been completed?	1	DR	The corresponding table has been completed. Corrective Action Request No 6 Table on estimated net anthropogenic removals by sinks to be revised according to changes in areas.	CAR 6	<input checked="" type="checkbox"/>
A.11 Public funding of the proposed small-scale A/R CDM project activity					
Has information been provided from Parties listed in Annex 1 on sources of public funding for the project which affirms that funding does not result in a diversion of official development assistance and is separate from and not counted towards the financial obligations of those Parties?	1	DR, IV	It is stated that no use of ODA is involved. No contrary indications received by the auditor. A EU funded project on community forestry was only on public land and it is going to expire by June 2008. The National Afforestation Program is only related to state owned land. No internationally financed afforestation activities are actually occurring in the area. Issues related to parties see A3.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.12 Confirmation that the small-scale A/R CDM project activity is not a debundled component of a larger project activity					
Has confirmation been provided that the project is not a debundled component of a larger project activity?	1	DR, IV	Yes. There are no other AR-CDM SSC projects registered or under validation in the region.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl								
B. Application of Baseline and Monitoring Methodology													
B.1 Title and reference													
Has the approved methodology been adequately referenced? Is the methodology the most current version and has the version number been indicated in the PDD?	1	DR	Yes, the methodology is adequately referenced. AR-AMS001 version 04.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
B.2 Justification of applicability of project to methodology													
Does the project meet the applicability conditions of the selected methodology and has this been adequately justified?	1	DR	Compliance on applicability needs to be clarified. See below for details demonstrate.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
(item 5) Is the most likely baseline scenario considered to be the land-use prior to the implementation of the project activity, either grasslands or croplands?	1	DR, IV, FV	Yes. Land is indicated as sporadically used not irrigated cropland, depending on the intensity of the monsoon rainfall. This was confirmed during field visit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
Item (1)													
(a) Project activities are implemented on grasslands or croplands;	1	DR, IV, FV	<table border="1"> <thead> <tr> <th>Incl. to PDD</th> <th>Rationale / Assumptions referenced</th> <th>Evidence provided</th> <th>Conclusion</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table> <p>Consistent also with results of PRA-Report.</p>	Incl. to PDD	Rationale / Assumptions referenced	Evidence provided	Conclusion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Incl. to PDD	Rationale / Assumptions referenced	Evidence provided	Conclusion										
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
(b) Project activities are implemented on lands where the area of the cropland within the project boundary displaced due to the project	1	DR,		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS				Draft Concl	Final Concl
			Incl. to PDD	Rationale / Assumptions referenced	Evidence provided	Conclusion		
activity is less than 50 per cent of the total project area;		IV, FV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
			Little cropping occurs. Indicated with one crop every 3 years due to soil conditions.					
(c) Project activities are implemented on lands where the number of displaced grazing animals is less than 50 per cent of the average grazing capacity of the project area;	1	DR IV, FV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			It is indicated that no displacement occurs. Farmers confirmed that they do not depend on that very extensive used land.					
(d) Project activities are implemented on lands where $\leq 10\%$ of the total surface project area is disturbed as result of soil preparation for planting.	1, 9, 9a	DR IV, FV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			Only small holes are planned to be dug for plantations. See A5.4					
B.3 Specification of the greenhouse gases (GHG) whose emissions will be part of the proposed small-scale A/R CDM project activity								
Have the GHGs whose emissions will be part of the project activity been specified?	1, 10	DR					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			In line with the methodology, it is indicated that emissions of N ₂ O from the use of fertilizer is considered.					

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
(Item 3) Are project emissions taken into account (ex-ante and ex-post) limited to emissions from the use of fertilizers?			According to item 25 of the methodology it is proofed that the emission from the use of fertilizer is not significant (less than 5% of the actual net removal by sinks according to the tool)		
B.4 Carbon pools selected					
Have the selected carbon pools been specified? (Item 2) Has above- and below-ground tree and woody perennials biomass and below-ground biomass of grasslands (i.e. living biomass) been considered?	1	DR	Yes, below and aboveground biomass is considered.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5 Description of strata applied for ex ante estimations					
Has the strata used for the ex ante estimations in the context of the project activity been described according to the methodology?	1	DR, IV, FV	Because all ecological conditions of the project sites are similar, the only stratification for ex-ante estimations is on tree species.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 7					
(a) Area of cropland with changes in the carbon stocks in the living biomass pool of woody perennials and in below-ground biomass of grasslands expected not to exceed 10% of ex-ante actual net GHG removals by sinks multiplied by share of the area in the entire project area;	1	DR	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Area of grassland with changes in the carbon stocks in the living biomass pool of woody perennials and in below-ground biomass of grasslands expected not to exceed 10% of ex-ante actual net GHG removals by sinks multiplied by share of the area in the entire project area;	1	DR	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
(c) Area of cropland with changes in the carbon stocks in the living biomass pool of woody perennials and in below-ground biomass of grasslands expected to exceed 10% of ex-ante actual net GHG removals by sinks multiplied by share of the area in the entire project area;	1	DR	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Area of grassland with changes in the carbon stocks in the living biomass pool of woody perennials and in below-ground biomass of grasslands expected to exceed 10% of ex-ante actual net GHG removals by sinks multiplied by share of the area in the entire project area.	1	DR	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6 Application of baseline methodology					
Has the baseline methodology been applied for the project activity and has key information and data used to determine the baseline scenario been provided in table form (variables, parameters, data sources etc.)	1	DR, IV FV	The baseline scenario is described as a continuation of the current status with ongoing degradation. Only some view trees are existing on the project area and those are considered in the calculations.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is the most likely baseline scenario of the small-scale A/R CDM project activity the land-use prior to the implementation of the project activity?	1	DR IV, FV	Yes. Land use is not continuous use of the land for crop.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is a description of the baseline and a description of the project scenario included, and is an analysis showing why the baseline net GHG removals by sinks scenario would likely lie below actual net GHG removals by sinks in the project scenario?	1	DR	A general description of baseline and project scenario is included. Calculations show that baseline removals are below project scenario.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Are the expected actual net removals human induced, thus anthropogenic.	1	DR, FV	Due to planting, removals are human induced, thus anthropogenic. No natural regeneration was found during field visit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Has detailed baseline information been provided including the date of completion and the name of the person (or entity) determining the baseline? Is this person also a participant?	1	DR	It is indicated that the project area has been stratified according to the main land use categories. The names are indicated <u>Corrective Action Request No 7</u> The date of the baseline estimates needs to be given.	CAR 7	<input checked="" type="checkbox"/>
B.7. Description of how the actual net GHG removals by sinks are increased above those that would have occurred in the absence of the registered small-scale A/R CDM project activity					
Has an explanation of how and why the project is additional been adequately defined? (Item 4 b / Appendix B) Has the procedure for the demonstrated of additionality been followed and has clear explanation and evidence on all barriers indicated in the PDD been provided?	1	DR, IV, FV	The additionality approach as included in Appendix B to the SSC methodology is used. Several different barriers are indicated. - Investment barrier Interviews showed that the farmers themselves cannot afford the plantations. No public financing of afforestations on private land is available. - Technological barrier It was confirmed through interviews that local farmers don't have access to seedlings. - Barrier due to social conditions In fact this is seems to be an institutional barrier Farmers are not encouraged or supported to plant trees by any organisation. The "Society" was founded especially for the purpose of CDM.	CAR 8	<input checked="" type="checkbox"/>

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			<p>- Ecological barrier Degradation of the soils is the reason for continuation of the current status of the areas in absence of the project.</p> <p><u>Corrective Action Request No 8</u> For any barrier indicated, there needs to be clear evidence provided. Evidence can be e.g. external documentation. Only barriers that are prohibitive should be considered. This is particularly applicable to evidence that sustains the existence of an investment barrier.</p>		
B.8 Application of monitoring methodology and plan					
Has a detailed description of the monitoring plan been provided?	1	DR	<p>It is indicated that the sampling will be applied using the same ex-ante strata for ex-post sampling (tree species).</p> <p>The main formula for adding below and above ground biomass at defined times are included.</p> <p>The above ground biomass is estimated through sampling, while for below ground carbon the default formula from the annex of the methodology is included.</p> <p>Leakage is set zero, due to non-existence of displacement of activities or households. See corresponding Request.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.8.1 Has the table on data to be collected to monitor actual net removals been adequately completed? (in line with table 1 of methodology)	1	DR	The table on monitoring of net removals has been completed in line with the requirements of methodology. Corrective Action Request No 9 Any changes in land ownership and in rights on tCERs must be monitored and variables concerning this matter shall be inserted in the table on data to be monitored.	CAR 9	<input checked="" type="checkbox"/>
B.8.1.1 Have the data to be collected or used in order to monitor the verifiable changes in carbon stock in the carbon pools within the project boundary been identified?	1	DR	The data have been identified and mentioned in the table of the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.2 Has monitoring of leakage been indicated and adequately explained?	1	DR	Although leakage is unlikely to occur, possible leakage will be monitored.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.2.1 If applicable has the table on monitoring of leakage been adequately completed? (in line with table 2 of methodology)	1	DR	The table on leakage parameters is complete in line with the requirements of methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.2 Have QA/QC procedures been adequately defined? QA/QC plan shall include procedures for : - Collecting reliable field measurements - Verifying methods used to collect field data - Procedures to verify data entry and analysis - Data maintenance and storage	1, 15	DR, IV	The QA/QC procedures have been defined in line with the requirements of the Modalities and Procedures in the Monitoring Plan.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.3. Has the operational and management structure that the project operator will implement in order to monitor actual removals and leakage by the project been adequately defined?	1, 16	DR, IV	A brief description of the operation structure is included. Land owners are organized in the "Society", operational entity is Haryana Forest Department	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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			acting as State Carbon Sequestration Office. The project activities are embedded into the standard procedures of the Haryana Forest Department. So responsibilities, duties and powers are clear.		
B.9 Date and person determining baseline and monitoring					
Has the person or entity determining the monitoring plan been named, are they listed as a project participant and has contact information been provided as well as the date of completion of the baseline study?	1	DR	Yes, details have been provided. External consultant is Mr. Zhang Xiaoquan, Chinese Academy of Forestry. Involved was staff of: Institute of Global Warming & Ecological Studies, Nodia, India Haryana Forest Department <u>Corrective Action Request No 10</u> Date of completion of the baseline study is to be inserted.	CAR 10	<input checked="" type="checkbox"/>
C. Estimation of ex-ante Net Anthropogenic Removals					
C.1 Estimation of (ex-ante) baseline net removals					
Has the estimate of baseline net removals been adequately defined?	1	DR	Baseline net removals were identified coming from the pre-existing trees.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(Item 6) Has documentation from literature and/or expert judgment been provided to justify which of the following cases occurs: a) Stock changes in baseline do not exceed 10% of ex-ante actual net GHG removals, then changes are set zero. b) Stock changes in baseline are expected to decrease, then	1	DR	It was chosen option a). Based on the presented calculations baseline stock changes do not exceed 10% of ex-ante actual net GHG removals. Ongoing degradation causes a decrease in	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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changes are set zero. c) Otherwise equal to the expected changes expected in the absence of the project			carbon stock in the baseline scenario. The growth of the few existing trees are considered as baseline sink.		
(Item 7) Has the project areas been stratified for baseline estimates according to the requirements of the methodology (cropland / grassland / >10 % stock change / < 10 % stock change)	1	DR IV, FV	For baseline estimates the area has not been divided into separate strata because of homogeneous conditions. This was found to be correct during field visit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(Item 8-14) Have the baseline carbon stocks been determined according to the methodology requirements (above ground / belowground)	1	DR	The baseline carbon stocks in tree and non tree vegetation have been estimated based on field estimates combined with literature sources. The baseline estimates are considered in line with the methodology requirements.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C.2 Estimation of (ex-ante) actual net removals					
Has the estimate of actual net removals been adequately defined?	1	DR	The corresponding calculations have been provided in an excel file.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 16 For the <i>ex-ante</i> calculation of the project biomass, has the project area been stratified according to the project planting plan that is, at least by tree species (or groups of them if several tree species have similar growth habits), and age classes.	1, 8	DR	The area has been stratified according to tree species to be planted. A map and a table on the parcel specific planning details were provided during field visit. <u>Corrective Action Request No 11</u> The scenarios in Table C-2 and Table C-3 shall be referenced to the species.	CAR 11	<input checked="" type="checkbox"/>
Item 17 Are the carbon stocks for the project scenario at the starting date of	1	DR	The consistency in carbon stocks is assured.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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the project activity ($t=0$) the same as the baseline stocks of carbon at the starting date of the project ($t=0$); and are they calculated for all following years by formula 12 of the methodology (sum of below and above ground biomass per strata for the defined area)					
Item 18 (above ground biomass) Has the carbon content for wood been define with 0,5 of dry matter?	1	DR	Yes, has been considered.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 19 If biomass tables or equations are available then these shall be used to estimate $T(t)_i$ per stratum i . If volume table or equations are used then $T(t)_i = SV(t)_i * BEF * WD$	1	DR	Stem volume equations from literature have been used. SV approach was chosen.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 20 Have values for $SV(t)_i$ be obtained from national sources. Have local values for BEF been used? If these are not available, have national values been used? If it is documented that these are also not available table 3A.1.10 GPG LULUCF (national defaults) or table 3A.1.9.	1, 11	DR, IV	Data from literature (local volume tables) for SV and for BEF from GPG have been used. Volume tables from Rhajasthan were used. The applicability is assured.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 21/22 (below ground biomass) Has the below ground biomass been calculated per stratum based on aboveground biomass and using documented Root/shoot ratio values and 0.5 for dry mass? (National values for R should be used, and if not available data from table 3A.1.8 GPG LULUCF. In absence of GPG values, formulae of Cairns or general GPG data / table 4.A.4, item 23)	1	DR, IV	Calculation per stratum has been carried out. R was defined from GPG because no India specific R is available. Corrective Action Request No 12 It should be indicated if no national data on R are available.	CAR 12	<input checked="" type="checkbox"/>
Item 25 If relevant (>10% of net removals), have fertilizer emissions been quantified and considered accordingly?	1	DR, IV	Fertilizer emissions have been considered non-significant (<10%).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 26	1	DR, IV	The ER have been calculated in an Excel	CAR 13	<input checked="" type="checkbox"/>

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Are ex-ante actual net removals calculated by: Project removals by sinks minus project emissions?			Spreadsheet. The indicated approach has been followed. Corrective Action Request No 13 Tables C1- C4 to be updated according to requested changes in area and pre-existing trees.		
C.3 Estimation of leakage					
If applicable, has the estimate of leakage been adequately defined?	1	DR, IV	Leakage is set with zero according to the project conditions.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 27 If leakage is neglected, has it been shown that the project activity would not result in the displacement of activities or people, or does not trigger activities outside the project Boundary? Item 28 If leakage is set zero, while project activities are shifted outside the boundary, has it been demonstrated with evidence that these areas contain low biomass and that they can receive this activity without causing deforestation?	1	DR, IV FV	Leakage is set zero, due to non-existence of displacement of activities or households. This was credibly demonstrated and confirmed by local site conditions.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 29 In all other cases, has leakage been estimated considering a) Area under cropland within the project boundary displaced; b) Number of domesticated grazing animals within the project boundary displaced; (c) For domesticated roaming animals, the time-average number of grazing animals per hectare within the project boundary displaced?	1	DR	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Item 30-33	1	DR	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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<p>If leakage is to be estimated, has the displaced cropland area and the displaced (roaming) grazing animals been quantified according to Appendix D?</p> <p>Has leakage received the default value foreseen in the methodology? (0 %, 15% of net removals or meth. not applicable; i.e. L=0% if not more than 10 % of cropland is displaced and if the displaced animals equal less than 10% of the grazing capacity)</p>					
C.4 Estimation of net anthropogenic removals					
<p>Has the estimate of net anthropogenic removals been adequately defined?</p> <p>Item 33:</p> $ER_{AR\ CDM,t} = \Delta C_{PROJ,t} - \Delta C_{BSL,t} - GHG_{PROJ,t} - L_t$	1	DR	<p>The ER have been calculated in an Excel Spreadsheet. The indicated approach has been followed. The aggregated tables are presented. See <u>CAR12</u></p>	CAR12	<input checked="" type="checkbox"/>
C.5 Estimation values					
<p>Has the table defining annual and total GHG removals been adequately completed?</p>	1	DR	<p>The result table is presented accordingly. See <u>CAR12</u></p> <p>To be updated according to requested changes in calculations.</p>	CAR12	<input checked="" type="checkbox"/>
D. Environmental Impacts of the Project					
D.1 Analysis of the environmental impacts					
<p>Has an analysis of the environmental impacts (including transboundary impacts, if any) been provided?</p>	1	DR, IV	<p>A very brief general description on sand dune fixation and controlling of wind erosion is provided in the PDD. Nothing on improving biodiversity.</p>	CR 2	<input checked="" type="checkbox"/>

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			<p><u>Clarification Request No. 2.</u></p> <p>In addition to the general description some evidence shall be provided on the (mostly positive) environmental impact of the project.</p>		
D.2 Significant negative impacts					
If any negative impact is considered significant by the project participants or the host Party, has a statement that the project participants have undertaken an environmental impact assessment in accordance with the procedures required by the host Party (including conclusions and references to support documentation) been provided?	1	DR, IV	No significant negative impacts are identified. In contrary may positive impacts on wildlife are expected.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.3 Planned monitoring and remedial measures					
Has a description of planned monitoring and remedial measures to address significant impacts referred to in section D.2 above been provided?	1	DR, IV	No significant negative impacts identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E. Socio-economic Impacts of the Project					
E.1 Analysis of socio-economic impacts					
Has an analysis of the socio-economic impacts (including transboundary impacts, if any) been provided?	1	DR, IV	Yes. The results of visits and interviews of the project participants are presented. Interviews during filed visit by the auditor with project participants confirmed the socio-economic impacts presented in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.2 Significant negative impacts					
If any negative impact is considered significant by the project participants or the host Party, has a statement that the project participants have undertaken a socio-economic impact assessment in	1	DR, IV, FV	No significant negative impacts identified. This could be confirmed during audit interviews and field visits.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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accordance with the procedures required by the host Party (including conclusions and references to supporting information) been provided?					
E.3 Planned monitoring and remedial measures					
Has a description of planned monitoring and remedial measures to address significant impacts referred to in section E.2 above been provided?	1	DR, IV	N/a	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F. Stakeholder Comments					
F.1 Description of how stakeholder comments have been invited and compiled					
Has a description of how stakeholder comments have been invited and compiled been provided and has it been undertaken in an open and transparent manner that facilitates comments being received and has the project been described in a manner that allows local stakeholders to understand the project?	1, 13	DR, IV	<p>Main stakeholders are local farmers.</p> <p>Different stakeholders have been interviewed in a PRA approach. Results are documented in the PDD. No stakeholders except the participating farmers were invited for comments.</p> <p><u>Clarification Request No. 3.</u></p> <p>Stakeholders from outside the project shall be invited for comments on the project like environmental NGO, women organisations.</p>	CR 3	<input checked="" type="checkbox"/>
F.2 Comments received					
Have stakeholders who made comments been identified and has a summary of the comments been provided?	1	DR, IV	<p>Table on comments is included, in line with discussed items during meetings.</p> <p>See CR3</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.3 Report on due account					
Has an explanation on how due account has been taken regarding the received comments from stakeholders been provided?	1	DR, IV	It is indicated how the use of tree species has been defined and adapted in line with	CR3	<input checked="" type="checkbox"/>

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			stakeholder considerations. The project is focussed on stakeholder needs See CR 3		
Annexes					
Annex 1 Contact information on project participants					
Is contact information on participants of the project complete?	1	DR	Contact details are provided. <u>Corrective Action Request No 14</u> The telephone number of Mr. Khod shall be rectified.	CAR 14	<input checked="" type="checkbox"/>
Annex 2 Public funding					
Has information been provided from Parties listed in Annex 1 on sources of public funding for the project which affirms that funding does not result in a diversion of official development assistance and is separate from and not counted towards the financial obligations of those Parties?	1	DR, IV	No funds of Annex 1 involved.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Annex 3 Declaration on low-income communities					
Has a written declaration that the proposed small-scale afforestation or reforestation project activity under the CDM is developed or implemented by low-income communities and individuals as determined by the host Party been provided?	1	DR	A declaration is provided by the participant. See OI above on definition of low income community.	OI	<input checked="" type="checkbox"/>

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Table 2 : CDM responses to CAR and CR

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<p><u>Outstanding Issue 1:</u> Determination by the Host Party / DNA of low income community. Source of definition of low income community to be provided.</p>	A 3	<p>The statement of low income communities from 8 villages has been attached. There is no standard of low-income community in India. We are requesting Indian DNA to issue such a standard which will come later.</p> <p><u>Auditor, 7 June 2008:</u> The definition of the low income community is pending.</p> <p><u>Auditor, 23 July 2008:</u> The confirmation by the DNA has been received. It has been confirmed that the project complies with requirements on low income communities.</p>	<input checked="" type="checkbox"/>
<p><u>Outstanding Issue 2:</u> Modalities of Communication document is necessary at registration (by which all participants jointly define the focal point for UNFCCC, also for receiving carbon certificates).</p>	A 3	<p>The Modalities of Communication has been attached</p> <p><u>Auditor, 7 June 2008:</u> It is required that the letter is signed by the official representative of the participant.</p> <p><u>Auditor, 23 July 2008:</u> Updated MoC have been received.</p>	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request No 1</u> The spreadsheet indicates 370.15 ha of the project area while the PDD indicates 369.5 ha. To be clarified and assure consistency.</p>	A 4.1	<p>The previous inconsistency is due to the round-up of decimal. The area has been cross-checked and PDD as well as calculation have been revised and updated based on the updated area. The new figure is 369.87 ha (a small parcel of land that was found not eligible has been excluded). See updated PDD.</p>	<input checked="" type="checkbox"/>

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		<p><u>Auditor, 7 June 2008:</u> The area indication was adapted accordingly.</p>	
<p><u>Corrective Action Request No 2</u> Consistency of parcel labelling is to be clarified and assured in the PDD.</p>	A 4.2	<p>The inconsistencies were caused by typing error during manually inputting of GPS boundary. Now all inconsistencies have been cross-checked, including GPS boundary that directly output from maps, and labelling. See attached updated spreadsheet for GPS boundary (GPS locations updated.xls)</p> <p><u>Auditor, 7 June 2008:</u> The updated table was received and previous inconsistency was erased.</p>	☑
<p><u>Corrective Action Request No 3</u> All coordinates measured in the field shall be controlled and crosschecked against the coordinates in the map.</p>	A 4.2	<p>The inconsistencies were caused by typing error during manually inputting of GPS boundary into spreadsheet. The maps that were made from on-site GPSing (transferring to GIS platform directly from GPS equipment) are definitely right. Now the GPS boundary spreadsheet has been made directly from the maps. See updated PDD and spreadsheet (GPS locations updated.xls).</p> <p><u>Auditor, 7 June 2008:</u> The discrete areas include labelling and are consistent with field data. (When converting to PDF, assure that labelling is still readable)</p>	☑
<p><u>Corrective Action Request No 4</u> Only one small pocket was found during field visit that has to be excluded from the project area as not eligible. According to the definition of forest the threshold was taken with 0.08 ha and 50%</p>	A 7	<p>This parcel of land has been taken out after directly measuring the boundary of the ineligible part of land. See PDD as well as spreadsheet.</p> <p><u>Auditor, 7 June 2008:</u></p>	☑

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crown coverage (parcel B1, 0.08 ha out of total 2.73 ha).		Has been adapted accordingly.	
<u>Corrective Action Request No 5</u> The starting date indicated is July 2008. Exact date required in format DD/MM/YYYY	A 9.1	Revised accordingly. See updated PDD Section A.9.1 <u>Auditor, 7 June 2008:</u> Has been adapted accordingly.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No 6</u> Table on estimated net anthropogenic removals by sinks to be revised according to changes in areas.	A 10	Re-calculated and revised accordingly. See updated PDD and ex-ante estimate spreadsheet attached. <u>Auditor, 7 June 2008:</u> Has been adapted accordingly.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No 7</u> The date of the baseline estimates needs to be given.	B 6	Revised accordingly. See updated PDD Section B.6 <u>Auditor, 7 June 2008:</u> Has been adapted accordingly.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No 8</u> For any barrier indicated, there needs to be clear evidence provided. Evidence can be e.g. external documentation. Only barriers that are prohibitive should be considered. This is also applicable to evidence that sustains the existence of an investment barrier to scenario.	B7	The barriers have been demonstrated by PRA practice which can be served as external evidence. The on-site auditor has also verified the barriers through interacting with local farmers during on-site auditing. In addition, following evidences have been attached: <ul style="list-style-type: none"> ✓ Statement from 4 banks (CAR_8_1 bank statement ✓ Statement from Haryana Forest Department (CAR_8_2 Statement from Haryana Forest Department) <u>Auditor, 7 June 2008:</u> Investment barrier: In regard to funding sources for reforestation activities, local banks were consulted, which confirmed that no loans have been granted in the	<input checked="" type="checkbox"/>

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Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		<p>past for this type of reforestations. The forest administration confirmed that no state subsidies are available for corresponding activities.</p> <p>Technological, social and ecological barrier are sustained with PRA documentation.</p> <p>The auditing team considers the activity additional and sustained with corresponding evidence.</p>	
<p><u>Corrective Action Request No 9</u> Any changes in land ownership and in rights on tCERs must be monitored and variables concerning this matter shall be inserted in the table on data to be monitored.</p>	B 8.1	<p>This has been added in table in section B.8.1.1.1 of PDD</p> <p><u>Auditor, 7 June 2008:</u> Has been adapted accordingly.</p>	☑
<p><u>Corrective Action Request No 10</u> Date of completion of the baseline study is to be inserted.</p>	B 9	<p>Already added in updated PDD section B.9</p> <p><u>Auditor, 7 June 2008:</u> Has been adapted accordingly.</p>	☑
<p><u>Corrective Action Request No 11</u> The scenarios in Table C-2 and Table C-3 shall be referenced to the species.</p>	C 2	<p>Reference to the species has been added in table C-2 and table C-3</p> <p><u>Auditor, 7 June 2008:</u> Table C.2 and C.3 (carbon stocks over time) has been adapted accordingly. Species are traceable through indications in B.3 on species within strata.</p>	☑
<p><u>Corrective Action Request No 12</u> It should be indicated that no national data on R are available.</p>	C 2	<p>Indicated in updated PDD section C.2</p> <p><u>Auditor, 7 June 2008:</u> GPG default used and considered acceptable. No indications on availability of better data sources found.</p>	☑
<p><u>Corrective Action Request No 13</u></p>	C 2	<p>Data in these tables have been recalculated based on</p>	☑

AR-AMS 0001 Ver. 04.1 Validation Protocol, Summary Table

Project Title: Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana

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Industrie Service

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
Tables C1- C4 to be updated according to requested changes in area and pre-existing trees.		updated area of lands and pre-existing trees. See revised PDD and spreadsheet for ex ante estimate <u>Auditor, 7 June 2008:</u> Has been adapted and updated accordingly.	
<u>Corrective Action Request No 14</u> The telephone number of Mr. Khod shall be rectified.	Annex 1	Revised in updated PDD <u>Auditor, 7 June 2008:</u> Has been adapted accordingly.	☑
<u>Clarification Request No. 1.</u> The consequences (positive or negative) of the AR CDM project on rare or endangered species shall be described and explained, also effects on wild life. Evidence to be provided.	A 5.2	This has been explained in updated PDD Section A.5.2 with supporting information. <u>Auditor, 7 June 2008:</u> Several NGOs relevant to conservation (Wildlife society of India, Life line awareness and serving welfare society and Wildlife Institute of India) are not expecting negative impacts on rare or endangered species.	☑
<u>Clarification Request No. 2.</u> In addition to the general description some evidence shall be provided on the (mostly positive) environmental impact of the project.	D 1	More specific description has been provided in PDD section D. <u>Auditor, 7 June 2008:</u> Sand dune fixation and land fertility impacts have been further described. Other consulted stakeholders have confirmed overall positive impacts.	☑

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Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
<p><u>Clarification Request No. 3.</u></p> <p>Stakeholders from outside the project shall be invited for comments on the project like environmental NGO, women organisations.</p>	<p>F 1</p>	<p>Comments from five NGOs have been added in PDD section F.1. Please see attached comments from some of NGOs.</p> <p><u>Auditor, 7 June 2008:</u></p> <p>Has been updated accordingly and complemented with further comments by NGOs.</p> <p>The process as taken forward by the project participant is considered to comply with requirements. The respective PRA events are considered to have had also informational character to the local stakeholders (land owners) and were not only used as input to project design.</p> <p>The NGOs additionally consulted expressed that the project is likely to generate sustainability impacts.</p>	<p style="text-align: center;"><input checked="" type="checkbox"/></p>




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Annex 2: Information Reference List

Final Report	15. Dec 2008	Validation of the CDM project: "Small Scale Cooperative Afforestation CDM Pilot Project Activity on Private Lands Affected by Shifting Sand Dunes in Sirsa, Haryana" Information Reference List	Page 2 of 3	
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Reference No.	Document or Type of Information
	Final Version: Version 03 13 Dec 2008
2.	Small Scale CDM Methodology AR-AMS0001 /Version 04.1
3.	Letter of Approval of India, issued by DNA Government of India Ministry of Environment & Forests, dated April 9, 2008
4.	Map Revenue Department (Land Registry Department), Confirmation on landownership of each person by the Revenue Department, reviewed during onsite visit, 2008
5.	Contract between Landowner and "Society", 2008
6.	Registration of "Society" with District Registration of Firms & Societies, dated January 9, 2008
7.	Byelaws of "Society", in English and Hindi signed by each project participant, reviewed during onsite visit, 2008
8.	Data sheets containing land and cattle holding details along with the individual annual income of the project participants / Detailed inventory and planning of project area / as a part of PRA exercise documentation (included also as footnote no. 6 and 7 in PDD)
9.	Government of Haryana. Technical Note No.4 Soil Working. Issued by Chief conservator of Forest, Haryana. Technical description and costs of Model "Sand Dune Fixation" Note 16.
10.	Excel spreadsheet on project areas by village, land owner, parcel, including GPS coordinates
11.	Volume and yield tables of Rajasthan, issued by S.S.Choudhary Chief Conservator of Forests Rajasthan. Including confirmation that tables can be used in the CDM project area by Chief Conservator of Forest, Panchcula (Included as footnote no. 5 in PDD)
12.	Working Plan for the Strip and Block Forests of Sirsa Forest Division. Bhagwan Singh H.F.S.
13.	Protocol of constitution assembly including election of Mr. Khod for President, dated 24th of December 2007
14.	Written declarations on low income, as compiled by local village presidents, dated 10 April 2008 (Included as footnote no. 8 in PDD)
15.	Monitoring Plan, secondary document, provided by PP, 2008
16.	The Haryana Forest Manual. Volume II. Relating to Establishment, Accounts, Budget and Office Business with Appendices, 1977
17.	Commenting letters by NGOs in regard to impacts on environment and endangered species: 1. Wildlife Society of India, 2. Wildlife Institute of India and 3. Lifeline Awareness and Serving Welfare Society Sirsa, all dated May 2008
18.	Bank statements in regard to non-availability of credits for reforestation projects, letters from four local banks: 1. State Bank of India, dated 29 May 2008, 2. Oriental Bank of Commerce, dated 28 May 2008 and 3. The Sirsal Central Co-op Bank Ltd., dated 28 May 2008 and 4. State Bank of Patiala, dated 29th May 2009.

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Reference No.	Document or Type of Information
19.	Confirmation by local Forestry Department in regard to non-availability of state funding for reforestations, dated 29 May 2008
20.	Confirmation by DNA in regard to Low income community involvement, dated 9 July 2008
21.	Institute of Sustainable Development. Environment Impact Study in Haryana Community Forestry Project Villages, December 2007 (included as footnote no 1 to PDD)
22.	State of Forest Report 2003, (Ministry of Environment & Forests), India, accessed via http://www.fsi.nic.in/sfr_2003.htm
23.	India's Forest 2007 (Ministry of Environment & Forests), India, accessed via http://envfor.nic.in/
24.	Environment, energy, and economy: Strategies for sustainability, Yoichi Kaya and Keiichi Yokobori 1997 (including information on desertification in Haryana) accessible via http://www.unu.edu/unupress/unupbooks/uu17ee/uu17ee06.htm
25.	Intergovernmental Panel on Climate Change (IPCC), 2003. Good Practice Guidance for Land Use, Land-Use Change and Forestry. Institute for Global Environmental Strategies (IGES), Hayama, Japan. 595p.
26.	Completed TÜV SÜD forms on field inspections (boundary, ownership, baseline and eligibility), as compiled by auditor during onsite visit, July 2008