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Validation Report

VALIDATION OF THE CDM-PROJECT: MOLDOVA COMMUNITY FORESTRY DEVELOPMENT PROJECT

REPORT NO. 600500917

14 November 2012

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

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Subject: Validation of the CDM Project “Moldova Community Forestry Development Project”

Accredited TÜV SÜD Unit:

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Certification Body “climate and energy”
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TÜV SÜD Contract Partner:

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Project Participant:

- Public entity – Agency Moldsilva,
- International Bank for Reconstruction and Development as custodian of the BioCarbon Fund (Client)

Project Site(s):

The various project sites are located in all districts of the Republic of Moldova, except Transnistria.
The PDD includes information on geographic boundary. Digital boundary files are provided jointly with this report (submitted as shape-file, in compliance with report of EB 41, item 34).

Project Title: Moldova Community Forestry Development Project

Applied Methodology / Version:

AR-AM0002 /
Version 03

Scope:

14

Technical Area(s):

14.1

First PDD Version (received by TÜV SÜD)*:

Date of issuance: 15 Oct 2011
Version No.: 03
Starting Date of GSP 07 Feb 2012

* The first version of the PDD was under validation with a GSP starting on 30 April 2010 by another DOE. The validation contract was however terminated.

Final PDD version:

Date of issuance: 02 Nov 2012
Version No.: 07

Estimated net anthropogenic GHG removal: 1,171,708 t CO₂-e (after the 30 year crediting period)
(=39,056 t CO₂-e annual average GHG removal)

Assessment Team Leader:

Sebastian Hetsch

Technical Review:

Karin Wagner, Martin Opitz

Assessment Team Members:

Martin Seitz

Certification Body responsible:

Thomas Kleiser

Summary of the Validation Opinion:

- ☒ 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 is recommending the project for registration by the CDM Executive Board if the 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.
- ☐ The review of the project design documentation and the subsequent follow-up interviews did not provide 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

AR-ACM	Approved Consolidated Methodology for Afforestation and Reforestation
AR-AM	Approved Methodology for Afforestation and Reforestation
AR-AMS	Approved Methodology Small Scale for Afforestation and Reforestation
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM-EB	CDM Executive Board
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
FSC	Forest Stewardship Council
GHG	Greenhouse Gas(es)
GIS	Geographic Information System
GPG	Good Practice Guidance
GPS	Global Positioning System
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
IRR	Internal Rate of Return
KP	Kyoto Protocol
LULUCF	Land-Use, Land-Use Change and Forestry
MP	Monitoring Plan
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
tCER	temporary Certified Emission Reduction
TARAM	Tool for Afforestation and Reforestation Approved Methodologies (spreadsheet based calculation tool)
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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INTRODUCTION

1.1 Objective

The objective of the validation process is to provide an independent assessment by a third party, a Designated Operational Entity (DOE), of a proposed project activity. The assessment involves the evaluation of the project basis and design identified in the Project Design Document (PDD) using the defined criteria outlined by the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and results in a conclusion by the executing DOE on whether or not a project activity is valid to be submitted for registration to the CDM Executive Board (CDM-EB). The ultimate decision on the registration of a proposed project activity rests with the CDM-EB and the Parties involved.

The project addressed in this validation report has been submitted under the following project title: "Moldova Community Forestry Development Project".

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-AR-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-AR-NM)
- Baselines and monitoring methodologies (including GHG inventories)
- Management systems and auditing methods
- Environmental issues relevant to the applicable sectoral scope
- Applicable environmental, 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 forward actions may provide input for improvement of the project design.

Once TÜV SÜD receives the PDD, it is made publicly available at the UNFCCC webpage and at TÜV SÜD's webpage to start a 45 day global stakeholder consultation process (GSP). In special circumstances, such as when a project design changes, the GSP may need to be repeated. Information on the PDDs is presented on page 1 of this report.

The purpose of a validation is to demonstrate compliance or non-compliance of the project with all stated and valid CDM requirements. Additionally, the purpose of validation is to enable the registration of CDM projects, which is only a part of the total CDM project cycle.

2 METHODOLOGY

The project assessment is based on the “Clean Development Mechanism Validation and Verification Manual” and is conducted using standard auditing techniques to assess the correctness of the information provided by the project participants. Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the CDM project activity are appointed. 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 the 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 being submitted to the CDM-EB.

In order to ensure transparency, assumptions must be clear and stated explicitly and background material must also be referenced. TÜV SÜD has developed a methodology-specific protocol customized for the project. The protocol demonstrates, in a transparent manner, the project criteria (requirements), discussion on each criterion by the assessment team, and the results from validating the identified criteria.

The validation protocol serves the following purposes:

- To organize the details and provision of clarifications on the requirements of which a CDM project is expected to meet;
- To elucidate how a particular requirement has been validated as well as to document the results of the validation and any adjustments made to the project design document.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

Validation Protocol Table 1: Conformity of Project activity and PDD

Checklist Topic / Question	Reference	Comments	Draft Conclusion	Final Conclusion
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then subdivided. 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 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 (✓), 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 identified a need for further clarification. Forward Action Request (FAR) to highlight issues related to project implementation that requires 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: Compilation and Resolutions of CARs, CRs and FARs

	Comments and Results	Ref	Conclusion and IRL
Issue	<i>Corrective Action, Clarification or Forward Action Requests.</i>	<i>Reference to the checklist question number in Table 1</i>	<i>Final conclusions and relevant references.</i>
Response	<i>The responses given by the client or other project participants during communication with the validation team.</i>		
Assessment	<i>Summary of the discussion and revision of project documentation together with the validation team's responses</i>		

In case of a denial of the project activity more detailed information on this decision will be presented in Table 3. Table 3 is also used for listing of any Forward Action Request.

Validation Protocol Table 3: Unresolved Corrective Action, Clarification Requests, Forward Action Requests

Clarifications Request, Corrective Action Request, Forward Action Request	Id. of CAR / CR / FAR	Explanation of the Conclusion for Denial, or Background of Forward Action Request
<i>Referenced request if final conclusions from table 2 resulted in a denial.</i>	<i>Identifier of the Request.</i>	<i>Detailed explanation of why the project is considered non-compliant with a criterion and a clear reference to the criterion</i>

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

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) to assure that the required skills are covered by the team. The CB TÜV SÜD operates the following qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL);
- Validator (V);
- Validator Trainee (T);
- Technical Experts (TE).

It is required that the sectoral scope(s) and the technical area(s) linked to the methodology and project have to be covered by the assessment team. For this particular project the assessment team members are presented in the table below. The respective appointment certificates are attached to this report as annex 3.

Assessment Team:

Name	Qualification	Coverage of scope	Coverage of technical area	Coverage of financial aspect	Host country experience
Sebastian Hetsch *	ATL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (14.1)	<input checked="" type="checkbox"/>	
Martin Seitz *	V	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Liviu Niciforel *	TE				<input checked="" type="checkbox"/>

* Audit team that conducted the onsite visit

Technical Reviewer:

- Karin Wagner (Technical Reviewer)
- Martin Opitz (support for coverage of respective TA)

2.2 Review of Documents

The PDD for the GSP was submitted by the PP to the DOE in February 2012. This PDD version and additional background documents related to the project design and baseline were reviewed to verify the correctness, credibility, and interpretation of the presented information. As a further step of the validation process, information provided by the PP was cross-checked with information from other sources (if available). A complete list of all documents and proofs reviewed is attached as Annex 2 to this report.

2.3 Follow-up Interviews

On 05-10 March 2012, TÜV SÜD performed interviews with project stakeholders and physical site inspection 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.

Persons Interviewed:

Name	Organisation
Galupa, Dumitru	Director FRMI, PIU Manager
Talmaci, Jon	Scientific Director FRMI, PIU
Spitoc, Liliana	PIU
Rofaru, Petru	Chief Director of Forest Fund
Varzari, Alexandru	IT, PIU
Franka Braun	World Bank, Bio Carbon Finance
Rama C. Reddy	World Bank, Bio Carbon Finance

2.4 Cross-check

During the validation process the team made reference to available information related to similar projects or technologies as the CDM project activity. The documentation was also reviewed against the approved methodology 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, clarifications, and any other outstanding issues which need to be clarified for TÜV SÜD's conclusion on the project design. The CARs and CRs raised by TÜV SÜD are resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process the concerns raised and responses that were given are documented in more detail in the validation protocol in Annex 1.

The final PDD version submitted in November 2012 served as the basis for the final assessment presented. 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: an achievement of reduction of anthropogenic GHG emissions and a contribution to sustainable development.

2.6 Internal Quality Control

Internal quality control is the final step of the validation process and is conducted by the CB "climate and energy" who checks the final documentation, which includes the validation report and annexes. The completion of the quality control indicates that each report submitted has been approved either by the head of the CB or the deputy (a veto person is used if necessary). In projects where either the Head of the CB or his/her deputy is part of the assessment team, the approval is given by the one not serving on the project team.

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

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 Annex 1 are listed in the Information Reference List (IRL) in Annex 2.

3.1 Approval

The project participants are (i) the Agency Moldsilva, and (ii) the International Bank for Reconstruction and Development as custodian of the BioCarbon Fund. The host Party Moldova meets the requirements to participate in the CDM.

The DNA of Moldova issued a LoA (IRL 13) on 30 April 2010 authorizing Agency Moldsilva and the International Bank for Reconstruction and Development as custodian of the BioCarbon Fund as a project participants. TÜV SÜD received this letter from the project participants.

The letter was issued by the respective Party's DNA: the "National Commission for the implementation and realization of the commitments under the United Nations Framework Convention on Climate Change and of the mechanism and provision of the Kyoto Protocol, Ministry of Environment and Natural Resources" of the Republic of Moldova.

The Moldovan LoA was further double checked with the DNA of the Republic of Moldova who confirmed by email the authenticity of the LoA (IRL 136). Therefore, TÜV-SÜD considers the provided letter as authentic.

TÜV SÜD confirms that the letter refers to the precise proposed CDM project activity title in line with the title in the PDD "Moldova Community Forestry Development Project"

The letter also indicates that the participating Party is a Party to the Kyoto Protocol, and that the participation in the "Moldova Community Forestry Development Project" project is voluntary. The Moldovan LoA also confirms that the proposed CDM project activity contributes to the sustainable development of the Republic of Moldova (host country).

Based on the information given in this letter, TÜV SÜD considers the approval as unconditional with respect to these items. TÜV SÜD considers that the requirements of VVM (§§ 45-48) are met. The LoA does not refer to a specific version of the PDD or validation report.

3.2 Participation

The participants of the project activity were approved by the corresponding Party, which is confirmed with the issued LoA. The means of validation used are the same as described in section 3.1, specifically in regard to the approval process of the project activity.

3.3 Project design document

The PDD complies with the relevant form and guidance provided by UNFCCC. The most recent version of the PDD template was used. TÜV SÜD considers that the guidelines for the completion of the PDD in their most recent version were followed. Relevant information was provided by the participants in the applicable PDD sections. Completeness was assessed through the checklist included in 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 activity consists of reforestation of 8,468.84 ha of degraded lands with a variety of species, mainly *Robinia pseudoacacia* and *Quercus*. The project consists of several discrete parcels, located in all districts of the Republic of Moldova, except Transnistria.

The project is implemented by the Agency Moldsilva, the central public administration body on state policy of forestry and hunting of the Republic of Moldova. In collaboration with communities the Agency Moldsilva reforested mainly communal and some state owned lands and manages it now on basis of contractual agreements with the communities. The baseline scenario is further degradation due to propensity for landslides and continued erosion in the absence of direct intervention.

In order to address the non-permanence of AR-CDM projects, the PPs opted for tCERs over a 30 year crediting period in line with VVM § 153.

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), which was verified with other sources if available.
- An on-site visit was performed and relevant stakeholder and personnel with knowledge of the project were interviewed. If doubts arose, further investigations and additional interviews were conducted
- Finally, information related to similar projects or technologies as the CDM project activity were used (if available) to confirm the accuracy and completeness of the project description.

In conclusion, 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.

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-AM0002 version 03 was demonstrated.

The assessment was carried out for each applicability criterion 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.

Following the requirements of the methodology, the following tools and procedures were correctly applied:

- Procedures to demonstrate the eligibility of lands for afforestation and reforestation project activities
- Tool for the demonstration and assessment of additionality in A/R CDM project activities
- Tool for the identification of degraded and degrading lands for consideration in implementing CDM A/R project activities
- Tool to demonstrate the eligibility of lands for afforestation and reforestation CDM project activities
- Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities

- Calculation of the number of sample plots for measurements within A/R CDM project activities;

The methodology-specific protocol, included in Annex 1, documents the assessment process. The results of the compliance check as well as relevant evidence are detailed in the protocol and the information reference list.

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 are expected to contribute more than 1% of the overall expected average annual emission reductions, were not identified.

3.5.2 Project boundary, pools and eligibility

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

The project area covers 8468.84ha; it consists of 770 parcels, distributed in various communes in all districts of the Republic of Moldova except Transnistria. The boundary as defined in the field was found to be consistent with the indications in the PDD (IRL 2, 3). In the field, the boundary delineation was cross-checked by the audit team with GPS (IRL 96).

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

- Cadastral maps (hard copy) of the Moldovan Forest Agency Moldsilva (IRL 6a)
- Digital boundary files in a Geographic Information System (GIS) (IRL 3). In accordance with EB 41, item 34, digital boundary files are provided as shape files.
- Field sheets including coordinates obtained from GPS points documenting the assessment of the audit team during the onsite visits (IRL 96)
- Overview maps of the location of the project area and boundaries are also included to the final PDD (IRL 2).

The boundaries were validated during the validation process using standard audit techniques, details of all observations are presented in the Annex 1. TÜV SÜD confirms that the identified boundaries as documented in the PDD and attached documents are adequately defined for the project activity.

In regard to **control over the project area**, the audit team confirms that the project participant has full control over the project area. The majority of the project area belongs to local communities, the rest is governmental owned land and directly under the control of Moldsilva (IRL 5, 8, 35, 36). It was confirmed that the land owners (mayors of the communes) signed contracts with Moldsilva allowing it to establish and maintain forest plantations. The ownership of the land and the forest products stays with the communities (IRL 14). In a separate addendum signed with all the communities the carbon rights are transferred to Moldsilva (IRL 15). The corresponding documentation was reviewed during the onsite visit (IRL 96, 114, 115, 127).

TÜV SÜD confirms that the project boundary delineates the proposed AR CDM project activity, and that the PP have control over the project area in line with VVM §140.

Following **carbon pools** are selected and considered in line with the methodology:

- Above and below ground biomass is considered for baseline and ex ante calculations.
- Changes in the carbon pool deadwood are set to zero under the baseline scenario and considered in the ex-ante calculations.
- Changes in the carbon pool litter are conservatively set to zero under the baseline and ex ante calculations.

- Changes in carbon pool soil are set to zero for bare and degraded lands in the baseline and considered for degraded lands subject to pre-project reforestation in the baseline calculations as well as in the ex-ante calculations.

The relevant **emission source** burning of biomass with the gases CO₂ and CH₄ (compare sections on removals and emissions below) is not selected for ex ante calculations as burning of biomass is not practiced in the project, which is in line with the applied methodology.

In regard to **eligibility of lands**, the project area fully complies with the requirements of the most recent Eligibility Procedure as defined by the EB. Among others, the assessment of the compliance was based on the following evidence:

- Baseline field studies conducted 2008 (IRL 27, 93)
- Cadastral mapping (IRL 6)
- Confirmation by cadastral authorities and local communities regarding land cover and land use (IRL 7, 9, 10)

Vegetation at the time of the project start was assessed and found to be below the forest threshold (according to the DNA definition). It was assessed that the vegetation prior to project start would not have surpassed this threshold at maturity without the project activity (IRL 27). The audit team validated this information through physical visits of the project area, as well as a review of the respective documents (IRL 96, 127). It was confirmed that no forest was on the project area before project start.

No forest had been on the project area on 31 December 1989, as documented by cadastral mapping (IRL 6) and written confirmation of the cadastral authorities and local communities (IRL 7, 9, 10). The documents were reviewed by the audit team. Eligibility was also verified by the audit team during interviews with local stakeholders on site, who confirmed that no forest had been on the project area since 1989 (IRL 96).

In summary, TÜV SÜD concludes that the project area is eligible for an AR-CDM project activity in line with VVM § 147.

3.5.3 Baseline identification

The PDD identifies the baseline scenario as “Degraded lands are expected to degrade further due to propensity for landslides and continued erosion in the absence of direct intervention. Historical trend confirmed through field studies and land use data”. This baseline scenario was determined by following the “procedure or selection of the most plausible baseline scenario” of the chosen methodology AR-AM0002 Version 3.

The information presented in the PDD was validated by a document review, the on-site visit of the project area (IRL 2, 96) and finally by cross-checking the information presented with similar relevant projects and literature (IRL 142). The sources referenced in the PDD were quoted correctly. The information was verified against credible sources, such as:

- Summer, Wolfgang/ Dierenhofer, Wolfgang (2003): Soil Erosion in the Republic of Moldova – the importance of institutional arrangements, in: Erosion Prediction in ungauged Basins: Integrating Methods and Techniques, IAHS Publication no. 27 (IRL 27)
- UNEP/ GRID Arendal Central and Eastern Europe, Caucasus and Central Asia: Moldova Soil Erosion, UNEP 2005 (IRL 42)

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 of the project area

prior to project start would also be the likely future land use in absence of the project. A baseline reforestation rate of 0.69 % (IRL 21) was considered according to the applied methodology.

TÜV SÜD confirms that no reasonable alternative baseline scenario was excluded in the analysis of baseline scenarios. Based on the validated assumptions, TÜV SÜD considers that the identified baseline scenario is reasonable. Taking the definition of the baseline scenario into account, TÜV SÜD confirms that all relevant CDM requirements, including relevant national and sectoral policies and circumstances, were identified correctly. A verifiable description of the baseline scenario was included in the PDD.

In regard to item 87 of VVM, TÜV SÜD confirms the following statements:

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 was 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 to determine emission reductions

TÜV SÜD 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 (IRL 19, 119). Correctness of calculations can be confirmed 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 during the onsite visit.

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 were checked and confirmed (IRL 16, 17, 18, 23, 32, 33, 76, 87, 88, 117, 120 and 125).

In essence, the methodology was correctly applied following the requirements. All values in the PDD are considered reasonable in the context of the proposed CDM project activity. Data sources are quoted correctly. Hence, the calculation of baseline stocks and removals, project emissions, leakage and the expected net anthropogenic GHG removals by sinks are considered correct.

3.5.5 Baseline stocks and greenhouse gas removals by sinks

The stratification process differentiated four different baseline strata: Robinia rich soil, Robinia poor soil, Quercus rich soil and Quercus poor soil which is considered acceptable under the described conditions of the project area as documented through the land use and eligibility assessment.

Baseline stocks were estimated and considered for all relevant types of vegetation. A study was elaborated indicating a sum of baseline carbon stocks of 172,407 tCO₂-e, divided into 15,528 tonnes CO₂-e in trees and shrubs of pre-existing vegetation and 156,878 tonnes CO₂-e of pre-

project A/R activities for the project area (IRL 19, 119). For the calculations, values for wood density were taken from scientific literature (IRL 128) and from national forest inventory (IRL 109). Values for biomass expansion factor are taken from national forest inventory (IRL 109) and values for carbon fraction were taken from the IPCC (IRL 129). The choice of data sources is considered adequate. Good practice in regard to forest inventory was followed in the context of the baseline assessment.

Baseline carbon stocks were discounted in the overall calculations of net anthropogenic removals.

It was conservatively assumed that the annual incremental growth for existing shrubs and scattered trees is 0.11 m³/ha each year based values derived from the yield tables (IRL 33 and 34). Thus, the ex-ante estimation of baseline GHG emission reduction is 172,407 t CO₂-e accumulated over the 30-year crediting period.

The parameters and equations presented in the PDD and further documentation were cross-checked and compared with the requirements and guidelines of the applied methodology and respective tools. The review of the equation included all formulae presented in the PDD and the digital calculation files.

In summary the calculation of the baseline stocks and GHG removals are considered correct.

3.5.6 Project emissions

The methodology considers project emissions from burning of biomass as a result of the implementation of the A/R Project. This source is discussed in the PDD and respectively in the audit process.

Biomass burning as potential GHG emission source was considered not applicable, as it is not foreseen to use fire for site preparation (IRL 2). Therefore, project emissions were set as zero according to the methodology.

The audit team validated this statement and confirmed through the physical onsite visit and their sectoral and country expertise that such emission are unlikely.

3.5.7 Leakage

According to the applicability conditions of the chosen methodology the degraded land proposed for the project activity continues to provide at least the same amount of goods and services.

The project activity will also not result in a reduction of the reforestation activities or increase the deforestation activities outside of the project boundary. Therefore leakage is considered to be zero.

The audit team confirms that leakage is calculated in line with the applied methodology. Based on documents reviewed (IRL 121) and the assessment of the project during the onsite visit it can be confirmed that leakage can be considered zero in line with the applied methodology.

3.5.8 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 are based for the two dominating tree species Robinia and Quercus on allometric biomass equations for young broadleaved trees in plantations in Romania (IRL 131). For other relevant tree species (IRL 120) yield tables (IRL 129, 130) are used. Sources for the required Biomass Expansion Factors, Root-to-Shoot ratios and

wood densities are described in detail in IRL 120; for Carbon Fraction the default value of 0.5 was applied in line with the methodology (IRL 129). The sources were reviewed and confirmed during the onsite visit and are consistent with data from international database such as IPCC (IRL 129) and scientific data (IRL 126).

The calculations of the net anthropogenic GHG removals were carried out with an Excel based tool (IRL 19) and supporting calculations (IRL119, 120). All calculations are in compliance with the applied AR-CDM methodology. The steps of the calculations are fully traceable and adequate for the project conditions.

In summary, the calculations for net anthropogenic GHG removals are considered correct.

3.6 Additionality

The additionality of the project was presented in the PDD using following approach: Additionality tool for AR-CDM (version 02) using the investment analysis. The CDM Guidelines on the Assessment of investment analysis was followed (IRL 118, 22a).

The approach used in the PDD was assessed based on a document review, where following relevant documents were reviewed:

- Financial analysis parameters (IRL 118)
- Sensitivity analysis (IRL 22a)
- Economic analysis of Moldsilva Agency 1996 - 2006 (IRL 22)
- Price list for timber products 2005 and 2006 (IRL 94 and 95)
- Calculations based on "Order of Moldsilva" for the establishment of categories of labour remuneration Nr.30-P, 18.02.2005; (IRL 101)
- Technological tables approved by Moldsilva agency 2006 (IRL 102)
- Information on cost of non-wood forest products, P.N.P.A, Moldova, 2006 (IRL 104)
- Contract on hunting lease (#21, dated 14.10.2006) (IRL 105)
- Volumes & prices of wood products 2006. Complete title: Volume harvested per sortiment: Calculation based on the Report on the harvesting of timber during different treatments (types of treatment, assortment, species etc.) (IRL 106 and 107)

Furthermore, the additionality analysis was discussed onsite with the project team of Moldsilva Agency as project participant, as well as with the consultants of the World Bank involved in PDD development (IRL 1). Interviews on this topic were also carried out with stakeholders during the onsite visit (IRL 1). The data, rationale, assumptions, justifications and documentation provided were checked using local knowledge and sectoral and financial expertise.

Based on the aforementioned approach, TÜV SÜD confirms that the documentation provided is appropriate for this project. Further analysis of the additionality is summarized in the sections below (3.6.1 – 3.6.5).

In essence, the project is considered additional as degraded lands are reforested which otherwise would have remained degraded lands - among others due to unavailability of funding for such reforestation activities.

3.6.1 Start date and prior consideration of the CDM

The project started on 01 November 2006. The starting date of the project activity is determined by start of the planting activities (IRL 132). In order to confirm the starting date the assessment team reviewed the reference documenting the start of planting (IRL 132) document. The age

and condition of the plantations inspected during the onsite visit was found consistent with the records (IRL 96).

The CDM consideration prior to project start was documented through the submission of the Moldova Community Forestry Development Project Idea Note to World Bank BioCarbon Fund in March 2006 (IRL 134) and the Aide-Memoire of the World Bank Mission from 6-10 Oct 2005 (IRL 133). The project therefore complies with the requirement of prior CDM consideration.

TÜV SÜD confirms that CDM was a decisive factor in the decision to proceed with the project, as no funds were available for reforestation activities on degraded forest lands or community or private lands (IRL 118). Revenues from carbon credits and the early supporting commitment from the World Bank (IRL 133) led to the decision that the project should be implemented.

Date	Activity by the Project Participant	Reference	Audit team conclusion
01 Nov 2006	Start of project activity	IRL 132	Document reviewed by TÜV SÜD and found in compliance with the AR-CDM requirements for starting date as defined in the Glossary of CDM terms and VVM.
21 Sep 2007	Letter of intent between BioCarbon Fund (BioCF) and the Agency Mold-silva (project entity) to purchase an agreed amount of Emissions Reductions from Moldova Community Forestry Development Project.	IRL 12	This letter contains information on the purchase and sales agreement of ERs between the Project Entity Mold-silva and the BioCarbon Fund. The audit team reviewed the document and concluded that it sustains real and ongoing action to secure the CDM status.
3 Nov 2008	Official World Bank supervision mission for Moldova Community Forestry Project	IRL 137	This document provides information concerning a World Bank supervision visit for the MCFDP. The audit team reviewed the document and concluded that it sustains real and ongoing action to secure the CDM status.
06 Feb 2009	Virtual Concept Review package for Moldova Community Forestry Project sent by World Bank Task Team Leader	IRL 140	The document contains information on a virtual concept review for the MCFDP, presented by the BioCarbon Fund. The audit team reviewed the document and concluded that it sustains real and ongoing action to secure the CDM status.
19 May 2009	Minutes of Virtual Decision Meeting Moldova Community Forestry Project	IRL 139	The document contains the summary/minutes of the virtual decision meeting for the MCFDP, held in April/May 2009 and presented by the BioCarbon Fund. The audit team reviewed the document and concluded that it sustains real and ongoing action to secure the CDM status.
30 Apr 2010	DNA has issued the Letter of Approval for Moldova Community Forestry Development Project	IRL 13	The audit team reviewed the document and concluded that it sustains real and ongoing action to secure the CDM status.
30 Apr 2010	Start of the first GSP of the project	IRL 141	As evident of the UNFCCC webpage the first GSP started with the DOE "Swiss Association for Quality and Management

			Systems". Hence ongoing action to secure the CDM status can be confirmed. The validation activity continued during the subsequent month, including the on-site visit by the DOE.
13 Aug 2010	Moldova Community Forestry Project Progress Report	IRL 138	The document contains email communication between Moldosilva and the World Bank, dated 13. Aug 2010, confirming the submission and acceptance of the interim financial report by the Financial Management of the World Bank. The audit team reviewed the document and concluded that it sustains real and ongoing action to secure the CDM status.
07 Feb 2012	Start of the second GSP of the project	IRL 141	The validation process with the first DOE was terminated and TÜV SÜD was contracted to conduct the validation of the proposed AR-CDM project activity.

The audit team reviewed the respective documents, based on which TÜV SÜD can confirm that real and continuous actions were undertaken to secure the CDM status of the project in line with the VVM version 1.2 paragraph 102 (b). Further, as per EB 62, Annex 13, TÜV SÜD concludes that continuing and real actions were taken to secure CDM status for the project activity, as there is less than 2 years of a gap between the documented evidence.

The audit team further confirms that the proposed CDM project activity complies with the requirements of the latest version of the "Guidelines on the demonstration and assessment of prior consideration of the CDM" with project start date before 02 August 2008.

In essence all requirements regarding prior and ongoing CDM consideration as per VVM and respective guidance are met.

3.6.2 Identifications of alternatives

The output of the project is long-term managed reforestations, contributing to soil conservation and improvement of water quality, generation of income in rural communities, production of wood and other non-timber forest products (nuts, fruits and medicinal products).

Relevant alternatives (baseline scenario) were identified in the context of the additionality test: (i) Degraded land are abandoned and regenerated through natural succession of forest cover, (ii) degraded lands are abandoned and will degrade further, (iii) degraded lands are converted to productive agriculture or perennial plantations, (iiii) Investment in engineering structures to stabilize the degraded sites prone to landslides and soil erosion and (iiiii) degraded lands restored through afforestation and reforestation without being registered as an A/R CDM project activity.

The presented alternatives include all plausible scenarios taking into account local and sectoral circumstances. Hence the list of alternatives is considered to be complete.

Based on the evidence provided and the discussion held with the project participants during the onsite visit, it is clear that the continuation of the current and historical land use (scenario ii) is the most likely scenario in the absence of the project activity.

3.6.3 Investment analysis

The PP uses the benchmark analysis to demonstrate the additionality. The selected financial indicators are IRR (internal rate of return) and NPV (net present value). The “Guidelines on the assessment of investment analysis” (EB 62 Annex 5) were used for conducting investment analysis using benchmark. The paragraph 8 of the appendix to guidelines suggests default expected return on equity of 9% after taxes for afforestation/reforestation projects in Republic of Moldova.

A 30 year interval is chosen which coincides with the 30 year crediting period of the project. IRR and NPV were calculated by the PP (IRL 22a, 123); the respective input data for the calculation was assessed and cross-checked by the audit team as indicated in the table below. Without the consideration of carbon revenues the discounted cash flow and the NPV is negative and the IRR is estimated with 5.7 %.

Key Parameter	Value in PDD / calculations	Source / Reference (IRL)	Conclusion
Project Area	8468.84 ha	GIS data of project boundary (IRL 3)	At validation the actual project area is 8468.84 ha.
Cost of labor (unskilled)	MDL 76/ day	Technological tables approved by the Agency Moldsilva, 2006 (IRL102)	Calculations based on Order of Moldsilva for the establishment of categories of labor remuneration Nr.30-P, 18.02.2005 (IRL 101) In order to cross-check these expenses, the audit team assessed the costs and time required based on regional and technical expertise of the audit team.
Cost of labor (professional)	MDL 210/ day		
Cost of labor (forest guard)	MDL 128/ ha/year		
Volumes harvested	≤ 15m ³ /ha	Technological tables approved by the Agency Moldsilva, 2006 (IRL102)	Calculation based on the report on the harvesting of timber during different treatments (types of treatment, assortment, species, age, etc.) (IRL 106)
Thinning cost 5-10 yrs, all species average	MDL 74 / m ³	Technological tables approved by the Agency Moldsilva, 2006 (IRL102)	Calculations based on Order of Moldsilva for the establishment of categories of labor remuneration Nr.30-P, 18.02.2005 (IRL 101). Costs for harvesting were assessed by the audit team based on existing studies and sectoral and regional expertise. The values used in the analysis are considered reasonable.
Thinning cost middle aged, Robinia 15 yrs., Oak 30 yrs.	MDL 56 / m ³		
Harvest cost	MDL 54 / m ³		
Fungicide/Pesticide	MDL 288 / m ³	Technological tables approved by the Agency Moldsilva, 2006 (IRL102)	Calculations based on Order of Moldsilva for the establishment of categories of labor remuneration Nr.30-P, 18.02.2005 (IRL 101). Costs for chemicals were assessed by the audit team based on sectoral and regional expertise. The values used in the analysis are considered reasonable.
Seedlings replanting rate	15 % pieces planted	Technological tables approved by the Agency Moldsilva, 2006	Calculations based on Order of Moldsilva for the establishment of categories of labor remuneration Nr.30-P, 18.02.2005 (IRL 101). Percentage of replanting was assessed by the audit team based on

Key Parameter	Value in PDD / calculations	Source / Reference (IRL)	Conclusion
		(IRL102)	sectoral and regional expertise. The value used in the analysis is considered reasonable.
Seedlings Quercus	MDL 0.34 / piece	Order Moldsilva on approval of Catalogue of prices planting material 2006 (IRL 103)	Values based on approval of Catalogue of prices planting material 2006 (IRL 103). Values of prices for seedlings were assessed by the audit team based on sectoral and regional expertise. The value used in the analysis is considered reasonable.
Seedlings Robinia	MDL 0.18 / piece		
Seedlings attending species	MDL 0.17 – 0.37 / piece		
Forest Inventory	MDL 73 / ha	Technological tables approved by the Agency Moldsilva, 2006 (IRL102)	Calculations based on Order of Moldsilva for the establishment of categories of labor remuneration Nr.30-P, 18.02.2005 (IRL 101). Cost of Forest Inventory was assessed by the audit team based on sectoral and regional expertise. The values used in the analysis are considered reasonable.
Medical plants and forest fruits	MDL 12 / ha	Inf. On non-wood forest products in 2006, Telenesti Forest Enterprise (Ref. no 104)	Value of Medical plants and forest fruits was assessed by the audit team based on sectoral and regional expertise. The values used in the analysis are considered reasonable.
Hunting lease	MDL 18 / ha	Contract no 21, 14.10.2005 on hunting lease (Ref. no 105)	Value of hunting lease was assessed by the audit team based on sectoral and regional expertise. The values used in the analysis are considered reasonable.
Fodder/Hay	MDL 670 / t	Inf. On non-wood forest products in 2006, Telenesti Forest Enterprise (Ref. no 104)	Value Fodder/Hay and Land fodder value pasture were assessed by the audit team based on sectoral and regional expertise. The values used in the analysis are considered reasonable.
Land fodder value pasture	MDL 670 / ha		
Cost of Vehicles	Costs range between MDL 3,198 / day and MDL 155 / day	Technological tables approved by the Agency Moldsilva, 2006 (IRL102)	The audit team cross-checked the values with the technological tables approved by Moldsilva Agency (IRL 102), assessed the prices based on sectoral and regional expertise and found the value reasonable at investment decision.

Key Parameter	Value in PDD / calculations	Source / Reference (IRL)	Conclusion
Wood sales price	Price range between 745 MDL /m ³ and 50 MDL / m ³	Published timber prices (IRL 106, 107, 116)	<p>The audit team cross-checked the wood price with the reports Volume and prices of wood products (2006) by Moldsilva Agency, assessed the prices based on sectoral and regional expertise and found the value reasonable at investment decision.</p> <p>Sawn Timber MDL 745 / m3 Construction Timber MDL 450 / m3 Secondary construction Timber MDL 440 / m3 Fire wood MDL 285 / m3 Branches MDL 50 / m3</p>
Default value for expected return on equity after taxes	9 %	The "Guidelines on the Assessment of investment analysis" (EB 62 Annex 5)	The paragraph 8 of the Appendix to the Guidelines suggests default expected return on equity of 9% for afforestation/reforestation projects in Republic of Moldova.
Exchange rate USD / MDL	12.8	Exchange rate	The exchange rate was checked by the audit team, and found to be correct for the time of investment decision (Jan 2006).

The parameters used are explained in detail (IRL 123) and are based on data made available and analysed by the Moldsilva Agency, the governmental national forest agency. Data are calculated for six different conditions; therefore the numbers vary for the different items/ha.

The sensitivity analysis was analyzed in detail and TÜV SÜD confirms that the underlying assumptions, parameters and chosen values are appropriate and that the calculations have been performed correctly.

Sensitivity analysis was performed on the timber price, which is the major parameter for the investment analysis. A variation of 10% and 50% was applied, which is considered appropriate for the project conditions, and in accordance with the applied AR-CDM additionality tool and general guidance provided by the Executive Board of UNFCCC "Guidelines on the Assessment of Investment Analysis". With a suggested increase of timber prices of 50% the NPV still stays negative and the IRR is calculated with 7.1 %.

The audit team confirms that it is highly unlikely that without the benefits from the sale of carbon credits the project reaches an IRR of 9 %. Therefore it is demonstrated that the project activity is not financially attractive without any CDM revenues.

A detailed list of all parameters and values used in the calculation including references has been provided to the DOE (IRL 123, 22a).

3.6.4 Barrier analysis

The project participants decided not do any barrier analysis next to the investment analysis.

3.6.5 Common practice analysis

The region for the common practice analysis was defined as the geographical area of the Republic of Moldova as the different parcels of the project area spread nearly all over the country.

Reforestation statistics of Moldova show a total reforested area of 6,277 hectares over the last 10 years (IRL 124, 135). This reforestation is however mainly due to another, already registered AR-CDM project (CDM project ID 1948). The remaining low annual reforestation is covered by the applied baseline methodology, which allows for a baseline reforestation rate (see also section 3.5.3). Therefore, the audit team concludes that no similar projects have been undertaken in the region before, and it is confirmed that the proposed CDM project activity is not common practice.

3.7 Monitoring plan

The monitoring plan presented in the PDD complies with the requirement of the methodology. The assessment team checked all parameters presented in the monitoring plan against the requirements of the methodology. For the monitoring of carbon stock changes the requirements and parameter list as per methodology were followed. Monitoring of leakage and GHG emissions was excluded due to non-relevance with the exception of the monitoring of eventually appearing unintended fires (see section 3.5.6 and 3.5.7)

The monitoring plan was included to the project documentation. The boundary and forest management monitoring was defined specifically for the project context. The sampling design was reviewed onsite and found to be in compliance with methodological requirements, and good practice as defined e.g. in the IPCC GPG LULUCF (IRL 129).

The procedures were reviewed by the assessment team on paper and through interviews with the relevant personnel (IRL 1); 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 were discussed with the PPs, as well as the inventory processes, data management, quality assurance and quality control procedures that will be implemented in the context of the project. The PPs developed Standard Operating Procedures (SOP) towards carbon monitoring in order to ensure the collection of reliable field data (IRL 108).

TÜV SÜD concludes that the PP will be able to implement the monitoring plan to report ex-post GHG net anthropogenic removals, which can also be verified.

The chosen monitoring frequency of the parameters is in line with the methodology (frequency in years). It is considered that there is no systematic coincidence of verifications with peaks in carbon stocks since no harvesting operations are foreseen within the crediting period.

Under consideration of the pre-fixed verification frequency of every 5 years (after first verification) and the defined forest management and harvesting system it is considered that there will be no systematic coincidence of verifications with peaks in carbon stocks (VVM §156).

3.8 Sustainable development

The LoA of the Host Country Moldova clearly presents a statement that the project contributes to the sustainable development of the Host Party.

3.9 Local stakeholder consultation

The stakeholder process was carried out in line with PDD guidance and was found to be documented through evidence on the consultation process. The Carbon Finance Document has been presented at a technical meeting with forest engineers' from 21 forest enterprises in 2007 (IRL 25); a series of workshops/meetings were conducted in January 2008 until September

2008 with public local authorities and local communities in order to allow people from the community understand and comment on the proposed project activity (IRL 25). A workshop organized by the Forestry Research and Management Institute jointly with the Regional Environmental Centre from Moldova (REC Moldova) took place 10 December 2009. Representatives from NGOs, academic institutions, education institutions and mass-media participated in the workshop on Environmental Management Plan developed under Moldova Community Forestry Development Project (IRL 25).

The Environmental Impact Assessment (IRL 29) and the Environmental Management Plan (IRL 30) were posted for public comments on the website of the Forestry research and Management Institute.

The assessment team reviewed the documentation in order to validate the inclusion of relevant stakeholders and using the local expertise it is confirmed that the communication method used to invite the stakeholders can be considered appropriate.

The summary of comments presented in the PDD was cross-checked with the documentation of the stakeholder consultation (IRL 111) and confirmed with interviews with stakeholders of the community by the audit team during the onsite visit, and it is found to be complete.

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

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

3.10 Environmental and socio-economic impacts

The PP undertook 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.

No Environmental Impact Assessment is required for reforestation activities in Moldova as per respective legislation (IRL 64, 80). However, the PP carried out an Environmental Assessment according to the requirements of the World Bank. The environmental impacts of the project were analyzed in detail in this study (IRL 29, 30). Also a social assessment was carried out in accordance to the requirement of the World Bank and described in the PDD (IRL 2, 25).

In essence, the audit team concluded that no negative environmental and social impacts are expected. This 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.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on the UNFCCC website and invited comments by affected Parties, stakeholders, and non-governmental organisations during a 45 day period.

All key information gathered is presented in the table bellow

GSP Comments

webpage: http://cdm.unfccc.int/Projects/Validation/DB/RZ5M0HDR7X5Y4ANBBZLSGYRU27G6G2/view.html	
Starting date of the global stakeholder consultation process: 07 Feb 12 - 22 Mar 12	
Comment submitted by: No comments received.	Issues raised: None
Response by TÜV SÜD: -	

5 VALIDATION OPINION

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

Moldova Community Forestry Development Project.

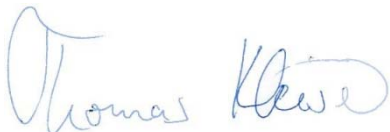
Standard auditing techniques have been used for the validation of the project. A methodology-specific protocol for the project has been prepared to conduct the validation process in a transparent and comprehensive manner.

The review of the project design documentation, subsequent follow-up interviews, and further verification of references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In the opinion of TÜV SÜD, the project meets all relevant UNFCCC requirements for the CDM if the underlying assumptions do not change. TÜV SÜD recommends 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. GHG removals attributable to the project are additional to any that would occur in the absence of the project activity. Considering that the project will be implemented as designed, the project is likely to remove the estimated amount of 39,056 tCO₂e annually (rounded), and a total estimated of 1,171,708 tCO₂e as specified within the final PDD version.

The validation has been performed following the requirements of the latest version of the CDM VVM and on the basis of the contractual agreement. The single purpose of this report is its use during the registration process as part of the CDM project cycle. Based on the work described in this report, nothing has come to our attention that causes us to believe that any project component or issue has not been covered by the validation process.

Munich, 14 November 2012



Thomas Kleiser

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

Munich, 14 November 2012



Sebastian Hetsch

Assessment Team Leader
TÜV SÜD Industrie Service GmbH



Annex 1: Validation Protocol

Table 1: Requirements Checklist

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
A. General Description of the Project Activity				
A.1 Title of the project activity				
Does the used project title clearly enable to identify the unique CDM activity?	2	The title of the proposed project activity "Moldova Community Forestry Development Project" enables the identification as unique A/R CDM activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any indication concerning the revision number and the date of the revision?	2	Revision number and date is presented in the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is this consistent with the time line of the project's history?	2	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2 Description of the project activity				
Has the project been described in terms of purpose, how the project is undertaken, and the project proponent's view of the project's contribution to sustainable development?	2, 33, 34, 35, 36, 37, 38, 39, 40, 41,	Purpose of the proposed A/R CDM project activity is the creation of community forests with an area of 8,468.84 ha through afforestation of degraded lands. The project activity includes 770 parcels spread over all districts of Moldova except Transnistria. The project is described in the PDD, it is stated how it is undertaken and the contribution to sustainable development is highlighted.	<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?	2	Parties involved are Spain as PP and the Republic of Moldova as host party, which is not a PP. Public entities PP's are "Moldsilva" Forest Agency and the "International Bank for Reconstruction and Development as custodian of the BioCarbon Fund"	CAR 1	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl						
		<u>Corrective Action Request No 1.</u> PDD Form version 5 requires to identify the host party.								
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?	2, 12	There is a valid and complete LoA issued by the DNA of Moldova, dated 30 April 2010, authorizing both PP's.	<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 - Host Party DNA communicated minimum values for forest definition	2	Spain and Moldova ratified the KP, and appointed a DNA. The Moldavian forest definition is given in the table below: http://cdm.unfccc.int/DNA/index.html <table><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>0,25 ha</td><td>5 m</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 %	0,25 ha	5 m	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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 %	0,25 ha	5 m								
A.4 Description of location and boundaries of the A/R CDM project activity										
A.4.1 Has the location of the project including Host Party, Region/State/Province and City/town/community been defined?	2, 3, 5	The host party is the Republic of Moldova. The proposed project activity is located in all districts of Moldova except the eastern territories of Transnistria. Detailed information on the communities involved is provided for each planting site in Annex 5.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
A.4.2 Has an appropriately detailed geographic delineation of the project boundary including a unique identifier been included?	2, 3, 5, 6	The boundaries of the project areas were identified by official cadastral maps first and surveyed with recognized methods (theodolite). In 2007 there was an official cadastral survey covering the entire country of Moldova. Later on the location of the project areas were reassessed by digitalising from the new cadastral maps. Boundary information is available as in GIS (shape files). The project boundaries were submitted as shape files to the DOE. Each polygon can be identified by a unique polygon ID number.	CR	<input checked="" type="checkbox"/>						

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<u>Clarification Request 1.</u> Clarify if procedures and quality control of the demarcation of the boundary are in place. Provide relevant SOPs to the audit team.		
A.5 Technical description of the A/R CDM project activity				
A.5.1 Has a description of the present environmental conditions of the project area (including climate, hydrology, soils, ecosystems and land use) been included?	2, 5, 7, 9, 10, 42, 43, 44, 45, 46, 47, 58,	The PDD provides detailed information on soils, erosion process and erosion status of the different project areas. A list of parcels with their characteristics is provided (IRL 5). More general information is provided on landslides, ravines, anthropogenic land use and relief as well as on hydrology, climate and ecosystem for Moldova, as the project areas are spread over most of the country's landscapes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.5.2 Have any rare or endangered species been defined as present?	2, 29,	The number of rare and endangered species of fauna in the project areas is provided. Rare and endangered species of Flora are not described in the PDD. An Environmental Impact Study has been conducted as a requirement of the World Bank/BioCarbon Fund, but according to national law it is not necessary for A/R activities. <u>Clarification Request 2.</u> Clarify if rare and endangered species occur on the various project sites. Provide the EIA, biodiversity report, and national legislation for environmental protection and for environmental expertise to the audit team.	CR	<input checked="" type="checkbox"/>
A.5.3 Have the species and varieties to be grown been adequately described?	2	The species and varieties planted have been described in general. <u>Clarification Request 3.</u> The PDD guidelines require to provide adequate description on all species and varieties grown in the project area. The PP shall clarify which species and varieties are used in the project.	CR	<input checked="" type="checkbox"/>
A.5.4 Has the technology to be employed (including environmentally safe and sustainable/renewable technologies)	2, 48, 49	The Project Activity follows the National Guidelines on scientific forest management and the silvicultural practices implemented by Moldsilva on	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
been adequately described?		<p>the degraded lands.</p> <p>GPS and GIS technologies are used for the demarcation of the boundaries.</p> <p>Side preparations are carried out mechanically according to soil management practices and without using biomass burning or chemicals.</p> <p>Nursery techniques and forest management practices are mentioned.</p> <p>In each forest enterprise there is a nursery that provides the seedlings.</p>		
A.5.5 Has the know-how with specifications of whether it will be transferred to host Parties been adequately described?	2, 25,	There is no transfer of technology/know how to the host country described. Technology/know-how transfer is described between institutions within the host country.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.5.6 Has the proposed measures to be implemented to minimize potential leakage been adequately described?	2	<p>There are several socioeconomic measures described in the PDD to minimize potential leakage caused by displacement of pre project grazing and other economic activities to ensure that the land under the project activity provides at least the same amount of goods and services as before.</p> <p>Main issue is to avoid the replacement of low effective pre project activities due to improvement and higher productivity.</p> <p>See section C2, CR 10</p>	CR	<input checked="" type="checkbox"/>
A.6 Legal title to the land, land tenure and rights to issued tCERs/ICERs				
Have details of the legal title to the land, land tenure and rights to issued tCERs/ICERs been described?	2; 14, 15,	<p>94.4% of the project area is under the control of local communities. All land owners hold legal titles of the project areas. The land owners (mayors of the communes) signed contracts with Moldsilva allowing it to establish and maintain forest plantations up to a period of 3 - 10 years (IRL 14). After that period the contract is either renewed or the local councils continue with the management activities.</p> <p>The ownership of the land stays with the local communities that are also entitled to all forest products resulting of the Project activity.</p> <p>In a separate contract addendum (IRL 15) the communities forward the carbon rights generated by the Project Activity to Moldsilva. During the onsite visit the audit team crosschecked signed contracts with the communities and Moldsilva concerning forest establishment and manage-</p>	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		ment and transfer of carbon rights to Moldsilva. <u>Clarification Request 4.</u> Clarify if the carbon contract between the land owner and Moldsilva (PP) remains valid after the main contract for forest establishment and maintenance expires		
A.7 Assessment of the eligibility of lands				
Has the latest version of the AR eligibility procedure been applied?	2	Version 1 of the procedures to demonstrate the eligibility of lands for AR CDM project activities Annex 18, EB 35 dated 19.October 2007 was applied, which is the latest version at time of validation.	<input checked="" type="checkbox"/>	
Is adequate evidence provided which demonstrates that a) the land in the project boundary is not forest at project start, AND natural stands or plantations have no capacity to reach forest threshold and is not temporarily unstocked as a result of human intervention or natural cause.	2, 7, 9, 10, 95, 27	Baseline field studies have been conducted in 2008 that show that there is neither any forest cover nor plantations or natural stands that could reach forest threshold according to the DNA of Moldova. There is a list providing information confirmed by the cadastral authority that the parcels were not dedicated as forest at project start. Site selection was organized as follows: 1: the mayors suggested degraded abandoned areas to the forest enterprises 2: cadastral mapping and confirmation regarding land cover and land use. 3. Verification by Moldsilva was done in 2008 together with the GPS mapping, photographs were taken and visual assessment of the parcels was made and documented (baseline field study IRL 27) 4: afforestation document: the status of plantation and also pre-existing vegetation was documented. During onsite visit the Audit team found few parcels with patches of forests included in the project area and with a relatively high density of pre-project woody vegetation. <u>Corrective Action Request No 2.</u> All project area shall meet the eligibility criteria as per AR-CDM requirements. The PP shall present respective evidence to the audit team.	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
b) the activity is an afforestation or reforestation by indicating historic land use (reforestation: unstocked by Dec. 1989; afforestation: unstocked >50 y)	2, 9	<p>There are official records on land use providing information that the land used for the proposed project activity has been without forest since 31 Dec 1989. Written confirmation is provided by the cadastral offices that there was no forest in 1989.</p> <p>The audit team further cross checked this information through field visits and interviews onsite with relevant stakeholders, including representatives of the community and cadastral engineers and technicians of the communities.</p> <p><u>Clarification Request 5.</u> Clarify in the PDD whether this is a reforestation or afforestation project.</p>	CR	<input checked="" type="checkbox"/>
Has the assessment of the eligibility of the land been adequately described?	2	See CAR 2.	CAR	<input checked="" type="checkbox"/>
A.8 Approach for addressing non-permanence				
Has the approach to address non-permanence been specified (tCER, ICER)?	2	<p>There is a commitment of the communities involved in the project activity to maintain the forests for at least 100 years.</p> <p>The project is adopting a 30 years crediting period and the generation of temporary Certified Emission Reductions (tCERs).</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
How is the avoidance assured of a coincidence of peaks in carbon stocks and time of verification? (according to CDM VVM)	2	<p>No information is provided in the PDD.</p> <p><u>Clarification Request 6.</u> Clarify whether peaks in carbon stocks coincide with the envisioned time of verification.</p>	CR	<input checked="" type="checkbox"/>
A.9 Estimated amount of net anthropogenic GHG removals by sinks				
Has the table on estimated net anthropogenic removals over the chosen crediting period been completed?	2	The complete table is included in the PDD.	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<u>Corrective Action Request No 3.</u> The figures presented in the PDD shall be consistent		
A.10 Public Funding				
Is indication on public funding (from Annex I countries) included to the PDD?	2	<p>The Project is financed and implemented by Forestry Agency Moldsilva in participation with the local councils.</p> <p>The project does not receive any public funding from an annex 1 country towards the project activity.</p> <p>However there is a grant from the Japanese Government for support of income generation and natural resource management activities. Financial means out of this fund are used to contribute to protection of leakage in the project activity.</p> <p><u>Clarification Request 7.</u> The PP shall clarify if there is any diversion of ODA funds to the project.</p>	CR	<input checked="" type="checkbox"/>
B. Duration of the Project Activity / Crediting Period				
B.1 Starting date of the project and the crediting period				
Does the starting date 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?	2	<p>The starting date of the proposed project activity is 1 November 2006. Documents provided prove the completeness of a planting on 30 Nov 2006.</p> <p><u>Clarification Request 8.</u> Clarify the date of implementation of the project and provide respective evidence to the audit team.</p>	CR	<input checked="" type="checkbox"/>
B.2 Expected operational lifetime				
Has the expected operational lifetime been defined?	2	The expected operational lifetime of the project activity is > 100 years as the Communities commit themselves to manage the forests accordingly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3 Choice of crediting period				
Is the project fixed or renewable and does it has an appro-	2	The project is fixed and has a crediting period of 30 years 00 months,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
priate crediting period length defined (in years and months)?		which is appropriate. Fixed project crediting period therefore starts on 01 Nov 2006 and ends on 31 Oct 2036.		
C. Application of Baseline and Monitoring Methodology				
C.1 Title and reference of approved methodology				
Has the approved methodology and any other methodologies or tools used been properly referenced (including version no.)?	2	The approved methodology AR-AM0002 version 3, is used <u>Clarification Request 9.</u> Clarify which tools and procedures are applied in the PDD.	CR	<input checked="" type="checkbox"/>
Has the most current version of the methodology been used (consider also PDD formats, eligibility procedure, AR add. tool)?	2	The most current updates of the above mentioned methodology has been used. <u>Corrective Action Request No 4.</u> Only valid versions of all tools, procedures and PDD format shall be applied.	CAR	<input checked="" type="checkbox"/>
C.2 Assessment and justification of selected methodology				
AR-ACM0002_ver3, section I (applicability criteria)				
Does the project use the baseline approach from paragraph 22 of the CDM A/R modalities and procedures: "Existing or historical, as applicable, changes in carbon stocks in the carbon pools within the project boundary"?	2	The project uses the baseline approach "Existing or historical, as applicable, changes in carbon stocks in the carbon pools within the project boundary".	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Conditions of applicability				
The project activity does not lead to a shift of pre-project activities outside the project boundary, e.g. the land under the proposed A/R CDM project activity can continue to provide at least the same amount of goods and services as in the absence of the project activity;	2, 27, 28,	The PDD presents information indicating that there is no significant shift of pre-project activity outside of the project area: <ul style="list-style-type: none"> • The carrying capacity of the remaining lands is sufficient • Livestock number are declining • Leakage prevention measures are implemented • The project is expecting to provide at least the same goods and services as the baseline scenario (e.g. hay and fodder produc- 	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		tion, employment, etc) Clarification Request 10. Clarify what amount of goods and services are provided in the baseline and project scenario.		
Lands to be reforested are severely degraded and the lands are still degrading.	2	The respective tool is applied, see below.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is the two stage approach of the "Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities" (Version 01) EB 41, Annex 15 used?	2	The A/R methodological tool "Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities" (version 1), EB 41, Annex 15, is correctly applied in compliance with the Methodology used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Stage 1: This stage involves an initial screening of lands to determine whether the area has been classified as "degraded" under any verifiable local, regional, national or international land classification system or credible study produced within the last ten years. [...]</p> <p>Stage 2: This stage involves lands for which there is no documented verifiable local, regional, national or international land classification designating them as "degraded" and/or "degrading" and for which evidence must be provided to demonstrate that the area is "degraded" and/or "degrading". [...]</p>	2, 5, 6, 93, 58	<p>The lands used for the project activity are all under various stages of degradation and are still degrading. This is documented in the official land use classification of the Republic of Moldova and the FAO "National Soil Degradation Map", which is a sources as per respective tool and therefore sufficient to demonstrate compliance with the applicability criteria.</p> <p>Further the land is classified as degraded as confirmed by the local cadastral office.</p> <p>A respective confirmation is provided for each individual parcel of the project area.</p> <p>The audit team assessed the confirmation during the onsite field visits.</p> <p>Further, the degradation was confirmed by the audit team through visual signs of degradation (in particular erosion).</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>The presence of one of the following is enough for demonstrating that land is "degraded" and/or "degrading":</p> <p>(a) Provide documented evidence that the area has been classified as "degraded" [...]</p> <p>(b) Demonstrate through a comparative study that the can-</p>	2, 7, 8, 10, 27, 58	<p>Information is provided by cadastral office information and by FAO Soil Degradation Map that the land is degraded.</p> <p>The project area is classified as degraded lands with no other land use category in the land cadastre of Republic of Moldova (see above), as well as by FAO.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl												
<p>didate lands in the proposed project area have similar or equivalent conditions [...]</p> <p>(c) Demonstrate through direct evidence based on selected indicators of land degradation that the area is “degraded” and/or “degrading” through conducting either a visual assessment of the state and condition of the indicators or a verifiable participatory rural appraisal (PRA). [...]</p>		<p>Also a visual field appraisal of degradation indicators was conducted by the project participants and confirmed through onsite visits by the audit team.</p> <p>Indicators for degradation include:</p> <ul style="list-style-type: none">Slope (presences of land slide and erosion)the presence and condition of existing vegetation														
Environmental conditions or anthropogenic pressures do not permit the encroachment of natural tree vegetation;	2, 7, 9, 10	<p>The conditions on the project sites that do not permit significant natural regeneration are described as limited availability of on-site and external seed sources and as well as poor seed sprouting and growth of young trees. The status of the land is confirmed by the cadastral office and by the statement of the communities.</p> <p>See CAR No. 2</p>	CAR	☑												
<p>Would the land remain degraded in the absence of the project activity?</p> <p>Is the “Tool for the identification of degraded or degrading lands for consideration in implementing A/R CDM project activities” applied?</p>	2	<p>The land would remain degraded in the absence of the proposed project activity as it s demonstrated with the “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” (version 1), EB 41, Annex 15.</p> <p>See CAR No. 2</p>	CAR	☑												
C.3 Assessment of the selected carbon pools and emission sources																
Are the carbon pools considered in the project activity in line with the requirements of the methodology?	2	<p>All carbon pools selected are in line with the methodology.</p> <table><tr><th>Carbon pools</th><th>Selected</th></tr><tr><td>Above ground</td><td>Yes</td></tr><tr><td>Below ground</td><td>Yes</td></tr><tr><td>Dead wood</td><td>Yes</td></tr><tr><td>Litter</td><td>Yes</td></tr><tr><td>Soil organic carbon</td><td>Yes</td></tr></table>	Carbon pools	Selected	Above ground	Yes	Below ground	Yes	Dead wood	Yes	Litter	Yes	Soil organic carbon	Yes	☑	☑
Carbon pools	Selected															
Above ground	Yes															
Below ground	Yes															
Dead wood	Yes															
Litter	Yes															
Soil organic carbon	Yes															
Have the appropriate emission sources been included in the PDD?	2	Emission sources are not expected from the project activity, as burning of biomass in A/R activities is prohibited in Moldova.	CR	☑												

CHECKLIST QUESTION			Ref.	COMMENTS	Draft Concl	Final Concl
Sources	Gas	Included to meth.		Naturally occurring fires will be monitored. See monitoring section.		
Burning of biomass	CO ₂	Yes		Clarification Request 11. Clarify which emission sources are considered in this project activity.		
	CH ₄	Yes				
	N ₂ O	No				
C.4 Description of ex ante stratification						
AR-ACM0002_ver3, section II.3						
If the project area is not homogeneous stratification should be carried out to improve the accuracy and precision of biomass estimates. 1. Baseline net GHG removals by sinks: Have major (baseline) vegetation types been identified for stratification? 2. Actual net GHG removals by sinks. Is the ex-ante stratification based on project management plan? (e.g. species planted and year planted)			2, 5, 28, 93,	A stepwise approach for stratification is used in the project activity. Baseline stratification is based on existence of vegetation, soil condition (poor and rich soil strata) and species mix to be planted (Robinia and Quercus). For ex ante stratification four main project strata were identified: 1. Robinia_rich soils 2. Robinia_poor soils 3. Quercus_rich soils 4. Quercus_poor soils Corrective Action Request No 5. Clarify which parcels belong to which strata. Assure consistency in stratification when calculating baseline and project area removals.	CAR	☑
Are the results of the stratification included to the PDD?			2	The results of the are presented in the PDD See CAR No 5.	CAR	
C.5 Identification of baseline scenario						
C.5.1 Description of the application of the procedure to identify the most plausible baseline scenario.			2		☑	☑
Is the stepwise approach as per methodology applied?			2	The stepwise approach as per methodology applied is used.	☑	☑
Step 1: Identify and list plausible land uses including future public or private activities on the degraded lands such as any similar A/R activity or any other feasible land develop-			2, 7, 9, 10,	Alternative land use scenarios were identified by using information provided by land records, field surveys, and local councils and from interviews with local communities. There is a list of plausible alternative land	☑	☑

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
ment activities, considering relevant national or sectoral land-use policies that would impact the project area. The information from land records, or field surveys, or feedback from stakeholders, or other appropriate sources shall be used.		<p>use scenarios provided in the PDD including:</p> <ol style="list-style-type: none"> 1. Abandonment of degraded lands (or included hay collection) and natural succession in forests 2. Abandonment of degraded lands (or included hay collection) leading to further degradation, 3. Use of engineering structures to stabilize the landslides and to minimize erosion, 4. Degraded lands converted to productive agricultural or perennial plantations 5. Degraded lands restored through afforestation and reforestation 		
<p>Step 2: Demonstrate that under the scenarios identified in Step 1, the most plausible scenario is that the project areas would remain degraded in absence of the project activity however, small rates of afforestation (pre-project A/R activity undertaken historically) which can be expected to continue in the absence of the project could occur. In this context, attractiveness of the alternative land uses, benefits to project participants, feedback from stakeholders of the land use, and the barriers associated with the alternative land use shall be evaluated in one of the following ways:</p> <ul style="list-style-type: none"> • Generally: By demonstrating that similar lands, in the vicinity, are not planned to be used for the alternative land uses and the financial or other barriers, which prevent alternative land uses can be identified; • Specifically for a forest as an alternative land use: Apply Step 2 (investment analysis) or Step 3 (barrier analysis) of the A/R “Tool for the demonstration and assessment of additionality”, to demonstrate that the land use in the absence of the CDM, is unattractive; • Specifically for any agricultural alternative land use: Demonstrate that the project lands have restrictions on the agricultural uses. Alternatively, use Step 2 of the A/R “Tool for the demonstration and assessment of additionality” to demonstrate that alternative agricul- 	2, 27,	<p>Surveys of land uses in the vicinities of the project areas confirmed that the degraded lands are expected to continue in the current use in the absence of the project activity.</p> <p>The “Tool for demonstration and assessment of additionality of A/R projects” (EB 21; Annex 16) is used.</p> <p>Scenario 2 “Abandonment of degraded lands (or included hay collection) leading to further degradation” is identified as the most plausible one.</p> <p>Clarification Request 12.</p> <p>The PP shall provide evidence to the DOE when applying the required “Tool for demonstration and assessment of additionality of A/R projects (EB 35; Annex 17)</p>	CR	<input checked="" type="checkbox"/>

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tural land uses are financially non-viable, or other barriers to agricultural uses exist.				
Step 3: To support the above findings, demonstrate that the lands to be planted are really “degraded” by applying the Step 3a and Step 3b below:	2	See section C.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Step 3a: Analyze the historical and existing land use/cover changes in a social-economic context and identify key factors that influence the land use/cover changes over time, using multiple sources of data from archives, maps or satellite images of the land use/cover around 1990 and before the start of the proposed A/R CDM project activity, field surveys, interviews, and collection of data from other sources. The historical land degradation can be demonstrated using one or more of the following indicators alternatively the approved “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” may be applied:</p> <ul style="list-style-type: none"> • Vegetation degradation, e.g., <ul style="list-style-type: none"> o Crown cover of non-tree vegetation has decreased in the recent past for reasons other than sustainable harvesting activities. • Soil degradation, e.g., <ul style="list-style-type: none"> o Soil erosion has increased between two time points in the recent past; o Soil organic matter content has decreased between two time points in the recent past. • Anthropogenic influences, e.g., <ul style="list-style-type: none"> o History of loss of soil and vegetation due to anthropogenic actions; and o Anthropogenic actions adversely impact the establish- 	2	<p>The “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” Version 01, EB 41, Annex 15 is used and degradation demonstrated.</p> <p>See section C.2 (applicability of Methodology)</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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ment of natural regeneration.				
<p>Step 3b: Evidence that shows that the lands are not expected to regenerate naturally and would continue to remain degraded or degrade further in the absence of the project activity. For this purpose, project participants shall demonstrate that there is a lack of:</p> <p>(a) On-site seed pool that may result in natural regeneration;</p> <p>(b) External seed sources that may result in natural regeneration;</p> <p>(c) Possibility of seed sprouting and growth of young trees; This may, for example, be done through surveys of the project areas and surrounding areas for two different years over a ten-year period or by other means that clearly demonstrate impossibility of natural regeneration in a credible and verifiable way.</p>	2	<p>The conditions on the project sites that do not permit significant natural regeneration and ongoing degradation are described as limited availability of on-site and external seed sources and as well as poor seed sprouting and growth of young trees.</p> <p>This is demonstrated and evidenced in the baseline study provided.</p> <p>See section C.2 and CAR No. 2</p>	CAR	<input checked="" type="checkbox"/>
<p>Step 4: These can represent the degraded bare lands, degraded lands in various stages of degradation, degraded lands with isolated vegetation, or degraded lands on which small rates of afforestation that occurred prior to the project and can be expected to continue in the future. It should be demonstrated that the candidate baseline scenarios do not alter the historical land use patterns of degraded lands, by providing the evidence outlined below.</p> <ul style="list-style-type: none"> Lands do not show significant deviation from the historical land use pattern. To evaluate the deviation in land use, the project participants shall use the data on land use practices, economic policies, and market variables over the most recent 10-year period; Demonstrate that the national or sectoral land-use policies adopted prior to 11 November 2001 do not influence the areas of the proposed A/R CDM project activity (e.g., because the policy is not implemented, the policy does 	2, 27	<p>The project area does not significantly deviate from historic pattern considering afforestation rates and land use practices for the last 10 years.</p> <p>Information is provided in the baseline study demonstrating that the national or sectoral land use policies adapted prior to 11 Nov 2001 do not influence the project areas.</p> <p>Clarification Request 13.</p> <ul style="list-style-type: none"> In line with the applied methodology, the PP shall provide information on land use practices and afforestation rates for the last 10 years. In line with the applied methodology, the PP shall provide evidence that the national or sectoral land use policies adapted prior to 11 Nov 2001 do not influence the project areas 	CR	<input checked="" type="checkbox"/>

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not target this area, or because there are prohibitive barriers to the policy in this area, etc.				
<p>Step 5: Confirm that the most plausible land use chosen as the baseline does not lead to an increase in the carbon stocks or other profitable uses.</p> <ul style="list-style-type: none"> The project participants should consider the data on vegetation, soil, physiography (slope, aspect, altitude etc.) and land use over a 10-year period prior to the project; PPs should show that the changes in adjoining land use are not likely to lead to more profitable alternative(s) over the next 5 year period (e.g. conversion to other uses due to urbanization) or shifts to other land uses that could be attributable to recent government policies or regulation (e.g. tax incentives). 	2	<p>Scenario 2 “Abandonment of degraded lands (or included hay collection) leading to further degradation” is identified as the most plausible one.</p> <p>An increase of in the carbon stocks of the project area under the selected baseline scenario cannot be expected as the lands are degraded. There is no significant regeneration and the afforestation rates are lower than the net increase of degraded agricultural lands in Moldova.</p> <p>Degraded lands tend to be excluded from production or subject to subsistence use like hay collection. According to the data from the Cadas-trul funciar al Republicii Moldova there is a continuing decrease of 34% in the area of perennial plantations and a 4 % decrease in the total cultivated land in Moldova from 1990 – 2005. Through the widespread and small sizes of the parcels (37% of the parcels are under 5 ha) a productive use at scale is difficult to realize.</p> <p>Clarification Request 14.</p> <p>Clarify if changes in adjoining land use are likely to lead to more profitable alternatives over the next 5 years period.</p>	CR	<input checked="" type="checkbox"/>
This methodology is not applicable, if the PPs cannot clearly show in the application of Steps 1 to 5 that the baseline approach 22(a) (existing or historical changes in carbon stocks in the carbon pools within the project boundary), and the scenario “lands to be planted are degraded lands and will continue to degrade in absence of the project” is the most appropriate plausible baseline scenario.	2	See Section C.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is all information used in the analysis of the baseline scenario archived?	2	<p>Clarification Request 15.</p> <p>In line with the applied methodology, the PP shall clarify how archiving is done for information used in the analysis of the baseline scenario.</p>	CR	<input checked="" type="checkbox"/>

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C.5.2 Is the description of the baseline scenario applying to each stratum reasonable?	2	<p>For representing the baseline scenario, the strata are combined in the rich and poor soil strata, as there is no significant difference identified in the above ground biomass of degraded lands and pasture land.</p> <p>The baseline net GHG removals by sinks are determined for the two strata separately as described in section C.4.</p> <p>Clarification Request 16. In line with the applied methodology, the PP shall clarify transparently what is the identified baseline scenario.</p>	CR	<input checked="" type="checkbox"/>
C.6 Assessment and demonstration of additionality				
<i>Use the most recent version of the "Tool for the demonstration and assessment of additionality in A/R CDM project activities".</i>		<p>The actual A/R Methodological Tool "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" (Version 02), EB 35, Annex 17 is mentioned for demonstrating additionality but the steps used for demonstration additionality is according to Version 1 of the tool.</p> <p>Corrective Action Request No 6. In line with the applied methodology, the PP shall apply the actual "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" as required by the methodology</p>	CAR	<input checked="" type="checkbox"/>
Step 0. Preliminary screening				
Has evidence been provided that the starting date of the A/R CDM project activity was after 31 December 1999, and that the incentive from the planned sale of GHG emission allowances was seriously considered in the decision to proceed with the project activity?	2, 132, 133, 134	<p>Project starting date is 1 Nov 2006.</p> <p>Clarification Request 17. In line with the applied tool and guidelines, the PP shall clarify if there is evidence on early CDM consideration for the proposed AR-CDM project</p>	CR	<input checked="" type="checkbox"/>
Step 1. Identification of alternative land use scenarios to the proposed A/R CDM project activity	2			

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<p>Have realistic and credible land-use alternative(s) [currently existing or that existed some time since 31 Dec.1989] been identified (sub-step 1a), at least including:</p> <ul style="list-style-type: none"> Continuation of the pre-project land use AR of the land within the project boundary performed without being registered as the A/R CDM project activity <p><i>If applicable</i>, forestation of at least a part of the land within the project boundary of the proposed A/R CDM project at a rate resulting from</p> <ul style="list-style-type: none"> legal requirements; or extrapolation of observed forestation activities in the geographical area with similar socioeconomic and ecological conditions to the proposed A/R CDM project activity occurring in a period since 31 December 1989, as selected by the PP. 	2	<p>Realistic and credible alternative land use scenarios have been provided accordingly.</p> <p>See section C. 5</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Are the alternative(s) in compliance with all applicable legal and regulatory requirements (sub-step 1b)?</p> <p><i>If that is not the case, an alternative can only be considered if applicable legal or regulatory requirements are systematically not enforced or the non-compliance with those requirements is widespread</i></p>	2, 61 - 75	All alternatives are in line with all applicable and regulatory requirements. A detailed description of these requirements is provided in the PDD.	CR	<input checked="" type="checkbox"/>
Is the project scenario not the only remaining alternative?	2	<p>The project scenario is the not the only remaining alternative:</p> <ol style="list-style-type: none"> Abandonment of degraded lands (or included hay collection) and natural succession in forests Abandonment of degraded lands (or included hay collection) leading to further degradation, Use of engineering structures to stabilize the landslides and to minimize erosion, Degraded lands converted to productive agricultural or perennial plantations 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		5. Degraded lands restored through afforestation and reforestation See section C.5		
STEP 2. Investment analysis				
Is the analysis method identified appropriately (sub-step 2a)?	2	Option III, benchmark analysis has been selected appropriately.		<input checked="" type="checkbox"/>
In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	2	n/a		<input checked="" type="checkbox"/>
Is it documented that the incomes and costs associated with each of the land use scenarios are not prevented by any barrier. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	2	n/a		<input checked="" type="checkbox"/>
Sub-step 2b. Option III. Apply benchmark analysis: Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	2, 19 22, 22a, 123	<p>Equity Internal Rate of Return (IRR) and Net Present Value (NPV) are considered for the investment analysis.</p> <p>Benchmark: The rate of interest is selected as the Required Rate or Return (RRR).</p> <p>The rate of interest charged by commercial banks for the first 10 months 2006 has been identified as 17.12 %. (Source: National Bank of Moldova); in the final investment analysis the default value for the expected return on equity after taxes of 9% is used.</p> <p>Clarification Request 18.</p> <ul style="list-style-type: none"> Clarify why the benchmark is applicable to the project and provide respective evidence to the audit team. Provide calculation of the financial analysis which are fully traceable 	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		(fully interlinked Excel file) <ul style="list-style-type: none"> • Provide evidence for all input parameter to the financial analysis. • Consider residual value in the financial analysis • Provide traceable calculation of the sensitivity analysis. • Clarify why a wood price increase of 30% is adequate for the sensitivity analysis 		
In case of Option II or Option III: Is the calculation of financial figures for these indicators correctly done for the project activity (in case of option II also for all alternatives)?	2, 19, 123	Relevant suitable financial indicators are described in the PDD. Cost estimates include: <ul style="list-style-type: none"> - Site preparation, - Establishment, - Infrastructure, - Labour - Monitoring - Other activities Revenue were estimated per ha over 30 years and include: <ul style="list-style-type: none"> - Revenue from wood products - Revenue from non forest products See CR 18	CR	<input checked="" type="checkbox"/>
In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	2, 19, 22	A financial analysis of net benefits of reforestation on one ha of degraded land over 30-year period without carbon revenue for the four identified strata is presented in the PDD. NPV and IRR are presented as negative at RRR 17.12 % as well as with an imaginary RRR of 10%. The identified baseline land use, hay collection, is supposed to generates an NPV of US\$ 64 -668 /ha over 30 years period. By this is demonstrated that the project activity without carbon revenues has less favourable indicators than the benchmark and therefore the project activity can be considered as not financially attractive. See CR 18		<input checked="" type="checkbox"/>
Is a sensitivity analysis included? - Is the initial conclusion regarding the financial attractive-	2, 19, 22,	A sensitivity study is conducted to examine the influence of timber prices, project costs and carbon prices. The scenarios analyzed were:	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
ness of the baseline scenario robust to reasonable variations in the critical assumptions? - Is the outcome of the sensitivity analysis that the proposed AR project activity would unlikely to be financially most attractive?	94, 95,	<ul style="list-style-type: none"> - Increase in timber prices - Increase in carbon prices <p>Results show, that an increase of carbon prices to US\$ 7 is significant and leads to a positive IRR starting in year 15.</p> <p>Concerning timber prices an increase of 30 % prices for wood products is needed to achieve positive influence. This is seen as not realistic.</p> <p>On the other hand rising costs for forest establishing and management caused by rising costs for labour could significantly affect the profitability of the project activity.</p> <p>Taking into account the outcome of the sensitivity analysis it can be assumed that the proposed A/R PROJECT ACTIVITY is unlikely to be the most financial attractive one.</p> <p>See CR 18</p>		
STEP 3. Barrier analysis Barrier analysis may be performed as a stand-alone additionality analysis or as an extension of investment analysis.	2	A barrier analysis in performed in addition to the investment analysis. -- in the final PDD there is no barrier analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is a complete list of barriers developed that would prevent the implementation of type of the proposed project activity (sub-step 3a)?	2	Three barriers are identified: <ul style="list-style-type: none"> - Investment Barrier - Barrier due to prevailing practice - Technical /operational barriers 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is clearly demonstrated that the identified barriers would prevent potential project participants from carrying out the proposed project activity if it was not expected to be registered as an A/R CDM project activity and is transparent and documented evidence provided on the existence and significance of these barriers?	2	<ul style="list-style-type: none"> - Investment barrier: - Barrier due to prevailing practice: - Technical /operational barriers <p><u>Clarification Request 19.</u> Clarify the prohibitive character of each barrier.</p>	CR	<input checked="" type="checkbox"/>
If the land within the boundary of the proposed A/R CDM project was at least partially forested since 31 December 1989 and the land is not a forest at the project start, is it demonstrated that under the current conditions (legal, financial, socio-economical, ecological or others) repetition of the forestation performed without being registered as the	2	<p>No information provided in this section of the PDD. Section A.7 does however provide further information</p> <p><u>Clarification Request 20.</u> In line with the applied methodology the PP shall clarify if repetition of</p>	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
A/R CDM project activity is not possible?		the forestation performed without being registered as the A/R CDM project activity is possible.		
Is it explained how the identified barriers listed in sub-step 3a are not preventing the implementation of at least one of the alternative land use scenarios (except the proposed project activity) (sub-step 3b)?	2	The baseline no 2: "Abandonment of degraded lands (or included hay collection) leading to further degradation" would not be prevented from implementation by any of the identified barriers. See CR 19	CR	<input checked="" type="checkbox"/>
Has the barrier analysis allowed determining whether the proposed A/R CMD project is additional?	2	See CR 19		<input checked="" type="checkbox"/>
STEP 4. Common practice analysis				
Is the project activity common practice in the region?	2	There were some small and insignificant A/R activities on degraded community lands between 1946 and 1991. These activities were slowed down from 1994 onwards. A/R activities from 1994 onwards are mainly established on public land of the forest fund and managed by Moldsilva. Clarification Request 21. <ul style="list-style-type: none"> Clarify which how the region was defined for the common practice analysis. Clarify how much reforestation activities were carried out in the region, and clarify if essential distinctions are observed. Provide respective evidence to the audit team 	CR	<input checked="" type="checkbox"/>
Has a common practice analysis been carried out in line with the requirement of the proposed A/R CDM project and are there essential distinctions between them?	2	See CR 21		<input checked="" type="checkbox"/>
(If there is reforestations in the region) Are there fundamental and verifiable changes in circumstances when compared to other projects	2	See CR 21		<input checked="" type="checkbox"/>
Has the common practice analysis allowed determining whether the proposed A/R CMD project is additional (i.e. could be demonstrated that the proposed A/R CDM project activity is not the baseline scenario?)?	2	See CR 21		<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
C.7 Estimation of the ex ante baseline net GHG removals				
Have the ex ante baseline removal calculations been provided in the table, do they correspond to the chosen crediting period and use the approach provided in the selected approved methodology?	2, 19,	<p>Table 29 provides the baseline net GHG removals by sinks (tCO₂e) over the crediting period of 30 years.</p> <p>The tables for data and Parameters that are available at validation are not provided in the PDD.</p> <p><u>Corrective Action Request No 7.</u></p> <p>The PP shall follow the PDD guidelines and present tables for data and parameters.</p>	CAR	<input checked="" type="checkbox"/>
AR-ACM0002_ver3, section II.5 Estimation of baseline net GHG removals by sinks				
Estimation of baseline net GHG removals by sinks	2,	<p>The following two possible land uses in the baseline scenario are considered in the PDD:</p> <p>(i) degraded bare lands and lands with isolated vegetation</p> <p>(ii) degraded lands on which small rates of planting occurred prior to the project (pre-project AR activity undertaken historically) that could be expected to continue in the absence of the project.</p> <p><u>Clarification Request 22.</u></p> <p>Clarify if pre-existing vegetation is considered in the calculations according to the methodology.</p>	CR	<input checked="" type="checkbox"/>
(i) Are the estimation of baseline net GHG removals by sinks on degraded bare lands or degraded lands that have vegetation much below the thresholds (area, crown cover, and tree height) of forest defined by the DNA, estimated according to the methodology?	2, 27, 28, 19	<p>For degraded bare lands the estimations on baseline net GHG removals by sinks are set zero for all selected carbon pools according to the methodology.</p> <p>For degraded lands with isolated trees the sum of carbon stock changes in above-ground and below-ground biomass are determined based on the data from growth models (yield tables) and allometric equations and local or national yield data estimates.</p> <p>In the “Report pre-existing biomass” a value of 0.6 m³ stem volume /ha is presented.</p> <p>The “tool for testing significance of emissions” is used to set baseline</p>	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<p>GHG removals to zero. Therewith is argued in the PDD that the above-ground woody vegetation is insignificant.</p> <p>Net changes in the carbon stocks of deadwood, litter and soil are expected to be negative and can therefore conservatively be considered as zero in accordance with the methodology.</p> <p>Equation (B.1) is used in compliance with the methodology.</p> <p>Equation (B.2) for areas with isolated trees is not used.</p> <p>→ the baseline net GHG removals are set to zero for the crediting period</p> <p>This is not according to the methodology.</p> <p>Visual assessment of maps and “google earth” images was used to select the parcels “with isolated trees”.</p> <p>See CR 22</p>		
(ii) Are baseline net GHG removals by sinks on degraded lands on which small rates of afforestation occurred prior to the project (pre-project A/R activity undertaken historically) and can be expected to continue in the absence of the project estimated according to the methodology? (Equation B.3)	2, 19, 27, 28	<p>See section C.5.1</p> <p>The PDD follows the stepwise approach of the methodology.</p> <p>Steps 1-3 are applied and a baseline reforestation rate is calculated.</p> <p>The equations (B.3 and B.4) are used to calculate the annual baseline GHG removals of pre-project A/R activities.</p> <p>The changes in non tree biomass, deadwood and litter pools for the pre-project A/R are set to zero according to the methodology.</p> <p>The calculations of the baseline GHG removals by sinks are provided in the TARAM TOOL 1.3 for AR-AM0002, version 1.</p> <p>Clarification Request 23.</p> <ul style="list-style-type: none"> Clarify what are references for all input parameters used in the calculations. Clarify whether baseline carbon stock changes are significant. Clarify which baseline strata are used calculating baseline and project removals. Adapt numbers of equations in accordance to the methodology 	CR	<input checked="" type="checkbox"/>
Is it assumed that the sum of the changes in the carbon stocks of non tree biomass, dead wood and litter carbon	2	The carbon stocks changes are assumed to be zero for non tree bio-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
pools is zero for all strata in the baseline scenario?		mass, deadwood and litter according to the methodology.		
Have the changes in carbon stock in soil organic carbon been assumed to be zero for all strata in the baseline scenario?	2, 19	No information provided in the PDD See CR 23	CR	<input checked="" type="checkbox"/>
Is the baseline net GHG removal considered for above and below ground biomass of trees in the baseline?	2, 19	No information provided in the PDD See CR 23	CR	<input checked="" type="checkbox"/>
Is the baseline annual net carbon stock change in above-ground and below-ground biomass, estimated using one of following two methods (increment data vs. stock data): <ul style="list-style-type: none"> Method 1: Carbon gain-loss method Method 2: stock change method 	2, 19	The stock change method 2 is followed in the TARAM tool. See CR 23	CR	<input checked="" type="checkbox"/>
Has the corresponding formula been applied correctly, are used values in line with onsite conditions and are they clearly sustained / referenced?	2, 19	No information provided in the PDD See CR 23	CR	<input checked="" type="checkbox"/>
In regard to Dj (wood density), BEF2,j (biomass expansion factor for conversion of volume), CFj (carbon fraction for species) and Rj (root to shot ratio). Have values been chosen with priority from local values to IPCC defaults?	2, 19	No information provided in the PDD See CR 23	CR	<input checked="" type="checkbox"/>
If data from global or national databases has been used, have values been confirmed through local data from literature or inventory?	2, 19	No information provided in the PDD See CR 23	CR	<input checked="" type="checkbox"/>
If the baseline net GHG removals by sinks are greater than zero, has it been assumed to be constant until steady state is reached under the baseline conditions?	2, 19	The baseline net GHG removals from bare lands and degraded lands are zero while the annual net baseline GHG removals from pre-projects AR activities are calculated (TARAM) and presented in the PDD. See CR 23	CR	<input checked="" type="checkbox"/>
C.8 Completion of the baseline study				
Have the date of completion and the name of the person (or entity) determining the baseline been specified?	2	The date of completion is December 2008. The names of the persons preparing the baseline study are: Dumitru Galupa (Team Leader), Ion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		Talmaci and Liliana Spitoc – ICAS.		
D. Estimation of ex ante Actual Net Removals, Leakage and Net Anthropogenic Removals				
D.1 Estimation of ex ante actual net removals				
Are the calculations of ex-ante actual net removals for the crediting period consistent with the approach in the selected methodology and adequately defined?	2, 19	<p>The stock change method (empirical method) is employed for ex ante calculations. Calculations have been provided in the TARAM tool 1.3 for AR-AM0002 version 1.</p> <p><u>Clarification Request 24.</u> Clarify if the Excel spreadsheet (TARAM) is applicable for the version of the methodology applied in this project activity. (see also CR above; C7).</p>	CR	<input checked="" type="checkbox"/>
AR-ACM0002_ver3, section II.7 Estimation of ex ante actual net GHG removal by sinks				
<p>Has the formula for the calculation of actual changes in living biomass, dead wood, litter and soil organic carbon stocks been applied correctly?</p> <p>Has the annual change in carbon stock in all carbon pools for year t been estimated adequately and in line with the methodology requirements?</p>	2, 16, 17, 18, 19,	<p>Table 30 in the PDD provides a summary of the risk adjusted estimations of the project carbon stock changes of 1,344,115t CO₂e.</p> <p>The annual project carbon change over the project period is 44,804 t CO₂e.</p> <p>The calculations are made in the Excel based TARAM tool.</p> <p>As increment data, information was taken from yield tables from Romania for Robinia, and yield tables from Ukraine were taken for Quercus.</p> <p><u>Clarification Request 25.</u> Clarify why the parameter chosen for each species is justified in line with the methodology, in particular considering that parameter per species group are applied. The PP shall provide traceable information on calculation of all input parameters.</p>	CR	<input checked="" type="checkbox"/>
7.a.1 above ground biomass, (tree and non-tree)				

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Has the mean carbon stock in above- and below-ground biomass per unit area been calculated under the biomass Expansion Factors (BEF) method, or the allometric equations method?	2, 16, 17, 18, 19, 33	Carbon stock changes have been calculated based on species and site specific volume growth and yield tables from similar sites in Romania, expressed in total tree aboveground volume including stem, branches and bark. Shrub biomass was estimated by modelling from local studies. See CAR 8	CAR	<input checked="" type="checkbox"/>
Have all the steps followed according the methodology requirements for the selected method?	2	The detailed steps are not provided in the PDD. See CR 25	CAR	<input checked="" type="checkbox"/>
<i>7.a.2 below ground biomass</i>	2, 18, 19,	R/S ratio was used, developed from local species specific tables. See CAR 8	CAR	<input checked="" type="checkbox"/>
<i>7.a.3 Dead Wood</i>				
Have the changes in carbon stocks of dead wood been estimated following the Stepwise approach of the methodology?	2, 19	The stepwise approach of the methodology is not followed. Deadwood is estimated in the TARAM Tool. See CAR 8	CAR	<input checked="" type="checkbox"/>
<i>7.a.4 Litter</i>				
Has the changes in carbon stocks of litter been conservatively neglected for ex ante estimates?	2, 19	Litter was not estimated and conservatively excluded from ex ante calculations according to the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>7.a.5 Soil organic carbon</i>				
Have the changes in carbon stocks of soil been assessed from empirical methods or from sampling methods?	2, 77	SOC was modelled from chrono-sequences of sites of known age measured of representative plantings in Moldova. (Shoch et al. 2003) In 2003 soil samples were taken for the first CDM project in Moldova. See also section C7 above. See CAR 8	CAR	<input checked="" type="checkbox"/>
<i>Estimation of GHG emissions by sources (section II.7.b)</i>				

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Is the increase of GHG _{emissions} (GHG _e) estimated according to methodology implications and is sustained and references input data used?	2	In accordance to EB 42 and EB 44 decisions project emissions related to <ul style="list-style-type: none"> - fossil fuel consumption related to implementation of the project, - biomass loss during site preparation from removal of herbaceous biomass in site preparation, and - fertilizer application are not considered in the project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Have non-CO ₂ emissions due to biomass burning been assessed according the latest version of the tool? (Tool: "Estimation of emissions from clearing, burning and decay of existing vegetation due to implementation of a A/R CDM project activity")	2	Moldavian law prohibits the burning of biomass in AR activities. Therefore there is no emission due to biomass burning. Occurrence of fire will be monitored and documented during project implementation. Table 31 provides the increase in emissions from AR PROJECT ACTIVITY. (=0)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Actual net GHG removals by sinks (section II.7.c)				
Is the equation B.43 applied correctly	2, 19	The calculations are presented in TARAM.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is the equation B.45 applied correctly (section II.9)	19	TARAM Tool is used for the calculations.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Uncertainties (section II.10)		Uncertainties are not considered according to version 3 of the meth. Clarification Request 26. Clarify how uncertainties are being handled (methodology section II.10).	CR	<input checked="" type="checkbox"/>
Data and parameters that are available at validation				
Is the list of parameters presented in chapter D.1 considered to be complete with regard to the requirements of the applied methodology (section II.11)?	2	No list of parameters is provided in the PDD in accordance to the methodology. Corrective Action Request No 8. The PP shall provide relevant data according to the methodology (section II.11) in the PDD to the audit team (see also section E.4)	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
UNFCCC decisions	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
Land use/cover data	2	Respective data is provided, see section A.7 and C.2 See CAR 8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Land use/cover map	2	Respective data is provided, see section A.7 and C.2 See CAR 8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Physiography map	2	Respective data is provided, see section A.7 and C.2 See CAR 8	CAR	<input checked="" type="checkbox"/>
Soil map	2	Respective data is provided, see section A.7 and C.2 See CAR 8	CAR	<input checked="" type="checkbox"/>
Satellite image	2	Not applicable, but aerial photos are provided to the audit team	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
National policies	2	National policies are included in section C.6 See CAR 8	CAR	<input checked="" type="checkbox"/>
Fixed costs	2	Costs are included in section C.6 of the PDD, but need to be further sustained (see respective requests) See CAR 8	CAR	<input checked="" type="checkbox"/>
Variable costs	2	Costs are included in section C.6 of the PDD, but need to be further sustained (see respective requests) See CAR 8	CAR	<input checked="" type="checkbox"/>
Regulatory costs	2	Costs are included in section C.6 of the PDD, but need to be further sustained (see respective requests) See CAR 8	CAR	<input checked="" type="checkbox"/>
Revenue	2	Revenues are indicated in section C.6 of the PDD, but need to be further sustained (see respective requests) See CAR 8	CAR	<input checked="" type="checkbox"/>
Investment analysis	2	Investment analysis is presented See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
I	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
J	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
K	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
t	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BDL_ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BDL_LB_{ijk,t}}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BAR_{ijk,t}}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BAR_LB_Tree_{ijk,t}}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BAR_S_{ijk,t}}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BSL,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$\Delta C_{ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{G,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{L,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
A_{ijk}	2	Information on area is provided and PP submitted shape files to the audit team. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta G_{Mean_LB_Treeijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
CF_k	2	Value is applied in the calculations See CAR 8	CAR	<input checked="" type="checkbox"/>
44/12	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$G_{w,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
R_{jk}	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$I_{v,ijk}$	2	Increment data is applied from yield tables See CAR 8	CAR	<input checked="" type="checkbox"/>
D_k	2	Wood Density is taken from a study from Kapp et al (2003) See CAR 8	CAR	<input checked="" type="checkbox"/>
$BEF_{1,jk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$\Delta C_{LB,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{2,LB,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{1,LB,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
T_B	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{2,LB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{1,LB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$C_{BB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
V_{ijk}	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$BEF_{2,jk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$f(DBHH)$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
nTR_{ik}	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{SOC,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{SOC\ 2,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{SOC\ 1,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
T_S	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BB,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		required to be monitored anymore. See CAR 8		
$\Delta C_{DW,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{L,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{SOC,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB,ijk,t2}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB,ijk,t1}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB_NTree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore.	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		See CAR 8		
$\Delta C_{AB_Tree,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_NTree,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$G_{AB_Stem,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$G_{AB_Foliage,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$G_{AB_Branch,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
CF_k	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore.	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		required to be monitored anymore. See CAR 8		
$\Delta C_{AB_Tree_Growth,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_Tree_Loss,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_Tree_Harvest,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_Tree_Dist,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$f_j(DBH,H)$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$DBH(t),H(t)$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{AB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$I_{Tree,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB_NTree_Shrub,ijk}$	2	Calculation of parameter is included in TARAM.	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8		
$C_{AB_NTree_Herb,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$B_{AB_NTree_Shrub,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
D^2_{ijk}	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
H_i	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
CF_s	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
A_Shrub,ijk	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$f_k(DB, H, C, N)$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{BB,ijk,t2}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{BB,ijk,t1}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{BB_Tree,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB_NTree_Shrub,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore.	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		required to be monitored anymore. See CAR 8		
$C_{BB_NTree_Herb,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BB_Tree,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BB_NTree_Shrub,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BB_NTree_Herb,ijk,t}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{BB,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$R_{T,k}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{BB,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{AB_Stem,ijk}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$R_{T,k,F}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
R_S	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$B_{BB,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$B_{AB,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{DW,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
M_k	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
DC_k	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$\Delta C_{SOC,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{SOC_For,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{SOC_Non_For,i}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$T_{For,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{SOC_REF,ijk}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
f_{ijk}	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
$C_{SOCC_Non_For,i}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
BD_i	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
D_i	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
$FC_{,kt}$	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
M	2	See CAR 8	CAR	<input checked="" type="checkbox"/>
GHG_E	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$E_{BiomassLoss}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>



CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
$E_{BiomassBurn}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$A_{NT_Biomass_Loss,i}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$B_{AB_NTree,i}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
CF_{NTree}	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$A_{BiomassBurn,i}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$B_{AB,i}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
CE	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$E_{BiomassBurn,CH_4}$	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
GWP_{CH_4}	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
EF_{CH_4}	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
12/44	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
16/12	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
$E_{Non-CO_2, BiomassBurn}$	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		required to be monitored anymore. See CAR 8		
ΔC_{ACTUAL}	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
ΔC_{ijk}	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
GHG_E	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
LK_i	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
C_{AR-CDM}	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
ΔC_{ACTUAL}	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>
ΔC_{BSL}	2	Calculation of parameter is included in TARAM. According to recent EB decision, parameters to be calculated are not required to be monitored anymore. See CAR 8	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
LK	2	Not applicable See CAR 8	CAR	<input checked="" type="checkbox"/>
Calculation of tCERs and ICERs (section II.12)	2, 19	The tCERs are calculated in the TARAM tool.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2 Estimation of ex ante leakage				
Are the calculations of ex ante leakage for the crediting period consistent with the approach in the selected methodology and adequately defined?	2, 19	According to EB 42 decision fossil fuel emissions from the transport need not be accounted. Therefore, leakage emissions from transport of personnel and products outside the project are excluded from calculations. The project does not lead to the displacement of pre-project economic activities and does not cause any forms of leakage. Therefore leakage is considered zero.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E. Monitoring Plan				
E.1 Monitoring of the project implementation				
E.1.1 Has data to be collected for monitoring of forest establishment and management been listed adequately?	2	General data and information is provided concerning monitoring as described below: <u>Clarification Request 27.</u> Clarify if Standard Operational Procedures (SOPs) for the monitoring parameters identified in section E.1, as well as QA/QC are applied in the project.	CR	<input checked="" type="checkbox"/>
AR-AM0002_ver3, section III.1			CR	<input checked="" type="checkbox"/>
Monitoring of the project initiation (section III.1.a)	2	Monitoring of the project initiation includes : - aspects site preparation and vegetation affected - information on pre-existing vegetation See CR 27	CR	<input checked="" type="checkbox"/>
Monitoring of the area afforested or reforested (section III.1.b)	2	Monitoring of the area includes: • Field surveys at periodic intervals to verify the consistence of the actual project boundary with the GPS coordinates, the permanent	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<p>markers used in delineating</p> <ul style="list-style-type: none"> Monitoring of the project boundary to provides information on land use and economic activities that occur outside the project area Monitoring measures to assess the risk of fire and other natural events that occur within and outside the project boundary Personnel involved in the monitoring will be trained to identify the changes in the boundary and to record changes in the project data-base for the purpose of reporting at the time of project verification. <p>See CR 27</p>		
Monitoring of the forest establishment (section III.1.c)	2	<p>Monitoring of the forest establishment includes:</p> <ul style="list-style-type: none"> Monitoring of aspects related to site preparation and amount of vegetation affected. Establishment of a database including information on planting schedule, location, area, species planted Monitoring on age class-wise area planted in each stratum and sub-stratum through field surveys. Monitoring on species composition and characteristics of planted species including the spacing and characteristics of the stand models Assessment of planting activities to confirm the quality of work within two weeks after completion of planting activities. <p>The Monitoring of the forest establishment is under control of the Forest enterprises.</p> <p>See CR 27</p>	CR	<input checked="" type="checkbox"/>
Monitoring of forest management activities (section III.1.d)	2	<ul style="list-style-type: none"> Monitoring on silvicultural activities that influence the GHG removals by sinks, Monitoring on volume/biomass associated with silvicultural activities (cleaning, thinning, sanitation cutting and harvesting) Monitoring on the occurrence of fires or other natural or human induced disturbances and the area and biomass affected Monitoring on deviations to the forest management activities outlined in the project design document and reasons for deviations 	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		See CR 27		
Monitoring frequency (section III.1.e)				
In the collection of data for the monitoring of the project boundary, forest establishment or of forest management, do any measurements not follow typical forest mensuration practices and if so have they been adequately described?	2	There is no information on deviation of measurement practices provided to the DOE.	CR	<input checked="" type="checkbox"/>
E.1.2 Have the SOPs and quality control/quality assurance (QA/QC) procedures applied been adequately described according to the methodology requirements?	2, 4	There is information in the PDD concerning QA/QC. See CR 27	CR	<input checked="" type="checkbox"/>
E.2 Sampling design and stratification				
AR-ACM0002_ver3 Section III.2				
Has the ex ante stratification of the project area been included to the PDD, if not, is it justified?	2, 4	Ex ante stratification is based on species groups and soils. Four main strata are identified as described in detail in section C.4. The main strata are further categorized into sub-strata based on planting year.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Have the conditions for ex-post strata update (within in GIS data base) been included to the PDD / Monitoring Plan? (section III.2.a)	2, 4	Ex post stratification might be adapted at each monitoring event based on area affected in disturbances and management activities implemented in each stratum/substratum. Changes in stratification will be reported to the DOE for verification. A stratification map is provided showing species composition, project boundary and plating year.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is sampling described in detail including the target of 10% precision level and the determination of the sample size according to the methodology? (section III.2.b)	2, 4, 20	A stratified sampling design is used to estimate the verifiable changes in carbon stocks in the carbon pools of the project and the corresponding sampling error. According to the methodology nested plot approach with permanent sample plots (PSPs) is chosen and the demarcation will be executed not prominently on the spot and with GPS. Carbon pools considered according to the methodology are: <ul style="list-style-type: none"> • Above ground tree vegetation • Non tree woody vegetation 	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<ul style="list-style-type: none"> Litter Soil <p>A precision level of 10% with a 90% confidence interval is targeted according to the methodology.</p> <p>Sample size is calculated using the equations (M.1 and M.2) according to the methodology are provided in a separate excel sheet (annex 12) an the numbers of sample plots as results presented in the PDD (Table 37a and b)</p> <p>The randomly selected point is set at south west corner of the sample plot. The direction of the layout is directed towards the centre of the polygon and the longer line is parallel to the planting direction.</p> <p><u>Clarification Request 28.</u> Clarify how sample plot were designed and calculated (per strata) as required by the applied methodology</p>		
Are the starting point selected randomly and the allocation of the sample plots done systematically by superimposing a grid over the site maps? (section III.2.c)	2, 4,	<p>PSPs will be used for aboveground biomass monitoring. Each plot will have its coordinates recorded using a GPS. The plot corners of rectangular plots (for aboveground biomass) and centres of circular plots (for litter) will be located; the GPS coordinates noted and marked not prominently.</p> <p>Temporary sample plots will be used for monitoring changes in the soil carbon.</p> <p><u>Clarification Request 29.</u> Clarify how sample plots are allocated and located and if there are respective procedures established</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is information provided about the sample plot area? (section III.2.d)	2, 4, 20	<p>Above ground biomass, standing deadwood:</p> <p>nested plots will be used, the bigger with an area of 250 m² (5 x 50 m),</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		the smaller one with an area of 50 m ² (5 x 10 m) Lying deadwood will be sampled with the intersect line method (2 x 50 m lines) Litter will be sampled using fixed circular or rectangular sampling frames, placed 4 times on random locations within a sample plot.		
Is information provided on plot location (section III.2.e)		There is no information provided on plot location. See CR 29	CR	
E.3 Monitoring of the baseline net removals				
Is monitoring of the baseline net removals required by the selected methodology? If yes, <ul style="list-style-type: none"> has the application of the procedure for selection of sample plots been adequately defined and has all data to be collected or used been listed? has the application of the procedure for selection of sample plots been adequately defined and has all data to be collected or used been listed? 	2	According to the methodology AR-AM0002 version 3 monitoring of the baseline is not required.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.4 Monitoring of the actual net removals				
Has the data to be collected in order to monitor the <u>changes in carbon stock</u> resulting from the project been adequately defined?	2	Data to be collected has been described in the PDD in accordance with the methodology. All data collected will be archived in an electronic spread sheet. The methodology covers the monitoring of the following pools: <ol style="list-style-type: none"> Above-ground biomass; <ol style="list-style-type: none"> Tree component; Non-tree component; Below-ground biomass; Deadwood; Litter; and Soil. 	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<u>Corrective Action Request No 9.</u> The PP shall provide data as required by the methodology section III.6 in tables as required by the PDD template including value applied and source of data.		
Have the following parameter been included?				
2.1.1.01 Stratum ID	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.02 Sub-stratum ID	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.03 Precision level	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.04 Standard deviation of each stratum	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.05 Sample size	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.06 Plot ID	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.07 Plot location	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.08 Age of plantation	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.09 No. of trees	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.10 Diameter at breast height (DBH)	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.11	2	See CAR 9	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Mean DBH		Parameter was included in the final version of the PDD		
2.1.1.12 Tree height	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.13 Mean tree height	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.14 Merchantable volume	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.15 Biomass expansion factor (BEF)	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.16 Wood density	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.17 Carbon fraction of above ground tree biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.18 Carbon stock of above- ground tree biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.19 Number of non-tree shrub species	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.20 Diameter at the base of shrub	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.21 Height of shrubs	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.22 Crown diameter of shrubs	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.23 Number of stems in the shrub	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.24	2	See CAR 9	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Carbon stock of above-ground shrub biomass		Parameter was included in the final version of the PDD		
2.1.1.25 Area under shrubs within the sub-stratum/stratum	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.26 Carbon fraction of shrub biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.27 Mean carbon stock of above ground shrub biomass per ha	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.29 Mean carbon stock of above- ground tree biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.30 Root-shoot Ratio for tree biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.31 Carbon stock of below-ground tree biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.32 Carbon stock of below ground shrub biomass per ha	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.33 Root-shoot Ratio for shrub biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.34 Change in the carbon stock of below-ground biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.35 Standing deadwood	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.36 Lying deadwood	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.37	2	See CAR 9	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Total deadwood		Parameter was included in the final version of the PDD		
2.1.1.38 Carbon in the litter biomass	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.39 Soil organic carbon samples in the sub-stratum /stratum	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.40 Bulk density	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.41 Soil depth	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.42 Area of stratum & sub-stratum	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.43 Change in the stock of soil organic carbon in the stratum /- sub-stratum/	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.44 Soil organic carbon in the sub-stratum /stratum/species	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.45 Mean soil organic carbon per ha	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.46 Soil organic carbon with 95% in the mean per ha	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.1.47 Sum of changes in carbon stocks CO ₂ e	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
Has the data to be collected in order to monitor the <u>GHG emissions</u> that are increased as a result of the project activity within the project boundary been adequately defined?	2	There is no increase of GHG emissions from the project activity as described in section D.1. See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
Have the following parameter been included?	2	See CAR 9	CAR	<input checked="" type="checkbox"/>
2.1.2.13 Area of the burn	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.2.14 Mean biomass per unit area	2	See CAR 9	CAR	<input checked="" type="checkbox"/>
2.1.2.15 Proportion of biomass burnt	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.2.16 Biomass combustion efficiency	2	See CAR 9	CAR	<input checked="" type="checkbox"/>
2.1.2.17 CO ₂ emission from biomass burn	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
2.1.2.20 CH ₄ emission From biomass burn	2	See CAR 9	CAR	<input checked="" type="checkbox"/>
2.1.2.30 Total GHG Emission from biomass burn	2	See CAR 9 Parameter was included in the final version of the PDD	CAR	<input checked="" type="checkbox"/>
Are the procedures for measurements in the monitoring of the changes in carbon stocks or the monitoring of GHG emissions increased in the project clearly defined and do they follow typical forest mensuration practices?	2, 4	Procedures for measurements in monitoring are not described in the PDD but in the management plan attached (Annex 4) <u>Clarification Request 30.</u> Clarify if SOPs and QA/QC are available for relevant parameters	CR	<input checked="" type="checkbox"/>
E.5 Leakage				
E.5.1 Has the data and information that will be collected to monitor leakage been adequately defined? (see tool on activity displacement)	2, 4	No leakage is anticipated in the project from the displacement of economic activities outside the project boundary. Therefore, no monitoring of leakage is required. See CR 10	CR	<input checked="" type="checkbox"/>
Are the procedures for measurements for the monitoring of leakage clearly defined and do they follow typical forest	2, 4	<i>Not applicable if there is no leakage.</i>	n/a	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
mensuration practices?				
E.5.2 Have procedures for the periodic review of the implementation of activities and measures to minimize leakage been adequately defined?	2, 4	To ensure that pre-project activities such as grazing are not displaced to areas outside project areas the project design includes measures to enhance the socioeconomic status of communities. These measures are described in the PDD in detail. See CR 10	CR	<input checked="" type="checkbox"/>
E.6 QA/QC procedures undertaken for data monitored				
Have QA/QC procedures been defined appropriately and are explanations of procedures (including their absence) reasonable? (not included in earlier Sections)	2, 4	No further QA/QC have been described than provided in section E.1.2 <u>Corrective Action Request No 10.</u> The PP shall include information on QA/QC as required by the PDD guidelines	CAR	<input checked="" type="checkbox"/>
E.7 Operational and management structure of project operator				
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?	2, 4	An overview is given over the operational and management structure: <ul style="list-style-type: none"> Project coordinator: responsible for project implementation and negotiations concerning tCERs. Steering committee: coordination of activities for all stakeholders Project Implementation Unit (PIU): responsible for everyday activities and on project and monitoring plan implementation. <u>Clarification Request 31.</u> Clarify operational and management structures	CR	<input checked="" type="checkbox"/>
E.8 Person applying monitoring plan				
Has the person or entity applying the monitoring plan been named, are they listed as a project participant and has contact information been provided?	2, 4	The team comprising the following persons prepared and reviewed the monitoring methodology: Dumitru Galupa, Ion Talmaci, Liliana Spitoc, Moldsilva (ICAS), Moldova David Shoch, Terra Carbon Dr. Rama Chandra Reddy, The World Bank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
F. Environmental Impacts of the Project				
F.1 Documentation of analysis of environmental impacts				
Has an analysis of the environmental impacts including impacts on biodiversity and natural ecosystems and impacts outside the project boundary been adequately documented?	2, 4 29, 30	<p>An EIA has been conducted on free bases. There is no legal requirement to conduct an EIA for AR projects in Moldova.</p> <p>The outcomes of the analysis are adequately described and presented in the PDD.</p> <p>The project activity involves AR activities in mainly small scale areas (80% of the parcels are <20 ha) distributed over the whole country with local or locally adapted species in mixed stands on degraded lands.</p> <p>The expected environmental impacts of the project activity are expected to be positive.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Does the analysis include (where applicable) adequate information on hydrology and soils, and risk of fires, pests and diseases?	2, 29, 30	<p>The analysis includes information on water, climate, soil, fire.</p> <p><u>Clarification Request 32.</u> Clarify what are legal requirements for EIA in Moldova</p>	CR	<input checked="" type="checkbox"/>
F.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 supporting information) been provided?	2, 29, 30,	<p>Negative impacts on soil, water and biodiversity are described as small and insignificant. Nevertheless an environmental management plan EMP has been implemented to mitigate the negative aspects and for monitoring of the biodiversity.</p> <p>An environmental impact assessment has been conducted. It was published for stakeholder comments.</p> <p><u>Clarification Request 33.</u></p> <ul style="list-style-type: none"> • Provide EMP to the DOE • Provide further information on comments received from stakeholders (NGOs, academia and state institutions) • Clarify where the EIA was published for stakeholder comments • Provide information on monitoring 	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
F.3 Remedial measures to address impacts				
Has a description of the planned monitoring and remedial measures to address significant environmental impacts been adequately defined?	2, 4	There is no further information provided as there are no significant environmental impacts to be expected.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G. Socio-economic Impacts of the Project				
G.1 Documentation of analysis of socio-economic impacts				
Has an analysis of the socio-economic impacts including impacts outside the project boundary been adequately documented?	2	An analysis of the socio-economic impacts of the project activity has been provided in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Does the analysis adequately include (where applicable) information on local communities, indigenous people, land tenure, local employment, food production, cultural and religious sites and access to fuel wood and other forest products?	2	The project activity is implemented on degraded lands belonging to local communities and in collaboration with the local councils. Temporary and permanent jobs are expected to be created for the local communities. The project activity is supposed to stabilize the supply on fuelwood, timber and other forest products to the communities.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.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 accordance with the procedures required by the host Party (including conclusions and references to supporting information) been provided?	2, 4	<p>There are no significant negative impacts to be expected caused by the implementation of the project activity.</p> <p>Main issues are recognized were:</p> <ul style="list-style-type: none"> • Illegal logging and grazing; • Socioeconomic impacts of the project in terms of supplies of fuelwood to local communities; • Awareness to project activities among stakeholders, institutions, and local communities; • Perceptions and impacts of changes in grazing regime; • Awareness and information campaigns on the project benefits and the need to improve community awareness to soil conservation and forest management activities 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
G.3 Remedial measures to address impacts				
Has an adequate description of the planned monitoring and remedial measures to address significant socio-economic impacts been provided?	2, 4	Socioeconomic programs implemented serve to prevent leakage and address the issues related to income generation, employment opportunities and alternative grazing regimes. Integrated management of communal pastures and forests promotes the capacity of local communities to manage communal pastures and forests.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H. Stakeholder Comments				
H.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?	2, 4, 25	Information of stakeholder consultation is provided in the PDD. As part of the first Japanese Grants 2005 meetings were conducted with the communities to address the continuity of the project. <u>Clarification Request 34.</u> Clarify how stakeholders were involved in the consultation process and provide evidence to the audit team.	CR	<input checked="" type="checkbox"/>
H.2 Comments received				
Have stakeholders who made comments been identified and has a summary of the comments been provided?	2, 4	Stakeholder comments have been Identified and a summary has been provided as follows: <ul style="list-style-type: none"> The project should consult with local communities in the selection of species for planting. Guidelines need to be implemented in the harvest and of non-timber forest products such as fruits, berries, hazelnuts, walnuts, medicinal plants, haymaking, and bee keeping. Permission for collection of fodder in the project area needs to be provided to mitigate the risk of illegal grazing. There is a need for cooperation between Forestry Agency "Mold-silva" and non-governmental organizations in managing communal 	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		forests; <ul style="list-style-type: none"> • There is a need to ensure the sustainability of newly created forests through cooperation with local population; • Local population should be provided opportunities to take part in forest management planning and maintenance of community forests and forest vegetation; • There is a need to disseminate periodic information on the project implementation, as well as on the implementation of other programs promoting forest management. See CR 34		
H.3 Report on due account				
Has an explanation on how due account has been taken regarding the received comments from stakeholders been provided?	2	Moldsilva provided detailed answers to the stakeholders and implemented mitigation measures to address the received comments: <ol style="list-style-type: none"> 1. Fodder collection and hay making between trees rows in the afforested areas is permissible as per legislation in force (the Forest Code, Regulations on haymaking and grazing of animals on areas under the forest fund). 2. The preferences of local people will be given priority in the planting activities. 3. As per Article 32 of the Forest Code, people have free access to the areas of forest fund for recreational purposes and harvest of non-timber products such as fruits, berries, walnuts, mushrooms etc. (with the exception of sectors); 4. The local communities can get direct and indirect employment in planting activities in nursery development, site preparation, planting, establishment, protection and management of forests on project lands. 5. Afforestation of degraded lands will improve the landscapes and improve recreation value of forest created under the project. Moldsilva provides for example grazing options for communes within the forest fund that are not used for forest.	CR	<input checked="" type="checkbox"/>

CHECKLIST QUESTION	Ref.	COMMENTS	Draft Concl	Final Concl
		<u>Clarification Request 35.</u> Provide information and references on the implementation of mitigation measures to the audit team.		
Annexes				
Annex 1 Contact information on project participants				
Is contact information on participants of the project complete?	2	Complete information is provided.	<input checked="" type="checkbox"/>	<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?	2	There is no public funding provided. See CR 7 in section A.10	CR	<input checked="" type="checkbox"/>
Annex 3 Baseline information				
Has information additional to that required in Section C or in the approved methodology been provided (or stated as not required)?	2, 94	Additional baseline information has been provided.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Annex 4 Monitoring plan				
Has the monitoring plan been included as annex 4 and does it allow for all the requirements listed under paragraph 25 of the Modalities and procedures for A/R project activities under the CDM?	2, 4	A monitoring plan has been included as annex 4.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Table 2: CDM responses to CAR and CR**Table 2: AR-CDM Validation: Summary of Requests and Responses of Project Developer**

Clarifications and Corrective Action Requests	PDD Sect.	Summary of PP Response	Audit Team Conclusion
<u>Corrective Action Request No 1.</u> PDD Form version 5 required to identify the host party.	A.3	The host party is the Republic of Moldova	The host party is identified according to the PDD Form version 5. CAR closed.
<u>Clarification Request 1.</u> Clarify if procedures and quality control of the demarcation of the boundary are in place. Provide relevant SOPs to the audit team.	A.4.2	Procedures and quality control measures to ensure the integrity of project boundaries are in place. The PIU is in charge of mapping all project sectors with GPS and of storing the GPS coordinates in the GIS database. Forest enterprises verify project boundaries and revise the project sites if any events impact the project boundary. They include their findings in the annual reports sent to the PIU. The PIU undertakes spot checks of project sectors in order to ensure project implementation is in line with the boundaries of registered project. The SOP on project boundaries is included in the CDM Operations Plan for the project. [Evidence: E15_ CDM Operations Plan]	Provide annual report with findings of the Forest enterprises sent to the PIU. As described in CR 33 of this document, SOPs of the BioCarbon Fund Manual for Monitoring are adopted (IRL 108). The PP shall provide clarification in the PDD regarding SOPs applied.
		For the control/monitoring of the project boundaries SOP 1 – <i>Collection and organisation of data using GPS</i> from BioCarbon Manual for Monitoring of CDM Afforestation and Reforestation Projects – is applicable. Please see IRL 108. PDD has been updated to this effect on page 6.	Clarification has been provided in the PDD that the SOP 1 (IRL 108) has been adopted for control/monitoring of the boundaries. CR closed.
<u>Clarification Request 2.</u> Clarify if rare and endangered species occur on the various project sites. Provide the EIA, biodiversity report, and national	A.5.2	No rare and endangered species have been observed on the project sites. List of endangered species that are present in the regions where project sites are included in tables 4/5 of the	Further detailed information is provided in the PDD. The reports mentioned in the Reference List

legislation for environmental protection and for environmental expertise to the audit team.		<p>PDD.</p> <p>The independent biodiversity monitoring will be carried out by Botanical Garden of the Academy of Sciences of Moldova during project implementation and the findings on the biodiversity (including those on endangered species) in the project areas will be recorded in the project database and reported. Independent biodiversity monitoring plan and indicators are outlined in detail in Annex 4 – Monitoring Plan (p. 29/30).</p> <p>[Evidence: Law on ecological expertise, law on environmental protection and other environmental legislation (in E 21_Laws and regulations) and on EIA (nr.851, 29/05/1996) listed as nr.78 in the list of sources; EIA listed as nr.29 in the list of sources; Report on floral biodiversity listed as Nr. 80, Report on avifauna diversity listed as Nr. 81]</p>	<p>(IRL 29, 79, 80, 91, 92) were provided to the audit team.</p> <p>The audit team confirms that information provided is in line with the requirements of the methodology.</p> <p>CR closed</p>
<p>Clarification Request 3.</p> <p>The PDD guidelines require providing adequate description on all species and varieties grown in the project area. The PP shall clarify which species and varieties are used in the project.</p>	A.5.3	<p>In PDD the description of following species has been added: Fraxinus, Carpinus, Ulmus, Acer spp., Elaeagnus.</p>	<p>Further information on additional tree species is provided in the PDD. Not all species planted are however included in the PDD.</p> <p>In line with the PDD guidance, the PP shall list all species (e.g. various species of Fraxinus and shrubs) planted in the project</p>
		<p>The list of species was completed with Fraxinus viridis.</p> <p>The list of planted shrubs has been completed in the PDD p. 18/19.</p>	<p>The list of tree and shrub species has been adapted.</p> <p>CR closed</p>
<p>Clarification Request 4.</p> <p>Clarify if the carbon contract between the land owner and Moldsilva (PP) remains valid after the main contract for forest establishment and maintenance expires</p>	A.6	<ul style="list-style-type: none"> Missing contracts are attached. The addenda to the contracts between land-owners and Moldsilva are part of the main contracts, and therefore have the same validity as the contracts themselves. In clause 5 of the contracts, these addenda establish that after expiry of the term of the contract, 	<p>E1 – is the missing addendum for the contract corresponding to the parcel 111111145 (IRL 115). The data on the addendum correspond to those identified on site for the main contract.</p> <p>The addendum for parcel 111111110 signed</p>

		<p>the contract is extended automatically by another term. This means that both, the contract as well as the addenda have a validity of 20 years from the moment they were signed in 2005, 2006, 2007 and 2008.</p> <p>[Evidence: E1, E2 missing addenda to contracts]</p>	<p>by Primaria Alexandreni still needs to be provided.</p> <p>There is the possibility that the contract/addendum between the land owner and Moldsilva is not prolonged after the first commitment period of 3, 5 or 10 years.</p> <p>The PP shall clarify if at the expiry of the main contract the addendum regarding the carbon rights is still valid.</p>
		<ol style="list-style-type: none"> 1. Additional contract for primaria Alexandreni is attached (ID 111111145.) (Ref No 115_Ad.Contract Alexandreni) 2. ID 111111110 refers to the plot form the Forest Fund, thus, no contracts were signed. <ul style="list-style-type: none"> • As has been explained previously, the addendum is part of the main contract. If the main contract expires, the addendum expires. However, the addendum extends the validity of the main contract indefinitely. Please refer to initial response: In clause 5 of the contracts, these addenda establish that after expiry of the term of the contract, the contract is extended automatically by another term. This means that both, the contract as well as the addenda are automatically renewed if neither party cancels them. • Until today, Agency Moldsilva did not receive any requests related to the termination of the contracts. 	<ol style="list-style-type: none"> 1. The additional contract of Primaria Alexandreni has been provided. 2. It is clarified that there is no Addendum to parcel 111111110 as this parcel is owned by Forest Fund and therefore no contract is needed (IRL 5). <p>Sufficient information and evidence is provided to the DOE to confirm that Moldsilva has established control over the afforestation sites. 29 randomly selected parcels have been visited and found in line with the requirements (VVM 142)</p> <p>CR closed</p>
<p><u>Corrective Action Request No 2.</u></p> <p>All project area shall meet the eligibility criteria as per AR-CDM requirements. The PP Shall present respective evidence to the audit team.</p>	A.7	<p>PP has re-checked all project sites (Letter nr. 01-07/258 as of 15/03/2012 addressed to forest enterprises). As a result of the detailed field surveys and rigorous checks of the all the project sites with regard to their eligibility under the AR CDM</p>	<p>Provide information on the detailed field survey (field sheets) for the parcels selected by the audit team.</p> <p>According to the shape-files the project covers</p>

		<p>requirements, the project sites or portions of project sites amounting to 961.11 ha that did not meet the AR CDM requirements were excluded from the project. As a consequence, the revised project area is 8,468.84 ha. New list of sites and the corresponding shape files are provided in Annex 6 to the PDD.</p> <p>[Evidence: E13 Letter eligibility check, PDD Annex 6 new shapefiles)</p>	<p>now 8,468.84 ha spread in 693 parcels. In the PDD a value of 770 parcels is mentioned. Consistency needs to be ensured.</p>
		<p>The PDD was corrected on page 6: 770 is the number of plots and 693 is the number of project polygons (in the case if two or more sites have common boundary they have been merged).</p>	<p>Clarification has been provided in the PDD about the differences in polygons and numbers of plots.</p> <p>CAR closed</p>
<p><u>Clarification Request 5.</u> Clarify in the PDD whether this is a reforestation or afforestation project.</p>	A.7	<p>The project qualifies as reforestation project as per draft decision CMP-1 of CP 7 of Marrakech Accords (2001). This fact is confirmed by certificates from Land Use and Cadastre Office that cited that project sites were not covered with forest as of 31.12.1989. The PDD has been revised excluding all references to a CDM afforestation project.</p>	<p>It is clarified in the PDD that the project is a reforestation project.</p> <p>CR closed</p>
<p><u>Clarification Request 6.</u> Clarify whether peaks in carbon stocks coincide with the envisioned time of verification.</p>	A.8	<p>The rotation age of species planted in the project is 31 years for <i>Robinia pseudoacacia</i> and <i>Gleditsia triacanthos</i>; and up to 100 years for the slow growing species such as <i>Quercus</i>, <i>Carpinus</i>, <i>Ulmus campestris</i>, and <i>Fraxinus excelsior</i>. The first verification will take place in 2012, and subsequent verifications are expected in 2017, 2022 and 2027. First harvesting will only occur in 2037. It is therefore clarified that the verification schedules of the project do not coincide with carbon peaks.</p>	<p>According to the ex ante estimations there is a constant increase in carbon stocks during the first crediting period (see PDD A.9) on average the rotation period is longer than the crediting period hence no coincidence of peaks of carbon stocks is expected.</p> <p>CR closed</p>
<p><u>Corrective Action Request No 3.</u> The figures presented in the PDD shall be consistent</p>	A.9	<p>All figures in PDD have been updated.</p>	<p>Table is updated with section D.</p> <p>CAR closed</p>

<p>Clarification Request 7. The PP shall clarify if there is any diversion of ODA funds to the project.</p>	A.10	<p>The project is not financed through ODA. The associated Japanese PHRD grant is a part of ODA but this grant does not provide any funding to the project. It is a capacity building activity implemented throughout the country.</p> <p>The Japanese PHRD grant is not a diversion of ODA as there is no revenue (including receipt of CERs from the project) to the Japanese government from the PHRD grant. According to paragraph 10, p.3 OECD guidelines:if instead of receiving CERs, a donor has agreed with the host country not to receive any of the generated CERs, or if the project does not generate CERs (e.g. a capacity development activity), no deduction would be necessary.”</p> <p>Therefore, it is clarified that there is no diversion of ODA funds to the project. [Evidence: E9_OECD guidelines]</p>	<p>All rights on CERs are according to the contracts with the land owning communities with MOLDSILVA. The Japanese Government does not receive any of the generated CERs.</p> <p>Information is provided in the PDD that there is no diversion of ODA funds (official development assistance) for this specific project.</p> <p>Additional information according to the provided document (IRL 84/E9) confirms that there would not be any consequence to the project under the actual conditions.</p> <p>The PP shall provide evidence what the PHRD finances are used for.</p>
		<p>PHRD grant is foreseen for:</p> <ol style="list-style-type: none"> 1. Provision of consultants' services and training to support the Forestry Research and Management Institute (FRMI) to build its capacities to provide training on sustainable integrated forestry management, to conduct training for community authorities, forestry specialist and farmers on sustainable and integrated forest management. 2. Community Support Program: awarding to communities Grant-financed sub-projects. An example of agreement concluded with primaria Hirtop, beneficiary of CSP is attached (Ref No 114_Contract Hirtop). Main activities financed (on land other than the MSC project intervention), mentioned in Annex A to the Contract, for 	<p>PHRD grant agreement has been provided (IRL 121) as required.</p> <p>Compliance with the documents (IRL 114, 121) and the requirements of the methodology has been provided.</p> <p>CR closed</p>

		<p>this commune are: forest management planning for the area of 78 ha; stimulation of natural regeneration on the area of 4.5 ha; maintain of pastures by the means of applying fertilizers etc. on the area of 46 ha; creation of pastures in flood-plains on the area of 10 ha; creation of 1 unit of staff responsible for the management of community forests and pastures.</p> <ol style="list-style-type: none"> 3. Demonstration nursery modernisation; provision of consultant services, training and goods to support the modernization of an existing forestry nursery. 4. Project management <p>PHRD grant agreement attached to this submission (IRL 121)</p>	
<p><u>Clarification Request 8.</u> Clarify the date of implementation of the project and provide respective evidence to the audit team.</p>	B.1	<p>The project activity was initiated on 1 November 2006, when the first planting activity began. This fact can be confirmed with the technical instruction issued by Moldsilva, e.g. FE Padurea Domneasca Primaria Ustia, C222211743(area 15.0 ha, planted November 2006) ; FE Edinet, Primaria Cenroleuca, C030341604(area 11.5 ha, planted November 2006), Primaria Hlinaia, C0303511611(area 10.0 ha, planted in November 2006).</p> <p>[Evidence: E_22 starting date: technical instructions C222211743, C030341604, C0303511611]</p>	<p>The documents provided represent the technical reception of the plantation with details regarding the execution phase. The documents are dated at 24 of November 2006, 26 of November 2006 and 7 of December 2006. The point 2 of the document mentions in all 3 cases that "the period of execution of the plantation" is 1st of November 2006. (IRL 132)</p> <p>CR closed</p>
<p><u>Clarification Request 9.</u> Clarify which tools and procedures are applied in the PDD.</p>	C.1	<p>The following tools are applied in the PDD:</p> <ol style="list-style-type: none"> 1. "Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities" v.01, EB 41, Annex 15 2. "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" v.02, EB 35, Annex 17. 	<p>It has been clarified in the PDD which tools and procedures were applied.</p> <p>CR closed.</p>

		3. "Tool to demonstrate the eligibility of lands for afforestation and reforestation CDM project activities" v. 01, EB 35, Annex 18	
<u>Corrective Action Request No 4.</u> Only valid versions of all tools, procedures and PDD format shall be applied.	C.1	Above mentioned CDM tools have been applied. PDD has been changed into format v.05.	Valid versions of all tools and procedures had been applied; PDD format has been updated to version 5. CAR closed.
<u>Clarification Request 10.</u> Clarify what amount of goods and services are provided in the baseline and project scenario.	C.2	<p>This project activity is implemented on degraded lands with no or only little incidental grazing prior to project start. In the baseline scenario, only limited goods and services were provided by the project, and the type of good was incidental grazing.</p> <p>In the project scenario, additional goods and services provided by the project include:</p> <ul style="list-style-type: none"> - Employment creation: seven workers were employed per ha of forest plantation establishment who were paid 700 Moldova lei (US\$ 58) each per ha (8,468ha in total). The project also provided significant employment in nursery establishment activities. [Data from interviews with stakeholders during validation site visit] - Medicinal plants: on some project plots, medicinal plants and roses (for teas) were planted. On some plots, 500kg/year are harvested (12 Moldovan Lei (1US\$) kilo) [Data from interviews with stakeholders during validation site visit] - Hay collection: The project permits hay collection on the project sites after five years of project implementation - Reforestation: The reforestation of 8,468ha 	<p>The PP clarified to the DOE that the amount of goods and services provided in the project scenario like fodder collection, fuelwood, medicinal plants, timber, revenue, employment and so on has a higher variety and volume as the ones from the baseline scenario "abandonment of degraded lands". (IRL 27, 29, 79, 80, 91, 92, 93)</p> <p>CR Closed</p>

		<p>constitutes a very important good to the community. The land value has appreciated significantly in value and the communes have an additional asset (timber wood, firewood).</p> <p>It is also important to note that national trends in livestock numbers have decreased in recent years.</p> <p>The national statistics show that number of cattle was reduced by 46% during 2002-2009, sheep and goats by 10%, and horses by 27% (see table): Source: Anuarul Biroului Național de Statistică, 2002-2009.</p> <p>These national level statistics are relevant because they match the scale of the project area, which is distributed throughout Moldova. Thus, given the overall reduction in stocks and grazing activity throughout the country, even incidental grazing in the without project case (baseline), would be expected to decrease in the foreseeable future.</p>	
<p>Clarification Request 11. Clarify which emission sources are considered in this project activity.</p>	C.3	<p>Emissions sources: burning of biomass in the result of naturally occurring forest fires (CO₂, CH₄)</p>	<p>Description of emission sources in section D.1.b of the PDD</p> <p>Emission sources to be considered according to the methodology include CO₂ and CH₄ from burning of biomass (See Table 2 of methodology)</p> <p>No burning of biomass is foreseen in the project activity.</p> <p>Hence the audit team concludes that emissions are not significant in the ex ante estimations.</p> <p>Emissions will however be monitored.</p>

			CR closed
<u>Corrective Action Request No 5.</u> Clarify which parcels belong to which strata. Assure consistency in stratification when calculating baseline and project area removals.	C.3	The list of parcels with the indication of stratum number is provided in Annex 5. [Evidence: Annex 5_ List of project sites]	The provided list of parcels (Annex 5) includes the stratification of each parcel. CR closed
<u>Clarification Request 12.</u> The PP shall provide evidence to the DOE when applying the required "Tool for demonstration and assessment of additionality of A/R projects (EB 35; Annex 17)	C.4.1	The PDD has been revised on p. 31. The reference to the "surveys of land uses in the vicinities" has been removed. The "Tool for demonstration and assessment of additionality of A/R projects" (EB 35; Annex 17) has been applied according to AR-AM0002 v.3 step 2 of baseline description.	The general approach has been excluded. A survey of the land uses in the vicinity is not longer needed C4 CR closed
<u>Clarification Request 13.</u> <ul style="list-style-type: none"> In line with the applied methodology, the PP shall provide information on land use practices and afforestation rates for the last 10 years. In line with the applied methodology, the PP shall provide evidence that the national or sectoral land use policies adapted prior to 11 Nov 2001 do not influence the project areas 	C.4.1	<ul style="list-style-type: none"> The afforestation rate degraded lands over the ten years prior to project start date (1996-2005) was 596 ha annually. From the data on forest planting in Moldova (acts of technical reception) over this time period it also becomes evident that the reforestation rate before 2002 (the project start of the CDM Moldova Soil Conservation Project) has been significantly lower (between 207-329ha). It also becomes apparent that reforestation on degraded private or communal lands did not occur before the first CDM operation was implemented in the country. This leads to the conclusion that land use practices on degraded lands was abandonment. During the validation site visit, it was also observed that some degraded lands had some informal uses, e.g. for degraded vineyards. The following policies of the Republic of Moldova related to land use have been adopted before 11 November 2001. [see references as per PDD] Forest Code, N. 887-XIII from 	Further detailed explanations and figures on the land use practices and A/R rates have been provided. The legal documents listed in the PDD have been provided to the DOE. Also national laws and regulations outline provision for restorations of degraded lands, these provisions do not influence the project area as they are not implemented due to lack of financial resources. This is evidenced by the pre project A/R rates presented (Annex 8) and explained in the Baseline study (Annex 3). CR closed

		<p>21/06/1996 Monitorul Oficial N.4-5/36 from 01/01/1997.</p> <p>The policies of the Republic of Moldova on land use adopted prior to November 2001 do not influence the project areas as the policies are of advisory nature or cannot be implemented due to the lack of financial resources.</p> <p>[Evidence: Annex 8_pre AR rate, E21_laws and regulations]</p>	
<p>Clarification Request 14.</p> <p>Clarify if changes in adjoining land use are likely to lead to more profitable alternatives over the next 5 years period.</p>	C.4.1	<p>In Section C.5 of the PDD <i>Establishment and description of baseline scenario</i>, these issues are discussed in detail, and possible changes to land use are evaluated as part of alternative scenarios.</p>	<p>No profitable uses and increase in carbon stocks are expected within the next 5 years considering the degraded status of the land and the review of the current policies. Relevant information has been provided in the PDD. The audit team concludes in accordance with the findings from the field visits compliance with the methodology.</p> <p>CR closed</p>
<p>Clarification Request 15.</p> <p>In line with the applied methodology, the PP shall clarify how archiving is done for information used in the analysis of the baseline scenario.</p>	C.4.1	<p>Data and information needed in the analysis of baseline information is stored at the PIU and forest enterprises. The information used for the Baseline Study is stored at PIU Office. PIU manages the data base (electronic version of GPS coordinates, digital images of the project sites and data on the characteristics of sites). PIU also manages paper files for each plot containing all information on location, area, contracts, degradation status at start date, etc. Each Forest Enterprise has data and information pertaining to the land use; information pertaining to eligibility of lands, degraded status of lands, vegetation and geographic characteristics of the project sites, data and information from cadastral maps, data and information collected by field staff on sites considered for the project, etc stored in paper format in different registers.</p>	<p>As required by the methodology, the PP shall provide relevant information on archiving including references in the PDD.</p>

		Section C.4.1 of PDD has been completed with relevant information.	Relevant information concerning the archiving of data has been provided in the PDD. CR closed
<u>Clarification Request 16.</u> In line with the applied methodology, the PP shall clarify transparently what is the identified baseline scenario.	C.4.2	In C.4.2 detailed description of the baseline scenario is presented along with the information on sources and references. [Evidence: E19_List of sources completed, E11_Sources of parameters for ex-ante Calculations]	Transparent description of the baseline scenario is now provided in section C.4.2. (IRL 32) CR closed
<u>Corrective Action Request No 6.</u> In line with the applied methodology, the PP shall apply the actual "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" as required by the methodology	C.5	For the demonstration of additionality, "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" (version 02), EB 35, Annex 17 was applied.	The actual "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" as required by the methodology had been applied. CAR closed
<u>Clarification Request 17.</u> In line with the applied tool and guidelines, the PP shall clarify if there is evidence on early CDM consideration for the proposed AR-CDM project	C.5	The project start was based on positive experiences gained under Moldova Soil Conservation Project (MSCP) for which two ERPAs were signed in 2004 (with the World Bank Prototype Carbon Fund) and 2006 (with the World Bank BioCarbon Fund). By start of the current project, carbon payments had been received (in 2004 and 2005) for GHG reductions, instilling confidence in CDM market potential and desire to go forward with the current project. During a World Bank mission undertaken in October 2005, the possibility of a follow up operation was discussed. MCFDP PIN was submitted to World Bank BioCF in spring 2006 and the project itself was initiated November 2006, when the first planting activity began. [Evidence: E 12,16, 17, 18, Aide-Memoire of World Bank mission October 6-10, 2005; BTOR of same mission, Agenda of same mission, email	Further information and evidence is provided concerning early consideration and project timeline. CR closed

		exchange, E 23/ 24 Aide Memoire of World Bank mission October 2006 mentioning PIN submission in March 2006, E14_Moldova PIN March 2006]]	
Clarification Request 18. <ul style="list-style-type: none"> Clarify why the benchmark is applicable to the project and provide respective evidence to the audit team. Provide calculation of the financial analysis which are fully traceable (fully interlinked Excel file) Provide evidence for all input parameter to the financial analysis. Consider residual value in the financial analysis Provide traceable calculation of the sensitivity analysis. Clarify why a wood price increase of 30% is adequate for the sensitivity analysis 	C.5	<ul style="list-style-type: none"> There are no special credits for forestry activities in Moldovan commercial bank. So the rate of the National Bank of Moldova is chosen as the required rate of return (RRR) to repay the loan. Annex 16 Financial and Sensitivity Analysis and TARAM Annex 11 are attached. Sources of all input parameters are presented in Financial Analysis (E11) Residual value has been applied in financial analysis. Sensitivity analysis has been carried out for the case of the increase of wood products with 30% and tCO₂ up to 7 \$US [Annex 16, E 11_Sources] Higher electricity prices (of up to 30%) in Moldova in 2006 have led to price pressure on wood and coal resources 	<ol style="list-style-type: none"> According to the document "Statistics of base rate on NBM long-term loans (over 5 years) for 2006-2007", the basic rate was 10.5% for 2006-2007. This figure was used in the calculations. [http://www.bnm.md/en/fm_base_credit_rate?redirect=1] Clarify why the benchmark is applicable to the project activity, in particular also considering that it is less conservative than the benchmark used in the CDM guidelines Provide fully interlinked Excel calculations. The PP shall provide references for all sources for input parameters (incl. value of timber production, machinery, ...) Residual Value has been considered in the calculation in line with good practice for investment analysis Sensitivity analyses have been included in the PDD and provided to the audit team. The sensitivity analysis has been provided for a wood price increase of 20%. Clarify why a wood price increase of 20% is adequate for the sensitivity analysis, considering increases in wood process over the last years.
		Financial analysis was verified and improved. Formulas were inserted, some sources were added; The reforestation is a long term investment. Moldova's decision as a public agency to undertake the reforestation activity conforms the project activity as long-term investment. The interest rate of long term loans assessed by the National Bank of Moldova is the applicable	<ol style="list-style-type: none"> Clarification has been provided concerning the use of the benchmark. The project participant now uses the benchmark of 9% provided in the CDM guidelines for the financial analysis (IRL 118). A fully interlinked excel sheet is provided with the financial analysis (IRL 118)

	<p>benchmark to public agencies as the National Bank of Moldova is a central bank that is a decision making entity on macroeconomic and monetary policies decisions of Republic of Moldova. All the public agencies of Republic of Moldova follow the policies and guidelines of the National Bank of Moldova. Therefore, interest rate on the long term loans published by National Bank of Moldova is the benchmark rate for the project. The interest rate on long term loan (benchmark) applicable at the time of Moldsilva's decision to initiate the project in 2005-2006 was 10.5%. This rate was chosen as the benchmark rate for conducting the investment analysis.</p> <p>-</p> <p>The Guidelines on the Assessment of investment analysis" (EB 62 Annex 5) were used for conducting investment analysis using benchmark. The paragraph 8 of the Appendix to Guidelines suggests default expected return on equity of 9% for afforestation/reforestation projects in Republic of Moldova. Given that the Guidelines have been published in 2011 while Moldova investment decision was in 2005 we consider it more appropriate to consider National Bank of Moldova's interest rate for long term loans as the benchmark rate. Calculations are presented with both rates – 10.5% and 9.0%. The IRR of the project without carbon is significantly lower than 10.5% and 9.0%. Therefore, the project is additional.</p> <p>-</p> <p>In sensitivity analysis for the timber price was used the scenario with 50% increase/decrease, taking into consideration the trend for timber prices in Moldova during 2002-2006 that demonstrates the average increase in price by 53.8% (please see the Ref No 116 _Timber price trend 2002 2006 and Ref No 22a Sensitivity Analysis).</p>	<p>3. References are provided for the input parameters. Basic input parameters have been calculated by using the Technological tables from Moldsilva (IRL 102) and other information (IRL 101, 103,104, 105, 106, 107); examples for the calculations have been provided (IRL 117)</p> <p>4. Closed.</p> <p>5. References for timber prices have been provided (IRL 104) and found acceptable by the DOE. An additional sensitivity analysis has been conducted accordingly with a scenario of an increase/decrease of 50% (rounded) in timber prices. No weighting according to the actual volumes of the different wood products has been done. (IRL 116)</p> <p>The PDD has been adapted accordingly.</p> <p>As per requirement, the PP shall not alter the PDD template (all pages need to be in portrait format)</p>
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		<p>For the purpose of calculation the figure 53.8% was rounded at 50%.</p> <p>-</p> <p>For the requested values the explanation on calculations is provided (please, see the attachment Ref No 117_ examples of basic parameters calculation from financial analysis).</p>	
		PDD was updated	<p>The PDD format has been adjusted to portrait format.</p> <p>CR Closed</p>
<p><u>Clarification Request 19.</u> Clarify the prohibitive character of each barrier.</p>	C.5	<p>Analysis of barriers is described in section B6. Sub-step 3b.</p>	<p>There is no section B6.</p> <p>No evidence were provided to the PDD to sustain the barriers as per AR-CDM additionality tool and CDM guidance on barrier, the PP shall provide transparent and documented evidence for the barrier.</p>
		<p>As per A/R CDM Additionality Tool, if after sensitivity analysis it is concluded that the proposed A/c CDM project activity without the financial benefits from the CDM is unlikely to be financially most attractive then PPs can proceed directly to Step 4 (Common practice analysis), skipping the Step 3 Barrier analysis. Relevant changes have been made in the PDD.</p>	<p>The barrier analysis has been excluded from the PDD in compliance with the regulations of the methodology.</p> <p>CR closed</p>
<p><u>Clarification Request 20.</u> In line with the applied methodology the PP shall clarify if repetition of the forestation performed without being registered as the A/R CDM project activity is possible.</p>	C.5	Please refer to section C.5.	<p>Section A.7 of the PDD shows that none of the projects areas were partly forested.</p> <p>No forestation performed without being registered as an A/R CDM project activity would have been possible as described by the PP in section C.5 of the PDD.</p> <p>CR closed</p>
<p><u>Clarification Request 21.</u> • Clarify how the region was defined for the</p>	C.5	<ul style="list-style-type: none"> • Common practice analysis has been carried out at national level, because the project 	<p>Provide relevant data/evidence in the PDD under C.5 common practice analysis.</p>

<div>common practice analysis.</div> <ul style="list-style-type: none">Clarify how much reforestation activities were carried out in the region, and clarify if essential distinctions are observed.Provide respective evidence to the audit team	<div><div>sites are distributed on the whole territory of the country.</div><ul style="list-style-type: none">Reforestation rates at national level, i.e. on all types of lands, have been approximately 4,000 ha/ year 1996-2005. However, reforestation rate on degraded lands has been extremely low in the same period (only around 250ha in the absence of CDM).Evidence: Annex 8_pre AR rate</div>	<div>According to TARAM the “Average annual pre-project AR area in the region encompassing the project activity” is 1315.1 ha/year.</div> <div>According to the Annex 8 the average afforestation rate for the line “degraded lands transferred into forest fund” is 327 ha/year for the period 1996-2005. Similarly, for the line “clearing and empty areas included in the forest fund” the average afforestation rate is 645 ha/year.</div> <div>For the period 1996 – 2001 the afforestation rate on lands outside the forest fund is 5 ha/year. For the period 2002- 2005 the rate is 6759 ha/year</div> <div>Provide traceable information and references on pre-project afforestation and the calculations in the PDD</div> <div>As required in the additionality tool, clarify what are essential distinctions between the existing AR activities and the proposed AR-CDM project activity</div>			
	<div><div><div><div>- Data provided in Table 17: Afforestation/reforestation of degraded lands during 1995-2001 has been added in PDD (Ref. No 21 Pre-AR Rate).</div><div>- Main difference between pre-project forestation activities and proposed CDM project activity:</div></div></div></div> <table><tr><td colspan="2">Main differences between:</td></tr><tr><td>Pre-project forestation activities</td><td>Proposed CDM activity</td></tr></table>	Main differences between:		Pre-project forestation activities	Proposed CDM activity
Main differences between:					
Pre-project forestation activities	Proposed CDM activity				

		Forestation activities area carried out on <u>all categories of land</u>	<u>Degraded lands</u>	<p>Provide reference on the following data:</p> <p>Total area of degraded land (ha) available for restoration through afforestation and reforestation activity at the national level in 2006 ha = 86,832 ha (no respective figure was found in the references provided)</p>
		Forestation activities area carried out on: <u>All types of land properties (state public, public property of local public administration and private property)</u>	<u>State public, public property of local public administration</u>	
		Forestation activities area carried out on: <u>All categories of land use (degraded arable lands, degraded orchards and vineyards, degraded stands, cutting areas, degraded pastures, glades and open place etc.)</u>	<u>Only lands uncovered with forest vegetation at the date of 31.12.1989.</u>	
		Benefits obtained from Pre-project forestation activities include: <u>forest wood and non-wood products; ecosystem services (water air, recreation)</u>	<u>Benefits: forest wood and non-wood products; ecosystem services (water air, recreation) plus additional benefits obtained from selling of carbon emission reductions</u>	
		Investments for forestation activities come from: <u>the state budget, Moldsilva's budget, National Ecological Fund, private invested (limited)</u>	<u>Investments for CDM project are provided from Moldsilva's budget.</u>	

		Reference has been provided	<p>Reference confirming the data for reforestation has been provided (IRL 124) The respective information is in line with the PDD.</p> <p>CR closed</p>
<p><u>Corrective Action Request No 7.</u> The PP shall follow the PDD guidelines and present tables for data and parameters.</p>	C.7	All required tables are completed in PDD.	<p>Tables are provided in the PDD according to the methodology</p> <p>All information on the parameter shall be presented in the PDD as required by the PDD guidelines and in line with the methodology</p>
		Sections C7/E4 have been updated.	<p>Sections C7/E4 have been partly updated.</p> <p>Information is required on all parameters and to be presented in the PDD according to requirements of the PDD guidelines C.7/E.4 and the methodology (II.11/III.6, the complete list)</p> <p>(Mark as not applicable, if not needed).</p> <p>The PDD form 3 version 5 requires in C.7 "Data and parameters that are available at validation". E.4 requires the same and in addition "Data and parameter to be monitored. The Methodology AR-AM0002 Version 03 provides in II.11 a detailed list with "Data needed for ex ante estimations" All these data/parameters need to be completely presented in the PDD in the required format. If data/parameters are not needed, indicate with "not applicable. Same procedure is required for E.4.</p> <p>Clarify also the R/S factor in the same context: Different R/S factors are used for baseline (pre-existing biomass IRL 119) and in TARAM</p> <p>Clarify use of different numbers in C7 and TA-</p>

			<p>RAM for: $\Delta C_{LB,ijk}$</p> <p>Different value as in TARAM Pre_AR cell F300: 1958,59</p> <p>Clarify why there is no distinction of different tree species/species groups</p> <p>There are parameters not listed in the PDD.</p>
		<ul style="list-style-type: none"> • Tables in PDD Section C7 and E4 have been updated and completed for ex-ante parameters. • Data and parameter listed in methodology AR-AM0002 v.3, section II.11 that pertain to actual ex-ante GHG removals by sinks estimations are listed in section D.1 (Table 31). All parameters are now listed in the PDD. • Consistency between R/S factors used in pre-existing biomass calculations (IRL 119) and in TARAM has been ensured, both calculations use the same factors. • $\Delta C_{LB,ijk}$ value in section C.7 has been changed, and provided by tree species/species groups. The value in the PDD is the same as in TARAM. 	<p>Data and parameters used are provided as per species according to the requirements of the methodology; the PDD has been adapted accordingly.</p> <ul style="list-style-type: none"> • Table 31 in section D1 has also been updated with values and parameters needed for ex ante GHG removals estimations in line with the methodology. • The R/S factor of Juglans regia (0.24) is used in the calculations of pre-existing Biomass, as it is the dominating species. Values calculated in IRL 119 for "Baseline net removal by sinks cumulative from pre-existing biomass" are copied into TARAM worksheet "CERs" • The values provided in the PDD for parameter $\Delta C_{LB,ijk}$ are the same as in TARAM, but the reference in the PDD in the respective parameter box is not correct. (The PDD page 61 refers to (IRL 119 "worksheet Pre-existing Biomass calc. cells AW48:AX50" (see also TARAM Pre-AR D319 and D320)). <p>The calculation file "REF 119 Annex 9_Pre-</p>

			existing Biomass 10 04 2012.xlsx" is not in line with requirements, the cells are not fully inter-linked, partly inconsistent and input values are not always clearly identified or traceable. The file format is not accepted by UNFCCC (has to be *.xls for upload)
		<ul style="list-style-type: none"> • Values for ΔCLB_{ijk} are now consistent in the PDD, TARAM Pre-AR worksheet, and IRL 119 calculation spreadsheet. • Calculation spreadsheet "REF 119 Annex-9_Pre-existing Biomass" has been revised. • A more conservative estimation of GHG removal from pre-existing biomass (i.e., 3591 vs 15,528 tCO₂e at year 30) is presented due to changes in the approach to estimate such source. While the new estimations are based on incremental-growth-per-tree data derived from generic yield tables for forest in the Ukraine and Moldova, previous estimations were based on Robinia pseudoacacia yield tables adjusted by the number of sampled trees. We found this new approach conservative. As a result, relevant changes were made in the previous REF 119 file. These changes can be tracked in the attached track-change version of this file. In addition, previous tables 23 and 24 on pre-existing biomass were deleted from the PDD as their content is not relevant under the revised calculations. 	<ul style="list-style-type: none"> • Values for $\Delta C_{LB,ijk}$ are now consistent in PDD, TARAM and pre-existing biomass calculations. The calculation spreadsheet for the pre existing biomass calculation (IRL 119) has been revised. • A different approach has been chosen for the calculations. Incremental growth is now calculated based on incremental growth per tree (IRL 119 and 128). The PDD has been revised accordingly. Calculations and sources have been checked and found in line with CDM requirements. <p>CAR closed</p>
<p>Clarification Request 22. Clarify if pre-existing vegetation is considered in the calculations according to the methodology.</p>	C.7	<p>Yes, pre-existing vegetation is considered in the calculation. See section C.7 in PDD.</p> <p>[Evidence: Ref No 28a_preexisting veget.]</p>	<p>There is a detailed description provided in the PDD, how pre-existing woody vegetation is recognised, delineated, sampled and measured.</p> <p>The equation $V = 0,39 \times D^2 \times H$ is described in</p>

			<p>the PDD.</p> <p>For Annex 9: provide fully traceable file with formulas or references (as softcopy) for input parameters (e.g. incremental growth, m³)</p>
		<p>In the description of the equation $V = 0,39 \times D^2 \times H$ in the PDD, D was described in cm, but it should be in m, this was corrected - in Pre-existing vegetation the figures were verified and formula were included (Please see Ref No 28a_preexisting veget _eng_24.07.2012)</p>	<p>Traceable information and references have been provided. (IRL 28a, 97, 98, 99)</p> <p>CR closed</p>
<p>Clarification Request 23.</p> <ul style="list-style-type: none"> Clarify what are references for all input parameters used in the calculations. Clarify whether baseline carbon stock changes are significant. Clarify which baseline strata are used calculating baseline and project removals. Adapt numbers of equations in accordance to the methodology 	C.7	<ul style="list-style-type: none"> All references are presented in two separate documents E11-Sources of parameters for Ex-Ante Calculation and PDD section C.7 parameters available at validation. To proof/ discuss significance of carbon stock changes is not requested by the methodology. Strata considered in calculating baseline and project removals are four: Robinia in poor soils, Robinia in rich soils, Quercus in poor soils, Quercus in rich soils. Numbers of equations adapted in PDD. 	<ul style="list-style-type: none"> Data and parameter available at validation are presented according to the methodology and PDD format (C.7.). References mentioned in E11 (IRL 18) need to be provided in softcopy to the DOE. Assure correct names/location of the reference Baseline carbon stock changes are according to the methodology not considered Information of the baseline strata used in the calculations is missing in this section of the PDD. Numbers of equation have been adapted. Equation B3 is typed incorrect in the PDD
		<p>Section C.7. of the PDD was completed with the following text:</p> <p>“For the calculation of removals resulted from AR activity under the baseline scenario, annual pre-project afforestation rate (58.47 ha) was divided between 2 strata according to the principles and proportions applied under the project:</p> <ul style="list-style-type: none"> <i>Rich soil stratum</i> – 43.49 ha (74.4% from annual pre-project quote); <i>Poor soil stratum</i> – 14.94 ha (25.6% from annual pre-project quote) 	<p>Information on the baseline strata used for the calculation has been provided in this part of the PDD.</p> <p>Correct names of references and sources have been provided.</p> <p>Provide consistency with values of pre-project afforestation rate in TARAM and PDD.</p> <p>The final results of the “Estimation of the ex</p>

		<p>After the division of relevant strata into groups of species using the same principle and proportions applied (see Step 4). The following 4 strata were obtained:</p> <ul style="list-style-type: none"> • <i>Robinia_Rich Soils/soluri bogate</i> – 42,95 ha (73,5% from annual pre-project quote); • <i>Robinia_Poor Soils/soluri sărace</i> – 14,49 ha (24,8% from annual pre-project quote); • <i>Quercus_Rich Soils/soluri bogate</i> – 0,53 ha (0,9% from annual pre-project quote); • <i>Quercus_Poor Soils/soluri sărace</i> – 0,46 ha (0,8% from annual pre-project quote); <p>When performing direct calculations (Worksheet "Pre-AR" in TARAM) the same parameters of species related to the growth, density were used. The results of baseline removals due to pre-AR activities are presented in Table 24."</p> <p>Equation B.3 was replaced with corrected one.</p>	<p>ante baseline net GHG removals by sinks" need to be provided in a table according to the PDD-form.</p>
		<ul style="list-style-type: none"> • Wood density factors have been harmonized between Annex 9 and TARAM. For pre-existing biomass calculations we are conservatively using the wood density of <i>Juglans regia</i> (0.64). Based on the measurements of 39 sample plots, <i>Juglans regia</i> was the most representative species (with a total of 67 trees). See worksheet "species parameters" in REF 119 Annex 9. • The equation B.3 on PDD page 76 has been corrected; it is the same as in the methodology. • Methodology has been fully applied (see p. 75) 	<p>Consistency of pre project afforestation rates in TARAM and PDD has been provided.</p> <p>The "Final results of the Estimation of the ex ante baseline net GHG removals by sinks" has been provided in a table according to the PDD-form.</p> <p>There is a difference in wood density for Robinia in "REF 119 Annex 9_Pre-existing Biomass Analysis 09 12 2012" (= 0.6) and in TARAM (= 0.7). This is not in line with CDM guidelines.</p>

			<p>The equation provided in the PDD section C7 Page 67 as B.3 is not in compliance with the methodology.</p> $\Delta C_{BAR_{gh,j}} = [\Delta C_{BAR_LB_Tree_{gh,j}} + \Delta C_{BAR_S_{gh,j}}] \quad (B.3)$ <p>The methodology needs to be fully applied; In the PDD information an Step 5 and Step 6 are missing (see methodology page 7)</p>
		Respective updates were done in the PDD and TARAM.	<p>The wood density for Robinia in IRL 119 has been adapted to the value in TARAM ($D = 0.7 \text{ t d.m. m}^{-3}$ in accordance to IRL 88). For pre-existing biomass calculations the density value of Juglans regia has been used, which can be considered as conservative and therefore can be accepted to be in line with CDM requirements.</p> <p>The equation B3 has been corrected and is now in line with the methodology.</p> <p>Step 5 and 6 is included in the PDD as required by the methodology.</p> <p>CR closed</p>
<p>Clarification Request 24. Clarify if the Excel spreadsheet (TARAM) is applicable for the version of the methodology applied in this project activity. (see also CR above; C7).</p>	D.1	<p>TARAM is fully applicable for ARAM0002 version 1 of the methodology. However, minor differences exist between versions number 1 and 3 of this methodology:</p> <ul style="list-style-type: none"> • Baseline: verifiable changes in carbon stocks of pools • Omission of some sources of GHG emissions as per 2008 EB CDM guidance. 	<p>Clarify if the Excel spreadsheet (TARAM) is applicable for the version of the methodology applied in this project activity.</p> <p>Include respective information.</p> <p>Clarification on the use of TARAM has been provided to the DOE. It is accepted as a calculation tool.</p>

		In principle, TARAM is fully applicable for AR-AM0002 version 1 of the methodology and is not applicable for the version 3 of the approved methodology but it was used for the calculation as the most appropriate one.	The correct version of the methodology shall be indicated in the CER calculations
		The correct version of the methodology has been included in TARAM, worksheet "Meth"	Indication for Methodology AR-AM0002 version 3 in the TARAM has been provided. CR closed
<p><u>Clarification Request 25.</u></p> <p>Clarify why the parameter chosen for each species is justified in line with the methodology, in particular considering that parameter per species group are applied.</p> <p>The PP shall provide traceable information on calculation of all input parameters.</p>	D.1	<p>Detailed information for species used in calculation are provided in several sections: section A5 of the PDD, TARAM Annex 11, Romania, Moldova and Ukraine's yield tables Annex 13a, 13b.</p> <p>For traceable information on calculation of all input parameters please refer to section C.7, E.3, E.4 in PDD, Evidence E 11_Sources of parameters (IRL 18), and E 25_Root to Shoot Calculation (IRL 120).</p>	<p>Note: PDD Page 71: for estimation of below ground biomass: R to S is step 1.</p> <p>Provide all sources listed in the PDD/annexes/evidence as softcopy to the DOE.</p> <p>Sambucus is included in the Quercus group, which has however significantly different properties. The meth requires the parameters such as wood density, root-shoot, BEF etc per species. Therefore, justify the conservativeness and applicability of the chosen parameters for species groups (Quercus and Robinia).</p>
		<p>-Sambucus was deleted from the listed shrub species because it was not used in this project. At the moment calculations are made based on main species. During the first monitoring event all planted species will be measured and included in calculations.</p> <p>- We consider the conservativeness use of parameters for species groups based on predominant species (Quercus and Robinia), because associations / groups of species for planting have practically the same parameters and growing performance:</p> <ul style="list-style-type: none"> - Wood density of main species and those species included in one group differs with 	<p>Softcopies of the required references have been provided to the DOE.</p> <p>The species used in the proposed project activity shall be clearly identified and/or species groups shall be clearly justified in the PDD in line with CDM requirements</p> <p>Values used for CER calculations shall be listed in the PDD as required by the PDD guidelines and methodology.</p> <p>(NB: as per PDD template the values should be in section C.7 or section E.4)</p>

		<p>about 10%:</p> <ul style="list-style-type: none"> - Stratum Quercus: <i>Quercus robur</i> (0.675), <i>Fraxinus</i> spp. (0.662), <i>Carpinus</i> (0.775), <i>Acer</i> spp. (0.660), <i>Pyrus</i> spp. (0.687); - Stratum Robinia: <i>Robinia pseudoacacia</i> (0.7), <i>Gleditsia triacanthos</i> (0.720), <i>Sophora japonica</i> (0.680), <i>Ulmus</i> spp. (0.520), <i>Acer</i> spp. (0.660). <p>Average growth (for existing forests, based on forest inventory) also differs among the group with about 10%:</p> <ul style="list-style-type: none"> - Stratum Quercus: <i>Quercus robur</i> (3.0 m3/year), <i>Fraxinus</i> spp. (3.5 m3/year), <i>Carpinus</i> (3.5 m3/year), <i>Acer</i> spp. (3.2), <i>Pyrus</i> spp. (3.3 m3/year); - Stratum Robinia: <i>Robinia pseudoacacia</i> (3.9 m3/year), <i>Gleditsia triacanthos</i> (3.3 m3/year), <i>Sophora japonica</i> (3.3 m3/year), <i>Ulmus</i> spp. (3.2 m3/year), <i>Acer</i> spp. (3.2 m3/year). <p>Sources:</p> <ol style="list-style-type: none"> 1. Ref. No 88 2. Ref. No. 99 3. Ref. No. 109 	<p>Ensure consistency between PDD section A.5, D1(list of parameters per species) and the CER calculations (TARAM)</p>
		<ul style="list-style-type: none"> • Growth of all species the proportion of which is >5% of the project has been calculated. All other species representing <5% of the project plantations (including shrubs) have been grouped in the category of "other broadleaf hardwoods". See Table 7 Project Species and Strata, PDD p. 16, and main species description PDD pp.18/19. • All input values in TARAM have been sustained. Pre-AR annual growth data (worksheet Pre-AR) now fully coincide with stand model growth data (worksheets SM1-SM4). In addition, all growth is sustained with calculations in worksheet "Growth calculation" of 	<p>Information about the 3 different species groups has been added in the PDD section A.5.3.</p> <p>The values provided for 2 of the 3 different groups do not vary significantly.</p> <p>Species groups need to be justified and further sustained in line with the CDM requirements.</p> <p>Concerning A.5.3 clarification on the following is still needed:</p> <ul style="list-style-type: none"> • <i>Corylus avellana</i> and <i>Cornus mas</i> appear in species group 2 and 3. • The table provided needs to be numbered.

		<p>REF 120.</p> <ul style="list-style-type: none"> Planting density has been used as the conversion factor for above ground biomass calculations (t.d.m./ tree to t.d.m./ha-1). <p>Section A.5, list of parameters in D.1 and TARAM are now consistent.</p>	<ul style="list-style-type: none"> No shrub group is declared in the table. <p>GHG calculations have not been provided in fully traceable excel sheet (TARAM). Input values have not been completely sustained. (e.g. Pre-AR B49/C49, D49/E49, F298, G289) Therefore GHG calculations and number of CERs cannot be confirmed by the DOE.</p> <p>Clarify in "REF 120 Annex 11a_inputs for stand models and pre AR" whether conversion factor has been used to calculate Above Ground Tree Biomass (t) to AGBG (t.d.m.ha-1))</p> <p>Ensure consistency between PDD section A.5, D1(list of parameters per species) and the CER calculations (TARAM)</p>
		<p>The PDD and TARAM have been updated accordingly</p>	<ul style="list-style-type: none"> Calculations based on species groups have been erased and are now based on the single species values. Tree and shrub species representing less than 5% of the project plantations are grouped together under "other broadleaf hardwoods" as described in the PDD (IRL 109, 120, 126). Input parameters used in TARAM (IRL 119) for CER calculations have been sustained. Sources are provided also in IRL 119 and IRL 120. The calculation of "Above Ground Tree Biomass [t d.m.ha⁻¹]" in IRL 120 had been clarified to the DOE. Consistency between list of parameters provided in PDD section D.1, information provided in PDD section A.5 and values used for calculations in TARAM has been provided.

			<p>There are still inconsistencies in TARAM:</p> <ul style="list-style-type: none"> In the sheet "Pre-AR" cell E19 is not the total of E13, E14. The source of the values shall be identified
		<ul style="list-style-type: none"> Inconsistency corrected. Source of value: calculation based on expert opinion on the geographic coverage of the pre-project A/R. 	<p>The inconsistency in the TARAM sheet has been corrected.</p> <p>The expert opinion as source of value can be accepted with additional information provided in the PDD and in the Act on Technical Reception (IRL 135).</p> <p>CR closed.</p>
<p><u>Clarification Request 26.</u></p> <p>Clarify how uncertainties are being handled (methodology section II.10).</p>	D.1	<p>According to the EB 63 Annex 26 accounting for uncertainty "shall not be enforced" and in PDD format v.5. there is no special chapter foreseen for this issue.</p> <p>In addition, as per section II.10 of the methodology, it ensures that the net anthropogenic GHG removals by sinks are estimated under the project in a conservative manner, taking into account the uncertainties associated with the secondary data. All sources of secondary data are listed in the PDD.</p>	<p>EB 63 Annex 26 applies for "verification of registered A/R CDM project activities" and not for validation.</p> <p>Sources of secondary data listed in the PDD and presented to the Audit team during (IRL 32) were selected from GPG or whenever available, from referenced local data.</p> <p>CR closed.</p>
<p><u>Corrective Action Request No 8.</u></p> <p>The PP shall provide relevant data according to the methodology (section II.11) in the PDD to the audit team (see also section E.4)</p>	D.1	<p>Relevant data presented in the PDD (Table 24) according to section II.11 of the methodology.</p> <p>All data according to the Section II.11 from the methodology were introduced in Section E.4</p> <p>All parameters listed in Section II.11 of the methodology have been listed in the PDD as follows: Section C.7 (Estimation of ex-ante baseline net GHG removals by sinks) and E.4 (Monitoring of the actual net GHG removals by sinks) have been filled out using tables as required by the PDD format. All data and parameters pertaining to ex-ante calculations have been included in section D.1 (Ex-ante estimations of actual net</p>	<p>The required information according to the methodology II.11 is not provided in table 24 of the PDD.</p> <p>The list of parameters is provided in section D1 of the PDD in accordance with the methodology.</p> <p>However the information on respective parameters need to be fully provided as required by the PDD guidelines.</p> <p>In particular the parameter for needed for ex-ante calculation need to have information on value applied, source of data, justification/measurement procedures, etc.</p>

		GHG removals by sinks) using the table format provided in the methodology (section II.11).	
		The PDD was updated accordingly	<p>Required information has been provided in the PDD sections C.7 and D.1 in accordance with the methodology.</p> <p>Section E.4 has been adapted; all parameters are included and in line with the methodology.</p> <p>One parameter is missing:</p> <ul style="list-style-type: none"> 2.1.2.15 Proportion of biomass burnt; however this parameter is not applicable as it is not foreseen to burn any biomass in the project. <p>One inconsistency has been detected:</p> <ul style="list-style-type: none"> 2.1.1.46 Soil organic carbon with 95% in the mean per ha; this parameter is described with a confidence interval of 90% in the PDD instead at the required 95%; this is not in line with the methodology.
		<ul style="list-style-type: none"> Equation 28 of the methodology allows for the 90 percent confidence in the mean per hectare. Therefore, there is an inconsistency in the methodology, it seems that version 3 of the methodology was revised to allow for 90 percent confidence level, but this variable in Table in Section III.6 was not revised. 	<p>The equation M28 in the methodology version 2 is described with a confidential interval of 95%, while it was 90% in the applied Version 3.</p> <p>The table in section III.6 of the methodology version 3 the former confidential interval is still mentioned;</p> <p>Nevertheless the value of the confidential interval of 90% as described for equation M28 in methodology version 3 is acceptable to the DOE.</p> <p>CAR closed</p>
<p>Clarification Request 27.</p> <p>Clarify if Standard Operational Procedures (SOPs) for the monitoring parameters identified in section E.1, as well as QA/QC are applied in the project.</p>	E.1.1	Relevant SOPs for monitoring parameters in section E.1.1 have been included in the PDD, Annex 4 Monitoring Plan, and E15_CDM Operations Manual.	<p>The monitoring parameters are not listed in table 28 as mentioned in the PDD page 78.</p> <p>SOPs developed by BioCarbon Fund are provided and QA/QC procedures described for forest establishment in the PDD.</p> <p>Information in the PDD to be provided that SOPs from "Manual for Monitoring of CDM Af-</p>

			<p>forestation and Reforestation Projects, Part I - Standard Operational Procedures" of the Bio-Carbon Fund (IRL 97) have been adopted for the Project. See CR 1</p> <p>CR closed</p>
<p>Clarification Request 28. Clarify how sample plot were designed and calculated (per strata) as required by the applied methodology</p>	E.2	<p>Calculation of sample plots has been revised and assuring strata-wise calculation. See Annex 12_Calculation of Sample Plots of the PDD.</p>	<p>Provide traceable information on calculation of all input parameters.</p> <p>The figures of the calculations in the spreadsheet and the PDD are not consistent.</p>
		<p>Figures in PDD are correct. Correct Ref. No 20_Calculation of Sample Plots is provided.</p>	<p>Consistency between reference (IRL 20) and PDD has been provided. Explanation on calculation of sample plots is provided. The audit team assessed the calculations and found them in compliance with the requirements.</p> <p>CR closed</p>
<p>Clarification Request 29. Clarify how sample plots are allocated and located and if there are respective procedures established</p>	E.2	<p>The following description of plot location was added in the PDD:</p> <p>For the purpose of defining the location of PSP, the following procedure was applied:</p> <ul style="list-style-type: none"> - First, all sectors of a respective stratum were grouped together in an excel database. - Based on the predefined number of PSP, Visual Basic Application was used to randomly generate the project sectors in which the PSP would be located. - For the determination of location of PSP within the previously identified sectors, a specially developed computer module (RandRoute) was used to randomly generate GPS coordinates within those sectors. These coordinates represent one corner (SW) of the PSP. <p>In Addition, details of sample plot location in every stratum are provided in Annex 12_Sample Plot calculation (IRL 20) and procedures to define sample plot location can be found in E15_CDM</p>	<p>Explain: visual basic application</p> <p>Provide further information on location of plots and data to be documented (SOP)</p> <p>Provide information in the PDD according to Meth. III.2.e. plot location.</p>

		Operations Plan, p.8 (IRL 122).	
		Please see the attached Ref. No. 110 _Visual Basic Application.	Information on “Visual basic application” has been provided to the DOE and is accepted. (IRL 110) Further information concerning location of plots and documentation of data has been satisfactorily provided (IRL 122). CR closed.
<u>Corrective Action Request No 9.</u> The PP shall provide data as required by the methodology section III.6 in tables as required by the PDD template including value applied and source of data.	E.4	In PDD Section E.4. Data and parameters to be monitored was completed	Provide complete data as required by the methodology section III.6.
		All data listed in section III.6 of the methodology are provided in Section E.4	Data has been listed as required. CR closed
<u>Clarification Request 30.</u> Clarify if SOPs and QA/QC are available for relevant parameters	E.4	SOP and QA/QC are available for relevant parameters in the BioCF Manual for Monitoring of AR CDM projects E 15_CDM Operations Plan and Section E of PDD.	SOPs developed by BioCarbon Fund are provided and QA/QC procedures described. (IRL 97) See comments in CR 1. CR closed
<u>Corrective Action Request No 10.</u> The PP shall include information on QA/QC as required by the PDD guidelines	E. 6	Additional QC and QA are part of the project CDM operational plan and the BioCarbon Fund Manual for Monitoring of AR CDM projects.	SOPs developed by BioCarbon Fund are provided and QA/QC procedures described. (IRL 108) See comments in CR 1. CR closed
<u>Clarification Request 31.</u> Clarify operational and management structures	E.7	Operational management structure has been clarified in Section 6 of E15_CDM Operations Plan, and Section E.7 of the PDD.	Clarification is provided in the PDD. CR closed
<u>Clarification Request 32.</u> Clarify what are legal requirements for EIA in Moldova	F.1	The national EA legal basis is presented in two main laws: Law on Environmental Protection (1993) and Law on Ecological Expertise and Environment Impact Assessment (1996). These laws introduce the concept of state ecological	Legal information concerning the requirement for EIA has been provided and found as in line with the requirements of the methodology. CR closed

		<p>review (literally, state ecological “expertise” SEE) which seeks to examine the compliance of proposed activities and projects with the requirements of environmental legislation and standards. The SEE precedes decision-making about activities that may have an adverse impact on the environment. Financing of programs and projects is allowed only after a positive SEE conclusion has been issued.</p> <p>In the document E19_List of Sources completed Law nr.851, 29/05/1996 on Ecological expertise and environmental impact assessment is listed (Legea privind expertiza ecologica si evaluarea impactului asupra mediului inconjurator)</p>	
<p><u>Clarification Request 33.</u></p> <ul style="list-style-type: none"> • Provide EMP to the DOE • Provide information on comments received from stakeholders (NGOs, academia and state institutions) • Clarify where the EIA was published for stakeholder comments • Provide information on monitoring 	F.2	<ul style="list-style-type: none"> - EIA and EMP were provided to DOE; - The workshop/round table dedicated to the presentation and discussions of the EIA and EMP for MCFDP was organized by the Forestry Research and Management Institute jointly with the Regional Environmental Centre from Moldova (REC Moldova). Twenty six representatives from NGOs, academic institutions, education institutions and mass-media etc. participated in the event. <p>The summary of MCFDP and relevant invitation to take part in the discussions of EMP were sent to about 150 organizations and institutions. At the same time, the Report on the EIA and EMP were posted on the web-site of Forestry Research and Management Institute on December 15, 2008 (www.icas.com.md), being available for public consultations and discussions.</p> <p>In the result of active discussions the following conclusions, recommendations and proposals have been reached:</p> <p>a) The timeliness of MCFDP and its positive environmental impact are recognized;</p>	<ul style="list-style-type: none"> • EMP and EIA have been provided to the DOE. • Provide information on comments received from stakeholders (NGOs, academia and state institutions) • The EIA was published on the web site of the Forestry Research and Management Institute on December 15, 2008 www.icas.com.md • Provide further information on monitoring and the carbon monitoring schedule as per EMP.

		<p>b) The necessity of more active cooperation of Agency "Moldsilva" with NGOs in managing of forests, especially the community forests;</p> <p>c) Ensuring the sustainability of new created forests through the cooperation with local population, schools etc.;</p> <p>d) To involve local population in forest management planning and maintenance of community forests and forest vegetation;</p> <p>e) At the selection of planted species to take into consideration the preferences of local communities, for ex. fast growing species, melliferous species etc.;</p> <p>f) Necessity of periodic information of local population on the project implementation, as well as on the implementation of other programs related to the spreading of forests and other types of forest vegetation.</p> <p>- The EMP includes a Monitoring Plan with measures that will be employed to track the effectiveness of the Mitigation Plan and described the environmental indicators to be monitored, along with the monitoring methods, frequency, costs, as well as the monitoring and reporting procedures, including institutional arrangements for the implementation of this plan</p>	
		No comments have been received after the publication.	<p>Information has been provided that no comments had been received after publication.</p> <p>Further information on monitoring schedule has been provided in the PDD in accordance to the EMP.</p> <p>CR closed</p>
<p>Clarification Request 34.</p> <p>Clarify how stakeholders were involved in the consultation process and provide evidence to the audit team.</p>	H.1	Please see annex Ref No. 111_Minutes workshop REC_ICAS_EIA&EMP 12.02.2009	<p>Information and evidence has been provided (IRL 111) to the audit team concerning stakeholder consultation.</p> <p>CR closed</p>

<p><u>Clarification Request 35.</u></p> <p>Provide information and references on the implementation of mitigation measures to the audit team.</p>	H.3	<p>As it is shortly described in PDD, Moldsilva provided detailed answers to the stakeholders and implemented mitigation measures to address the received comments. This can be demonstrated with few examples:</p> <ol style="list-style-type: none"> 1. Ref No 112 Authorization for agricultural crops. This authorization was issued by Forestry Enterprise Chisinau for local people from primaria Balabanesti (18 persons, which are listed on the page 2 of the annex) to whom is permitted to grow agricultural crops (beans, corn etc.) between the planted forest. The cadastre contour is indicated 646-591, area- 5 ha. Also it is stipulated the special condition for the use of this authorization: "with the observance of Forest Code's provision: without bringing any damages to forest crops". 2. Ref 113 Planting of forest by local people. This present the "voucher for the works" issued for the planting of forest crops in primaria Roscani (FE Chisinau), list of local people, with whom the Working Contracts were signed (page 2 and 3) for the execution of work for forest crop planting. 	<p>Required information has been provided concerning the implementation of mitigation measures (IRL 112, 113)</p> <p>CR closed</p>
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Table 3 : Unresolved CAR / CR / FAR

Not applicable



Annex 2: Information Reference List

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date																
1.		Persons interviewed during the on-site audits (Name, Institution, Position)	4 - 10 Mar 2012																
		<table><tr><th>Name</th><th>Organisation</th></tr><tr><td>Galupa, Dumitru</td><td>Director FRMI, PIU Manager</td></tr><tr><td>Talmaci, Jon</td><td>Scientific Director FRMI, PIU</td></tr><tr><td>Spitoc, Liliana</td><td>PIU</td></tr><tr><td>Rofaru, Petru</td><td>Chief Director of Forest Fund</td></tr><tr><td>Varzari, Alexandru</td><td>IT, PIU</td></tr><tr><td>Franka Braun</td><td>World Bank, Bio Carbon Finance</td></tr><tr><td>Rama C. Reddy</td><td>World Bank, Bio Carbon Finance</td></tr></table>		Name	Organisation	Galupa, Dumitru	Director FRMI, PIU Manager	Talmaci, Jon	Scientific Director FRMI, PIU	Spitoc, Liliana	PIU	Rofaru, Petru	Chief Director of Forest Fund	Varzari, Alexandru	IT, PIU	Franka Braun	World Bank, Bio Carbon Finance	Rama C. Reddy	World Bank, Bio Carbon Finance
		Name		Organisation															
		Galupa, Dumitru		Director FRMI, PIU Manager															
		Talmaci, Jon		Scientific Director FRMI, PIU															
		Spitoc, Liliana		PIU															
		Rofaru, Petru		Chief Director of Forest Fund															
		Varzari, Alexandru		IT, PIU															
		Franka Braun		World Bank, Bio Carbon Finance															
		Rama C. Reddy		World Bank, Bio Carbon Finance															
In addition community members were interviewed during the field visits.																			
2.	Moldsilva	Project Design Document (PDD), final Version No. 7	02 Nov 2012																
3.	Moldsilva	GIS files (shape-files)	25 Jun 2012																
4.	Forestry Research and Manage-ment Institute	Forest Monitoring Plan	2011																
5.	Moldsilva	List of land parcels of the Project and their characteristics	15 Sep 2011																
6.	Moldsilva	Cadastral map including soil of the project area	21 Mar 2011																
6a.	Moldsilva	Cadastral maps, assessed on site	21 Mar 2011																
7.	Moldsilva	Data on degraded status of the project sites	22 Apr 2009																
8.	Moldsilva	Cadastral information on land use of the project sites	24 Sep 2008																
9.	Moldsilva	Certificate from territorial land use and cadastre office	17 Oct 2011																
10.	Moldsilva	Certificate from primaria	21 Mar 2011																
11.	Moldsilva	Letter to UNFCCC concerning the national definition of forests (Annex 7a)	09 Dec 2003																
12.	The World Bank	Letter of intent	21 Sep 2007																

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
13.	DNA Republic of Moldova	Letter of Approval for the proposed AR-CDM project activity	30 Apr 2010
14.	Moldsilva	Contract with primaria	21 Mar 2011
15.	Moldsilva	Additional agreement with primaria on carbon rights	21 Mar 2011
16.	Moldsilva	Romania yield tables	1973
17.	Moldsilva	Yield tables for Ukraine and Moldova	1987
18.	Moldsilva	Parameters used in ex ante estimation of the actual net GHG removals by sinks	12 Sep 2011
19.	Moldsilva	CER Calculations (final version)	Nov 2012
20.	Moldsilva	Spreadsheet showing calculation of size of sample plots	15 Aug 2012
21.	Moldsilva	Afforestation/reforestation statistics before the project	1996
22.	Moldsilva	Economic analysis of MOLDSILVA	22 Sept 2012
22a.	Moldsilva	Sensitivity analysis of the project	30 Jun 2012
23.	Moldsilva	Calculation of baseline soil carbon	12 Sep 2011
24.	Moldsilva	Baseline soil plots	30 Mar 2010
25.	Moldsilva	List of meetings, trainings and seminars	31 Mar 2011
26.	Moldsilva	Definitions of erosion categories	15 Sep 2011
27.	Dumitru Galupa, Ion Talmaci, Lilia-na Spitoc	Baseline study v3 update 19.09.2011 developed by "Forestry Research and Management Institute"	19 Sep 2011
28.	Moldsilva	Report on the measurement of pre-existing vegetation	09 Apr 2012
28 a	Moldsilva	Excel Sheet pre-existing vegetation	24 Jul 2012
29.	The World Bank	Environmental Impact Study	2009
30.	The World Bank	Environmental Management Plan	2009
31.	Moldsilva	Report on inventory of stocks of pre-existing tree biomass in the area of MOLDOVA community FORESTRY DEVELOPMENT project	22 Jun 2012
32.	Moldsilva	Source data for ex ante estimations	20 Jun 2012
33.	Giurgiu, V., Decei, J. and Armasecu. S.,	Biometria arborilor și arboretelor din România – Table dendrometrice. Editura "CERES", Bucuresti;	1972

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
34.	Gosudarstvennyi Komitet SSSR po lesnomu hozeastvu	Normativno-spavochnye materialy dlea taksatstyi lesov Ukrainy i Moldavii. Kiev "Uroжай" (Ukrainian and Moldavian Yield Tables), p. 225; p. 259.	1987
35.	Government of the Republic of Moldova	Land Code (no 350-XIV/July 12, 2001)	12 Jul 2001
36.	Government of the Republic of Moldova	Forest Code (law no. 887/June, 21, 1996)	21 Jun 1996
37.	Government of the Republic of Moldova	Water Code (no. 440-XIII/ April, 27, 1995)	27 Apr 1995
38.	Government of the Republic of Moldova	Law on Rehabilitation of Degraded Lands through Afforestation (1041-XIV/June, 15, 2000)	15 Jun 2000
39.	Government of the Republic of Moldova	Strategy on Sustainable Development of Forestry Sector (no. 350-XV din 12.07.2001)	12 Jul 2001
40.	Government of the Republic of Moldova	National Strategy and Action Plan for Biodiversity Conservation (no.112-XV/April 27, 2001)	27 Apr 2001
41.	Government of the Republic of Moldova	National Strategy and Action Plan for Biodiversity Conservation (no.112-XV/April 27, 2001)	27 Apr 2001
42.	UNEP	UNEP/ GRID Arendal Central and Eastern Europe, Caucasus and Central Asia: Moldova Soil Erosion, UNEP 2005	2005
43.	Summer, Wolfgang/ Dierenhofer, Wolfgang	Soil Erosion in the Republic of Moldova – the importance of institutional arrangements, in: Erosion Prediction in Ungauged Basins: Integrating Methods and Techniques, IAHS Publication no. 279, 2003, iahs.info/redbooks/a279/iahs_279_0024.pdf	2003
44.	Boboc, Nicolae et al.	Contributions to Spatial Landslide Assessment in the Bac Tableland; in: ANALELE Universității „Ștefan cel Mare” Suceava SECȚIUNEA GEOGRAFIE ANUL XVIII – 2009	2009
45.	The World Bank/ FAO	Rural Productivity in Moldova- Managing Natural Vulnerability, The World Bank Sustainable Development Department Europe and Central Asia Region, p.7	2007
46.	Moldsilva	Technical description for nurseries (review onsite)	04 Mar 2012
47.	Inst. De Cercetari pentru Pedologie, Agrochimie si Hidrologie	Sistemul informational privind calitatea invelisului de sol al Republicii Moldova (banca de date) (The information system on the quality of the soil cover of Moldova (the database), Chisinau, Pontos,	2000
48.	Kisnew	National guidelines: Îndrumările tehnice pentru regenerarea pădurilor și împădurirea terenurilor forestiere din Republica Moldova” (reviewed onsite)	1996
49.	Moldsilva	Technical guidelines for the stands management in Moldova, Forestry Research and Management Centre Chisinau, 1995	1995
50.	UNFCCC/IPCC	Draft decision -/CMP.1 Land-use, land-use change and forestry (LULUCF) from CP. 7 "Marrakech Ac-	10 Nov 2001

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
		cords" on the definitions, modalities, rules and guidelines relating to LULUCF under the Kyoto Protocol.	
51.	W. Summer, W. Diernhofer	iahs.info/redbooks/a279/iahs_279_0024.pdf	Jul 2003
52.	Government of the Republic of Moldova	National Bureau of Statistics of the Republic of Moldova, Livestock and Poultry as of January 1 (2003-2010), http://www.statistica.md/pageview.php?l=en&idc=315&id=2281	1 Jan 2012
53.	Government of the Republic of Moldova	The government decision no 636, 26/05/2003 of Republic of Moldova (degraded lands)	26 Mar 2003
54.	Chisholm, A., and R. Dumsday, Eds	<i>Land Degradation</i> , Cambridge Univ. Press, Cambridge	1987
55.	Barrow, C. J.	<i>Land Degradation</i> , Cambridge Univ. Press, Cambridge	1991
56.	Eswaran, H., R. Lal and P.F. Reich	Land degradation: an overview	2001
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58.	FAO	National Soil Degradation Maps. http://www.fao.org/landandwater/agll/glasod/glasodmaps.jsp	2008
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60.	Dr. Ilie BOIAN, National Focal Point of UNCCD, Director of SHS	Summary on World Day to Combat Desertification, June 17, 2011 "Forests Keep Drylands Working", http://www.meteo.md/mold/17062011en.htm	17 Jun 2011
61.	Government of the Republic of Moldova	Forest Code, N. 887-XIII from 21/06/1996Monitorul Oficial N.4-5/36 from 01/01/1997.	01 Jan 1997
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63.	Government of the Republic of Moldova	Law on Natural Resources, N.1102-XIII from 06/02/1997, Monitorul Oficial N.40/337 from 19/06/1997.	19 Jun 1997
64.	Government of the Republic of Moldova	Law on Environmental Protection, N.515-XII from 16/06/1993, Monitorul Oficial N.10/283 from 30/10/1993.	30 Oct 1993
65.	Government of the Republic of Moldova	Law on State Protected Natural Areas Fund, N.1538-XIII from 25.02.98, Monitorul Oficial N.66-68/442 from 16/07/1998.	16 Jul 1998
66.	Government of the Republic of Moldova	Law on the Improvement of Degraded Lands through Afforestation, N. 1041-XIV from 15/06/2000, Monitorul Oficial N.141-143 from 09/11/2000.	09 Nov 2000
67.	Government of the Republic of Moldova	Decision of the Parliament, N.350-XV from 12/07/2001 on the Strategy for Sustainable Development of Forestry Sector, Monitorul Oficial N.133-135 from 08/11/2001.	08 Nov 2001

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
68.	Government of the Republic of Moldova	Decision of the Parliament approving the National Strategy and Action Plan on Biological Diversity Conservation, N.122-XV from 27/04/2001, Monitorul Oficial N.90-91/700 from 02/08/2001.	02 Aug 2001
69.	Government of the Republic of Moldova	Decision of the Government nr. 595 as of 29/10/1996 "On the Improvement of the Management of Forestry Economy and Protection of Forest Vegetation".	29 Oct 1996
70.	Government of the Republic of Moldova	Decision of the Government nr. 636 as of 26/05/2003 "On the Approval of the Program for Land Development and for the Improvement of Soil Fertility".	26 May 2003
71.	Government of the Republic of Moldova	Decision of the Government nr. 737 as of 17/06/2003 "On the Approval of the State Program for Afforestation and Regeneration of the Lands from the Forest Fund for the period of 2003-2020".	17 Jun 2003
72.	Government of the Republic of Moldova	Decision of the Government nr. 739 as of 17/06/2003 "On the Implementation of the Strategy for Sustainable Development of the National Forest Sector".	17 Jun 2003
73.	Government of the Republic of Moldova	Decision of the Government nr. 740 as of 17/06/2003 "On the Approval of Statutory Acts for the Management of Forestry Economy".	17 Jun 2003
74.	Government of the Republic of Moldova	Decision of the Government nr. 618 din 04/06/2007 „On the approval of the list of indicators for each criteria of sustainable forest management”	04 Jun 2007
75.	Government of the Republic of Moldova	Decision of the Government nr. 187 din 20/02/2008 „On the approval of the Regulation on the rent of forest fund with the purpose of game and/or recreation management”.	20 Feb 2008
76.	Giurgiu V., Armăsescu S	Biometria arborilor și arboretelor din România. Editura Ceres București M. S. (1985);	1972
77.	Shoch, D., Brown, S., Galupa, D., Talmaci, I. and L. Spitoc.	Moldova Soil Conservation Project Monitoring Plan	2003
78.	Moldsilva	Tiurin method	10 May 2012
79.	Dr. Galina Sabanova	Biodiversity report (in Russia)	2008
80.	Government of the Republic of Moldova	Law on Ecological Expertise and Environment Impact Assessment	29 May 1996
81.	Moldsilva	Technical guideline for seed collection (review onsite)	2003
82.	Moldsilva	Guideline for eligibility assessment	15 Mar 2012
83.	Moldsilva	Afforestation document (including information on pre-existing vegetation)	2007
84.	OECD	OECD guidance on ODA	
85.	Moldsilva	Internal order from Moldsilva on Planting start (reviewed onsite)	2006
86.	Moldsilva	Reforestation statistics	Mar 2012

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
87.	Kapp et al	Wood density	2003
88.	Furniture and wood good trial and certification centre	Wood samples trial report (Russian)	2003
89.	Moldsilva	Operation plan for monitoring	15 Jun 2012
90.	Moldsilva	Programme for plot location, based on GIS	Mar 2012
91.	Moldsilva	Study on Flora	2008
92.	Moldsilva	Study on Avifauna	2008
93.	Forestry research and management Institute	Baseline Information (Annex 3, PDD)	08 Oct 2008
94.	Moldsilva	Price List 2005	2005
95.	Moldsilva	Price List 2006	2006
96.	TÜV-SÜD	Field Sheets of the onsite visit of the audit team	9 Mar 2012
97.	Isaev A.S, Korovin G.N., Utkin A.I.et al	Estimation of carbon pool and its annual deposition in phytomass of forest ecosystems in Russia, [Original Russian title Otsenka zapasov i godichnogo deponirovaniya ugleroda v fitomasse lesnyh ekosistem Rossii]	1993
98.	Utkin A.I., Zamolodchikov d.g., Korovin G.N.	Estimation of carbon stock on sample plots: comparison of allometric method and conversional-volume method.[Original Russian title: Opredelenie zapasov ugleroda nasajdenii na probnyh ploshchadei: sravnenie allometricheskogo i konversiono-obemnogo metodov	1997
99.	Osadchev V.G., Ivankov P.T., et al	Guide for wood processing [Original Russian title: Spravochnik po derevoobrabotke]	1955
100.	UNFCCC	“Guidelines on the Assessment of investment analysis” (EB 62 Annex 5) http://cdm.unfccc.int/Reference/Guidclarif/reg/reg_guid03.pdf	2011
101.	Moldsilva	Calculations based on Order of Moldsilva for the establishment of categories of labour remuneration Nr.30-P, 18.02.2005;	18 Feb 2005
102.	Moldsilva	Technological tables approved by the Agency Moldsilva, 2006	2006
103.	Moldsilva	Order of Moldsilva 47-p, 13.03.2006 on approval of Catalogue of prices for planting material for 2006	
104.	Moldsilva	Information on cost of non-wood forest products	2006
105.	Moldsilva	Contract on hunting lease (no 21 dated 14.10.2006)	14 Oct 2006
106.	Moldsilva	Volumes & prices wood products_total 2006. Complete title: Volume harvested per sortiment: Calculation based on the Report on the harvesting of timber during different treatments (types of treatment, assortment, species etc.)	2006

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
107.	Moldsilva	Volumes & prices wood products by enterprises. Complete title: Price of Timber per sortiment: Calculation based on the Report on wood products volume and price by forestry entities subordinated to the Agency "Moldsilva", 2006	2006
108.	World Bank, Carbon Finance Unit (Alvaro Vallejo, Rama Chandra Reddy, Marco Van der Linden)	Manual for Monitoring of CDM Afforestation and Reforestation Projects Part I - Standard Operational Procedures	2011
109.	Ministry of the Environment and Natural Resources, United Nations Environment Program	National Inventory Report – Greenhouse Gas Sources and Sinks in the Republic of Moldova	2009
110.	Alexandru Varzari	Description Visual Basic Application	2007
111.	World Bank	Minutes Workshop REC ICAS EIA&EMP	2009
112.	Forest Enterprise Chisinau	Authorization for Agricultural Crops	25 May 2006
113.	Forest Enterprise Chisinau	Planting of Forest by Local People	28 Nov 2008
114.	Moldsilva	Contract Hirtop	16 Feb 2012
115.	Moldsilva	Contract Alexandreni	16 Feb 2012
116.	Moldsilva	Timber Price Trend	14 Aug 2012
117.	Moldsilva	Example Basic Parameters calculation	02 Aug 2012
118.	Moldsilva	Financial analysis parameters with sources, modified 24.07.2012	24 Jul 2012
119.	Moldsilva	Annex 9_Pre-existing Biomass (Excel file: "Annex 9 pre-existing Biomass Analysis.xls")	Nov 2012
120.	Moldsilva	Annex 11 a_inputs for stand models and pre AR	04 Oct 2012
121.	Japan PHRD	Japan PHRD Technical Assistance Program	2008
122.	Moldsilva	E 15_CDM operational plan MCFP_June 15 2012_eng	15 Jun 2012
123.	Moldsilva	E 10_Financial analysis parameters with sources_modif_24.07.2012	24 Jul 2012
124.	Republic of Moldova	Cadastru 2006_terenuri degradate	25 Apr 2006
125.	Moldsilva	E 25_Calculation the root to shoot ratio Moldova_IT	15 Aug 2012
126.	Euro. Forest Institute	The EFISCEN Inventory Data Base (online)	2012

Ref.No.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Date
127.	TÜV-SÜD	Parcels visited during on site	04 Mar 2012
128.	Sachsse, H	Einheimische Nutzhoelzer. 1984, Hamburg: Parey. 160pp	1984
129.	IPCC	IPCC GPG LULUCF	2003
130.	Forest Research and Project Institute, Bucuresti	Simplified Yield tables, Ministry of Forest Economics, Forest Research and Project Institute, Bucuresti	1968
131.	Blujdea, V. et al.	Blujdea, V. et al., Allometric biomass equations for young broadleaved trees in Romania, in: Forest Ecology and Management, October 2011	Oct 2012
132.	Moldsilva	Technical Instructions on start of planting	Nov 2006
133.	The World Bank BioCF	Aide Memoire Mission October 2005	Oct 2005
134.	Moldsilva	BioCF PIN 2006_eng	Mar 2006
135.	Moldsilva	Act on Technical Reception 1996-2005	1996
136.	Gheorghe ALARU, Minister, Ministry of Environment	Email: confirmation of LoA by DNA of Republic of Moldova	29 Oct 2012
137.	The World Bank BioCF	Aide Memoire Mission November 2008	Nov 2008
138.	Moldsilva	Progress Report Aug 2010	Aug 2010
139.	The World Bank BioCF	Minutes Virtual Concept Review	19 May 2009
140.	The World Bank BioCF	Virtual Concept Review	06 Feb 2009
141.	UNFCCC	http://cdm.unfccc.int/Projects/Validation/index.html	30 Oct 2012
142.	Moldsilva	Moldova Soil Conservation Project, http://cdm.unfccc.int/Projects/DB/SGS-UKL1216031019.22/view	30 Jan 2009

Annex 3: Appointment Certificates



Industrie Service

CERTIFICATE OF APPOINTMENT

Mr Hetsch, Sebastian, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date	23.03.11					

Qualification as						
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		23.03.11	23.03.11	23.03.11		

Other qualification					
Country Expertise					
Region	1	2	3	4	5
Date	23.03.11				
Financial Expertise					
Date	23.03.11				

Qualification in technical areas	
Technical Area	Date
14.1_Forestry	23.03.11

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0006/02.

Date	Signature
23.03.12 Extension of Validity	<i>Thomas Kleiser</i>



Industrie Service

CERTIFICATE OF APPOINTMENT

Mr Seitz, Martin, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date	23.03.11					

Qualification as						
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		01.03.12	01.03.12			23.03.11

Other qualification					
Country Expertise					
Region	1	2	3	4	5
Date	23.03.11				
Financial Expertise					
Date					

Qualification in technical areas	
Technical Area	Date
14.1_Forestry	23.03.11

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0020/03.

Date	Signature
23.03.2012 Extension of Validy	



Industrie Service

CERTIFICATE OF APPOINTMENT

Mr Nichiforel, Liviu, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date	24.02.2012	24.02.2012				

Qualification as						
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date						

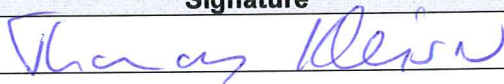
Other qualification					
Country Expertise					
Region	1	2	3	4	5
Date					
Further countries	Moldova, Romania				
Financial Expertise					
Date					

Qualification in technical areas	
Technical Area	Date

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0076/001.

Date	Signature
24.02.2012	



Industrie Service

CERTIFICATE OF APPOINTMENT

Ms Wagner, Karin, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date	23.03.11					

Qualification as						
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		23.03.11	23.03.11	23.03.11	23.03.11	

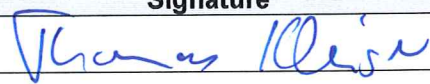
Other qualification					
Country Expertise					
Region	1	2	3	4	5
Date	23.03.11				
Financial Expertise					
Date	23.03.11				

Qualification in technical areas	
Technical Area	Date
1.2_Energy generation from renewable energy source	23.03.11

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0015/02.

Date	Signature
23.03.12 Extension of Validity	



Industrie Service

CERTIFICATE OF APPOINTMENT

Mr. Opitz, Martin, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

Qualification applicable to						
Standard	CDM	JI	GS	VCS	VER	Other
Date	20.05.11					

Qualification as						
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		23.07.12	20.08.12			20.05.11

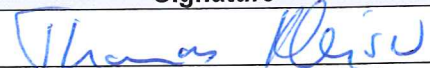
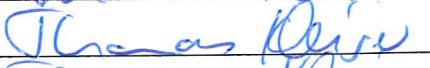
Other qualification					
Country Expertise					
Region	1	2	3	4	5
Date	20.05.11				
Financial Expertise					
Date					

Qualification in technical areas	
Technical Area	Date
14.1_Forestry	20.05.11

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0059/04.

Date	Signature
20.05.2012 Extension of Validity	
23.07.2012	
20.08.2012	