Industrie Service

Choose certainty.
Add value.

Validation Report

FIRST CLIMATE AG

VALIDATION OF THE CDM-PROJECT: REFORESTATION OF GRAZING LANDS IN SANTO DOMINGO, ARGENTINA

REPORT NO. 1215648

16 November 2010

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

Industrie Service

Report No.	Date of first issue	Revision No.	Revision Date	Certificate No.
1215648	14 Jun 2010	2	16 Nov 2010	-

Subject: Validation of a CDM Project

Accredited TÜV SÜD Unit:	**TÜV SÜD Contract Partner:**
TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich, Germany	TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199 80686 Munich, Germany
Project Participants: Novartis Pharma AG Fabrikstrasse 1, Forum 1 Basel, Switzerland Novartis Argentina S.A. Ramallo 1851 Buenos Aires, Argentina	**Project Site(s):** Santo Domingo in the Department of Ituizango, Province of Corrientes, Argentina. The PDD includes information on geographic boundary and in line with EB 41 guidance item 34, digital boundary files are provided jointly with this report (in shapefile format).

Project Title: Reforestation of grazing Lands in Santo Domingo, Argentina

Applied Methodology / Version:	AR-AM0005 / Version 03	**Scope:**	14
		Technical Area(s):	14.1 and 14.3

First PDD Version:		**Final PDD version:**	
Date of issuance:	12 Aug 2008	Date of issuance:	15 Nov 2010
Version No.:	01	Version No.:	05.1
Starting Date of GSP	26 Aug 2008		

Estimated Annual Emission Reduction: 66,038 t CO_2-e

Assessment Team Leader:	**Technical Reviewer**
Sebastian Hetsch	Robert Scharpenberg
Assessment Team Members:	**Certification Body responsible:**
Hubertus Schmidtke	Thomas Kleiser
Juan Chang	

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 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

Industrie Service

Table of Contents Page

INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set forth 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 whether a project activity is valid and should be submitted for registration to the CDM Executive Board (CDM-EB). The ultimate decision on the registration of a proposed project activity rests with the CDM-EB and the Parties involved.

The project activity covered by this validation report was submitted under the project title: “Reforestation of grazing Lands in Santo Domingo, Argentina”.

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 sectoral scope applied for
- 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 a first PDD version, 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, e.g. certain conditions allow the GSP to be repeated, a request to revise the PDD will be processed. The original PDD and the modified PDD will form the basis for the final evaluation. Information on both versions of the PDD is presented on page 1.

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

2 METHODOLOGY

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the project participants. The assessment is based on the "Clean Development Mechanism Validation and Verification Manual" version 1.02. The work starts with the appointment of the team covering the technical scope(s), technical area(s) and relevant host country experience for evaluating the CDM project activity. Once the project is made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up actions, resolution of issues identified, and finally preparation of the validation report. The prepared validation report and other supporting documents then undergo an internal quality control by the CB "climate and energy" before submission to the CDM-EB.

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

The validation protocol serves the following purposes:

- It organizes details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator has to document how a particular requirement was validated, as well as the results of the validation and any adjustments, if any, made to the project design.

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**	**PDD in GSP**	**Final PDD**
The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further sub-divided. The lowest level constitutes a checklist question / criterion.	*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.*	*The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any **Request** has to be substantiated within this column*	*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.*	*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.*

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

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**
If the final conclusions from table 2 result in a denial or a Forward Action Request the referenced request should be listed in this section.	*Identifier of the Request.*	*This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion with a clear reference to the requirement which is not complied with or the details of the FAR.*

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 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 five qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Validator (Validator)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)
- Techncial Reviewer (R)

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

Name	Qualification	Coverage of scope	Coverage of technical area	Host country experience
Sebastian Hetsch	ATL	☑	☑	
Juan Chang	Validator	☑	☑	☑
Hubertus Schmidtke	Validator	☑	☑	

Sebastian Hetsch is appointed as Assessment Team Leader (ATL) and GHG-Validator by the certification body "climate and energy" of TÜV SÜD. Mr Hetsch holds a university degree in forest science. He passed extensive training on auditing of GHG projects. Before joining TÜV SÜD he worked for several years in the field of international forest policy and management at the United Nations' Food and Agricultural Organization (FAO) and at university.

Juan Chang is a GHG-Validator for forestry projects appointed by the certification body "climate and energy" of TÜV SÜD. He is a forest engineer with more than ten years working experience in forestry and land-use related projects. Since 2007 he has participated in more than ten audits as member of the Audit Team for forestry projects under the CDM and different voluntary standards.

Dr. Hubertus Schmidtke is a GHG-Validator for forestry projects appointed by the certification body "climate and energy" of TÜV SÜD. He holds a PhD title in field of forest science who is specialized in forest inventory design and the monitoring of carbon pools in afforestation and reforestation projects. He has received extensive training in CDM related issues and has audited several afforestation and reforestation projects.

2.2 Review of Documents

The first version of the PDD was submitted by the PP to the DOE in August 2008. 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 03-07 November 2008, 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.

Name	Organisation
Griselda Guarino	GMF
Jorge Esquivel	GMF
Heinrich Burschel	GMF
Markus Lehni	Novartis International AG
Daniel Magnano	Novartis Argentina S.A.
Joachim Sell	First Climate AG
Maria Cristina Goldfarb	Forage Resource: Rangelands and Pastures- INTA

2.4 Further 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 needed to be clarified for TÜV SÜD`s conclusion on the project design. The CARs and CRs raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process the concerns raised and responses that were given are documented in more detail in the validation protocol in Annex 1.

The final PDD version submitted in November 2010 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

As final step of a validation activity the final documentation, which includes the validation report and the validation protocol, has to undergo an internal quality control by the CB “climate and energy”. That means that each report has to be approved either by the head of the CB or the deputy. In projects where either the Head of the CB or his/her Deputy is part of the assessment team, approval can only be given by the one not serving on the project. In this project, the technical review process of the Certification Body was carried out by Mr. Robert Scharpenberg to cover the scope and technical area.

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 Novartis Argentina S.A and Novartis Pharma AG. The host Party Argentina and further party involved Switzerland meet the requirements to participate in the CDM.

The DNA of Argentina issued a LoA (IRL 44) on February 8 2010 authorizing Novartis Argentina S.A as a project participant. The DNA of Switzerland also issued a LoA on August 23 2010 (IRL 56) authorizing Novartis Pharma AG as a project participant.

The LoA from Argentina was further double-checked with the CDM project webpage sponsored by the DNA of Argentina: Secretaria de Ambiente y Desarrollo Sustentable (http://www.ambiente.gov.ar/?idarticulo=6304), which confirms the approval of this CDM project. The LoA from Switzerland was also checked through direct communication via e-mail with Mr. Yvan Keckeis, representative of the DNA of Switzerland: Federal Office of the Environment (IRL 57).

TÜV SÜD received both letters directly from the project participants and confirms that the letter refer to the precise proposed CDM project activity title in line with the title in the PDD “Reforestation of grazing Lands in Santo Domingo, Argentina”.

These letters also indicate that Argentina and Switzerland are Parties to the Kyoto Protocol, and that the participation in the “Reforestation of grazing Lands in Santo Domingo, Argentina” project is voluntary for all project participants.

The Argentinean LoA also confirms that the proposed CDM project activity contributes to the sustainable development of Argentina (host country).

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

3.2 Participation

The participant Novartis Argentina S.A of the project activity was approved by the corresponding Party, which is confirmed with the issued LoA. The participant Novartis Pharma AG was also approved by the corresponding Party as indicated in 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 2,292 ha of grasslands with native species mix and exotic species for commercial purposes. The project area is located on the lands owned by a fiduciary located in Buenos Aires on behalf of Novartis Argentina S.A., in the Ituzaingo Department of the Province of Corrientes, in northern Argentina.

In order to address the non-permanence of AR-CDM projects, the PPs opted for lCERs over 20 years, 2 times renewable crediting period.

The region where the project is implemented shows subtropical humid conditions at the border to the tropical zone. In the baseline setting the areas are extensively managed grasslands covered mostly with native grass species and few standing trees, witnessing extensive grazing as most common land use.

The overall objective of the project is to sequester CO_2 through a forestry plantation composed of 75% native species and 25% exotic species in previously managed grasslands. In addition, the plantation will follow the FSC principles and criteria which provides further quality assurance to the management of the plantation and makes the project innovative compared to other reforestation activities in northern Argentina.

In regard to the PPs, the project is developed by Novartis Pharma AG, as a part of its voluntary emission reduction strategy. The ownership of the carbon rights is transferred from Novartis Argentina S.A. to Novartis Pharma AG via purchase agreement.

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-AM0005 version 03 was demonstrated.

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

- Interview with grassland experts from Instituto Nacional de Tecnologia Agropecuaria-INTA (www.inta.gov.ar/): Ing. Agr. Maria Cristina Goldfarb, PhD - Forage Resource: Rangelands and Pastures (IRL 1).

- Goldfarb, C. 2008. Identificacion de los pastizales Ea. Santo Domingo, Correintes - Argentina. (Identification of the pastures of the Santo Domingo estate). (IRL 17)
- Auditor field notes during the onsite visit (IRL 41).
- INTA, 2007. Soil analysis of the Santo Domingo estate. Ituzaingo, Corrientes – Argentina.

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

- Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" (Version 02)
- Tool for estimation of GHG emissions related to displacement of grazing activities in an A/R CDM project activity;
- Tool for testing significance of GHG emissions in A/R CDM project activities.

The methodology specific protocol documents the assessment process, which also includes the steps taken. The results on the compliance check, as well as the relevant evidence, are detailed in Annex 1.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the project activity. Emission sources, which are not addressed by the applied methodology, and 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 2,292 ha in one single discrete parcel of land. The boundary as defined in the field was found to be consistent with the indications in the PDD. In the field, the boundary delineation was cross-checked by the audit team with GPS.

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

- Maps (hard copy) of the plantation units (IRL 42)
- Digital boundary files in a Geographic Information System (GIS) (IRL 25).
- Field sheets including coordinates obtained from GPS point documenting the assessment of the audit team during the onsite visits (IRL 41)
- 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.

Regarding the **control over the project area**, it was confirmed that the project participant Novartis Argentina S.A. is holder of the property via a fiduciary (IRL 7). The corresponding documentation was reviewed and found established according to the legal system of the host country. Thus, control over the project area by the PP is considered to be established.

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

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

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:

- Historical land use based on 1988, 2000 and 2003 LANDSAT satellite imagery included to the PDD (IRL 43).

The 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 41). This assessment was conducted on the entire parcel of land in two teams during the onsite visit. The geo-referenced data gathered considered the current land use types, the ownership of the land, consistency with leakage estimates, consistency with baseline estimates and any indications on the presence of rare or endangered species. Based on this data 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 demonstrated in the historical land use based on satellite imagery interpretation (IRL 43). The document was reviewed by the audit team. Eligibility was also verified during interviews with experts on site, who confirmed that no forest had been on the project area since 1989 (IRL 1).

3.5.3 Baseline identification

The PDD identifies the baseline scenario as “Continuation of pre-existing land use activities” which is unmanaged grasslands. As foreseen by the methodology, a pre-project reforestation rate was also considered.

The information presented in the PDD was validated by a document review, the on-site visit of the project area (IRL 1, 41) and finally by cross-checking the information presented with similar relevant projects and literature. The sources referenced in the PDD were quoted correctly. The information was verified against credible sources, such as:

- Eco Consulting S.R.L. 2007. Environmental impact assessment. Forestry Project Santo Domingo (IRL 13).
- Statistics and Census Directorate 2008. Corrientes in numbers 2008. General Governmental Secretary (IRL 26)

Field visits and interviews sustained the chosen baseline approach as per CDM Modalities and Procedures: *Changes in carbon stocks in the pools within the project boundary from the most likely land use at the time the project starts*.

In the case of this project, continuation of 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 annual reforestation rate of 0.34% was considered for the region according to the methodology. Based on the evidence provided, the reforestable area in the department of Corrientes is around 2 700,000 hectares (IRL 45) and the reforestation activity is around 9 226 ha/year (IRL 46) resulting in an annual rate of 0.34%.

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 86 of VVM, TÜV SÜD confirms that:

1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence, and can be deemed reasonable;
4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
5. The approved baseline methodology 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 34). Correctness of calculations can be confirmed as they were replicated by the audit team using the information provided.

The values and estimates presented in the PDD are considered reasonable based on the documentation reviewed, further references and the result of the interviews 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 30, 31, 32 and 47). Detailed information on the verification of parameters used in the equations can be found in Annex 1.

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 can be considered correct.

3.5.5 Baseline stocks and greenhouse gas removals by sinks

The stratification process differentiated five baseline strata, based on the planting years and species composition following the stepwise approach described in the applied methodology.

Baseline stocks were estimated and considered for all relevant types of vegetation. The baseline carbon stocks changes were estimated to be 21,366 tonnes CO_2-e in pre-existing trees and carbon stock changes from pre-project reforestation activities in the region. Baseline carbon stocks were discounted in the overall calculations of net anthropogenic removals.

For the calculations, Biomass Expansion Factors were taken from local published data (IRL 48) values for Root-shoot ratio and Carbon Fraction were taken from the IPCC GPG LULUCF. The choice of data sources is considered adequate. Good practice in regard to forest inventory was followed in the context of the baseline assessment.

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 emissions from biomass burning, combustion of fossil fuels for onsite vehicles and removal of pre-existing non-tree vegetation. These sources have been discussed in the audit process and calculations were reviewed and found to be consistent with the project activities and in accordance with the methodology requirements.

Emissions from fossil fuels for onsite vehicle use are considered insignificant in the particular project context. Furthermore, according to EB report 44, the GHG emissions from fossil fuel combustion as well as from Nitrous oxide (N_2O) emissions from decomposition of litter and fine roots from N-fixing trees may be neglected in A/R CDM project activities.

Biomass burning as potential source according to the methodology was not considered by the participant, which is sustained by the fact that no indications were found through onsite mission and interviews that burning for site preparation is applicable to the project context.

In light of the non-relevance the corresponding parameters are not monitored. It is however underlined that the potential impact of unintended fires will be monitored via monitoring of potential natural impacts as covered by the section of boundary monitoring.

3.5.7 Leakage

The leakage sources according to the chosen methodology are GHGs emissions from displacement of pre-project grazing and fuelwood collection activities.

In regard to leakage from displaced grazing, the PP followed the steps indicated by the methodology and the corresponding tool for “Estimation of GHG emissions related to displacement of grazing activities”. Following the guidance provided in the mentioned tool, it was demonstrated that the animals were sold to an entity not involved in the CDM project activities or slaughter which does not result in leakage (IRL 49)
Leakage due to fuel wood collection is not relevant in the project region as verified during the field assessment and interviews with experts and therefore neglected (IRL1, 41).

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 were based on species specific growth models for the project site (IRL 46, 47, 48) and have been carried out in line with methodology requirements.

The plantation schedule of three years was considered in this context. For wood density the values were taken from published data specific for the site conditions of the selected species (IRL 50, 51, 52). The biomass expansion factor, Root-to-Shoot Ratio and Carbon Fraction were taken from IPCCGPG LULUCF 2006.

Over the crediting period of 20 years, total net anthropogenic removals of 1 320,775 t CO_2-e are expected. The calculations of the net anthropogenic GHG removals were carried out with an Excel based tool provided by World Bank (TARAM) (IRL 34). 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.

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 barrier analysis.

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

- Banco Mundial 2009. Estrategia de Desarrollo Productivo – Informe primera fase. Estrategia Competitiva para la Provincia de Corrientes (IRL 45).
- Juan Modesto Dellacha et al. 2007: Cadena forestal Argentina, FAM. (IRL 28)

Furthermore, the additionality analysis was discussed onsite with the project team, as well as with local experts on grasslands (IRL 1). Interviews on this topic were also carried out with stakeholders during the onsite visit (IRL 1, 41). The data, rationale, assumptions, justifications and documentation provided were checked using local knowledge and sectoral and financial expertise. The information provided by the PP was further cross-checked by:

- El Sector Forestal en Misiones y Noreste de Corrientes (http://www.misiones.gov.ar/ecologia/Todo/Bosques/Plan%20Maestro/InformeOlsenII.htm) (IRL 29)
- Bracamonte, P. 2006. La Provincia de Corrientes y su Ordenamiento Territorial. Secretaria de Planeamiento, Gobierno de Corrientes (http://www.plancorrientes.gov.ar/articulo/articuloDetalle.aspx?articuloid=268) (IRL 53)

Based on these validation steps TÜV SÜD confirms that the documentation assessed is appropriate for this project. Further analysis of the additionality is summarized in the sections below (3.6.1 – 3.6.4).

In essence, the project is considered additional as lands are reforested which otherwise would have remained grazing lands.

3.6.1 Start date and prior consideration of the CDM

The project started on 05 May 2007 determined by the initial site preparation activities of the plantation (IRL 24). Furthermore this is line with a planting plan as discussed during the onsite visit.

The CDM consideration prior to project start was documented through an internal Executive Board Meeting Report of Novartis Pharma AG dated 16 June 2006, which clearly indicates the decision to undertake an AR CDM project as a part of the voluntary emissions reductions strategy of the pharmaceutical company (IRL 27).

The project therefore complies with the requirement of prior CDM consideration.

3.6.2 Identifications of alternatives

The output of the project is installation of new plantations for commercial purposes on unproductive grazing lands.

Relevant alternatives were identified in the context of the additionality test: (i) continuation of pre-project land use activities (cattle farming), (ii) grassland management and soy production, (iii) forest plantations with exotic species (iv) implementation of project 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 is the most likely scenario in the absence of the project activity.

3.6.3 Barrier analysis

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

- Technological barriers
- Market barriers
- Investment barriers
- Institutional barriers

The main barrier preventing the implementation of the project without carbon credits is the **technological barrier**. The proposed CDM project activity is innovative in the sense of using mostly native species found in the native forest patches adjacent to the project area with little information on its growing patterns and management. Although there are other reforestation activities in the region, it was demonstrated that there are no similar activities undertaken with native species (IRL 28, 29), due to the limited access to planting material and current demand of timber products mainly from exotic species.

This particular arrangement of the plantation with native species also underlines the **market barrier.** As previously mentioned, the timber market in northern Argentina is mainly for exotic species and therefore there is a credible risk of market uncertainties for native species. The CDM incentive is expected to overcome such risk.

Other barriers identified by the project participants include **investment barriers** from the former land owner point of view. Even if the project would apply to the incentives available from the government for the first planting year (IRL 54), the longer rotation period of the hard wood native species compared to the exotic species and the market uncertainties previously described as well as the high transportation costs due to the location of the plantation, make this type of project of a high investment risk. Finally, **institutional barriers** related to low density of people in the region and lack of skilled labour reinforces the technological barrier initially identified.

The result of this assessment shows clearly that the barrier presented in the PDD can be considered real. This barrier does prevent the project activity from being implemented while it would not prevent at least the baseline of the project. This was confirmed based on the documentation review, interviews and local and sectoral expertise of the assessment team. The latter was i.e. confirmed by the interviewed stakeholders.

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

The project activity envisions supplying the necessary funding for project implementation, and in this manner overcome the identified barrier.

3.6.4 Common practice analysis

The region for the common practice analysis was defined as the geographical area of the department of Corrientes, where the project takes place. The assessment team reviewed the approach presented in the PDD and can confirm that relevant parameters such as location, ecological conditions, economical situation, and development were taken into account in

order to define the region (IRL 29). The chosen region has unique characteristics in regard to forest structure and population characteristics. Therefore, the presented approach can be considered appropriate for the common practice analysis.

The evidence provided shows a total reforested area in Corrientes is around 420 000 ha (IRL 56) while according to the most recent statistics (IRL 55) 42% of the wood production in the Province of Corrientes is from *Pinus sp* and 58% from *Eucaliptus sp.* According to the evidence provided, the reforestable area in the department of Corrientes is around 2 700,000 hectares (IRL 45) and the reforestation activity is around 9 226 ha/year (IRL 46) resulting in an annual rate of 0.34%. In order to assure conservativeness, this value is considered under the baseline scenario.

Furthermore, the onsite visit allowed the assessment team to verify that no other reforestation activities of similar design are conducted in the region, which was further confirmed with references from official sources provided as evidence (IRL 45, 55).

Therefore, it can be confirmed that the proposed CDM activity is not a common practice in the defined region, while considering the specific project design.

At the contrary, the project contains many elements of a “first-of-its-kind” CDM project as no indications were received by the audit team that other larger scale plantations with native species are comparable to the present project are in the region.

3.7 Monitoring plan

The monitoring plan presented in the PDD complies with the requirement of the methodology and the CDM Modalities and Procedures. The assessment team 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 GHG emissions and leakage was excluded due to non-relevance (see section 3.5.6).

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 4).

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 3, 35, 18).

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.

3.8 Sustainable development

The LoA of the Host Country Argentina 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 (IRL 3). The consultation process was conducted jointly with the FSC certification process.

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

The summary of comments presented in the PDD was cross-checked with the documentation of the stakeholder consultation (IRL 36) 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 checked 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.

An environmental impact study assessment was conducted as a part of the management plan of the plantation in the context of the FSC certification of the plantation (IRL 13). The PP is considered to have followed the requirements of the host country regarding the environmental and socio-economic impact assessment.

In essence, the audit team concluded that no negative environmental and social impacts are expected. This conclusion was also sustained by the results of the field visit of the audit team.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

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

The following table presents all gathered key information:

webpage: http://cdm.unfccc.int/Projects/Validation/DB/JBQRATSO9YD14WIEW0AUGUDA65K16M/view.html	
Starting date of the global stakeholder consultation process: 28 Aug 2008	
Comment submitted by: No comments received.	**Issues raised:** None
Response by TÜV SÜD: -	

5 VALIDATION OPINION

TÜV SÜD performed a validation of the following proposed CDM project activity "Reforestation of grazing Lands in Santo Domingo, Argentina".

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

The review of the project design documentation, subsequent follow-up interviews and further verification of references provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Therefore, 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. Emission reductions attributable to the project are additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

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

Munich, 16 November 2010

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

Munich, 16 November 2010

Sebastian Hetsch
Assessment Team Leader
TÜV SÜD Industrie Service GmbH

Table 1: Requirement Checklist

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
A. General Description of the Project Activity					
A.1 Title of the project activity					
Does the used project title clearly enable to identify the unique CDM activity?	2	DR, IV	Yes, the project is clearly identifiable. Title: Reforestation of grazing Lands in Santo Domingo, Argentina	☑	☑
Are there any indication concerning the revision number and the date of the revision?	2	DR	Yes, version number and date is consistent. Initial version has been version 01, dated 12th of August 2008. The latest version is 22nd September 2010.	☑	☑
Is this consistent with the time line of the project's history?	2	DR	Yes, timeline is consistent. The project started in 2007 and thus the PDD was developed after project initiation.	☑	☑
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? (indication on IAS or GMOs in large scale projects)	2, 3, 4	DR, IV	The PDD section includes a summary on the objective – which is the increase of carbon stocks, establishment of FSC certified plantations, environmental protection, and the supply of good quality wood for wood products industry - as well as the general processes of how the project is carried out. The project activity (planting) started in June 2007 and had initially planned a net planting area of 2,600. This area was reduced to 2,292ha due to a more detailed delineation of the project boundary. The project activity focuses on the	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			installation and management of a mixed plantation consisting of 75% of native species and 25% of fast growing exotic species. Novartis intends to establish a forest of high nature value with clear preference to native species. First step is to plant exotic species, mixed with native species. Native species will be preferred during thinning. Any losses of pinus will be replaced with native species. Status of FSC certification process: FSC-Certification done by Smartwood in February 2008. Certificate SW-FM/CoC-003026. Yearly revision expected		
A.3 Project participants					
Have the Parties and project participants participating in the project been listed in the table as required?	2	DR	Parties and participants have been indicated. In Annex 1 the contact details are correct. Initially it was foreseen that First Climate and GMF were also project participants, however due to contractual relationships beteween these two and Novartis Pharma AG it was decided to leave only Novartis Pharma AG and Novartis Argentina as project participants. **Corrective Action Request No.1.** Clarify who shall project participants. Assure consistency with Annex 1. For completion of table consider to put participants from one country in one cell only (Switzerland)	**CAR 1**	☑
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, 5, 56	DR	Letters of Approval from Argentina and Switzerland have been submitted authorizing the participants.	☑	☑
Do all participating Parties fulfil the participation requirements	2	DR	Yes, all criteria a complied with.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
as follows: - Ratification of the Kyoto Protocol - Designated a National Authority - Host Party DNA communicated minimum values for forest definition			For forest definition see http://cdm.unfccc.int/DNA/ARDNA.html?CID=10 **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** 22.5 | 1 | 3		
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	DR	The information on project location in regard to City/town/community has been provided in the PDD (Ituzaingó Department of the Province of Corrientes in northern Argentina)	☑	☑
A.4.2 Has an appropriately detailed geographic delineation of the project boundary including a unique identifier been included?	2	DR, IV	Overview maps of the two project areas are included to the PDD. The maps include scale, date, coordinates and coordinate system. **Corrective Action Request No.2.** Include a map that indicates the boundary and only the project area that will be planted during project activity, excluding natural forest patches and old Eucalyptus plantation. The boundary shall only include the net planting / reforestation areas. If there is discrete parcels they shall carry an identifier.	**CAR 2**	☑
AR-AM0005, section II.1					
Is the project boundary under control of the participants	2, 25,	DR,	The project is located in one discrete area of land. Each	**CR 1**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
geographically delineated? (using adequate sources remote sensing, certified top. maps, official records, etc; geo-referenced, preferably in digital)	4, 6, 7, 8, 9, 10, 1	IV	corner was identified geographically by using GPS. Coordinates and GIS layers of the boundary were provided during onsite visit. The total area is rounded to 2292 ha due to the accuracy of the GPS equipment used with few meters of error. Current owner according to land title is a trustee for Novartis. The transfer of the land is in the legal process according to Argentina laws. The trustee is the owner of the land until the approval of the border zone commission is issued. A positive statement from the provincial government Corrientes is given. At the end of the legal process of transfer of the land Novartis Argentina will be the owner. The transfer of the land is sustained by contracts. Carbon rights will be property of Novartis Argentina. Novartis Argentina is a subsidiary of Novartis Pharma AG Switzerland. The rights on carbon are contractually transferred from Novartis Argentina to Novartis Pharma AG. **Clarification Request No. 1.** It shall be clarified based on which document carbon rights were forwarded from the Trustee to Novartis (Argentina).		
Are the geographic coordinates of the boundary provided and included to the PDD?	2, 25	DR, IV	Coordinates and GIS layers of the boundary were provided.	**see CAR 2**	☑
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?	2,12, 13, 14, 15,	DR, IV	Climate, hydrology, soils and ecosystem are described in the PDD. The land conditions before project start were mainly pasture with native grass species. Some single trees and	☑	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
	16, 17, 18,		some natural forest patches along river sites. There is one river in the project area. Four different orders of soils. There is risk of water erosion and floods. The climate is classified as subtropical humid without dry station. A special study on site conditions has been elaborated. An EIA was conducted in the context of the land transfer. Following studies were elaborated in the context of FSC: studies on birds, amphibians, grasslands and natural forest patches. Discussion on flood risk and their impact on the plantations. There is a risk of flooding, since one part of the project area is next to the river Aguapey. This is considered in the management plan. Only Pinus is planted there, which tolerate temporary flooding. Compare Requests in section F on EIA:		
A.5.2 Have any rare or endangered species been defined as present?	2, 3, 13-16,	DR, IV	Within the project area no rare or endangered flora has been observed. In the nearby project region some animal species have been observed that are endangered. Their occurrence cannot be excluded from the project area. No endangered species are indicated in the FSC documents. FSC Criterion 6.2.1 was not met. **Corrective Action Request No.3.** Evidence on rare and endangered species (flora and fauna) and on impacts of the plantations on those species shall be provided.	**CAR 3**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
A.5.3 Have the species and varieties to be grown been adequately described?	2, 18, 19, 20, 21	DR, IV	Different types of native species shall build 75 % of the plantations after 10 years. In the initial phase mainly two exotic species (*Pinus elliottii*, *Pinus taeda*) will be planted to build up conditions (soil, micro climate) for the native species (12). They will remain after 10 years with 25%. All native species planted in the project appear in the natural forest of the finca Santo Domingo, except Araucaria Angustifolia. But Araucaria is native in the region, therefore it is considered native to the project. Experiences on plantations with native species are existing from the former Shell project (Pro Yungas) in Salta and from the Danzer project in Corrientes close to the project sites. The spacing of the pines is standard and is adopted to soil conditions and planting techniques. Not for all native species there are experiences with plantations. If one species fails, the area will be replanted with species that have grown successfully. Enrichment planting in groups is foreseen. Failed plantations of native species are replanted with native species, Gaps are filled. The overall target of 75% native and 25% exotic species remains. The silvicultural concept is considered acceptable. Risks with not well known native species are covered through a flexible replanting and enrichment planting scheme. In the course of the validation process the Forest Management Plan was updated in terms of the composition of the species and planting arrangement. **Corrective Action Request No.4.**	**CAR 4**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			In the management documents and excel sheet the plantations of native species shall be documented species wise.		
A.5.4 Has the technology to be employed (including environmentally safe and sustainable/renewable technologies) been adequately described?	2, 13, 21	DR, IV	It is indicated that the technical standard will follow: - Forest Management Plans - Forest Stewardship Council`s Principles and Criteria - Any requirement under the CDM as detailed in this PDD SOP's for planting are included in the Management Plan, including those on use of herbicides and pesticides. FSC certificate from 24. February 2008, SW-FM/COC-003026. Site and soil preparation techniques are described. Also Nursery practices, forest establishment and management. Not the whole area but the rows are prepared mechanically. On the hilly sites the stripes are 1 m, distance between the rows is 3, 4 or 5 meters according to the planting scheme. On the lower sites the width of the row is 1.2 meter and the distance in between is 4 or 5 meters according to the planting scheme. The disturbance is minimized and considered tolerable. The use of GIS and GPS shall be applied for stratification, monitoring and verification. No fertilizer is applied.	☑	☑
A.5.5 Has the know-how with specifications of whether it will be transferred to host Parties been adequately described?	2	DR, IV	No transfer of technology from an Annex I Country is included. Participants indicate transfer of knowledge on native species to the area as mainly eucalyptus and Pinus plantations are existent.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
A.5.6 Has the proposed measures to be implemented to minimize potential leakage been adequately described?	2, 22, 23	DR, IV	Leakage could be expected from fossil fuel combustion and activity displacement. As about 2400 animals are grazing on project site, these will be displaced until the end of 2008. 400 will be sold to slaughterhouses, 2000 will be displaced to other grazing land. According to PDD the cattle displacement will not cause an increase of grazing area in the project region. It is argued that in the province of Corrientes 4.382 mio of cattle are living on 6.410 mio ha of grazing area. The 3000 cattle and the 3'000 ha of the finca are negligible. The corresponding evidence **Clarification Request No. 2.** Describe / mention the activities to minimize leakage (fossil fuels).	**CR 2**	☑
A.6 Legal title to the land, land tenure and rights to issued tCERs/lCERs					
Have details of the legal title to the land, land tenure and rights to issued tCERs/lCERs been described?	2, 10	DR	The land is owned by fiduciray on behalf of Novartis Argentina. Rights on carbon credits will be transferred to Novartis Pharma AG via contract. The original land owners have left the areas and quit livestock farming activities. Rights to lCERs: Novartis Argentina has transferred exclusive rights to all accumulated lCERs issued for the proposed A/R CDM project activity to Novartis Pharma AG. Novartis Pharma AG uses the lCERs within their voluntary GHG emission offsetting strategy and will not sell the lCERs but retire them. The contract between Novartis Argentina and Novartis Pharma AG on the carbon rights was provided during	**CR 3** **CAR 5**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			onsite visit. **Clarification Request No. 3.** Clarify and sustain with evidence that carbon rights are held by the land owner according to the Argentinean legal setting. **Corrective Action Request No.5.** Incorporate to the Monitoring plan a parameter on monitoring of land ownership and access to carbon rights during the crediting period.		
A.7 Assessment of the eligibility of lands					
Has the latest version of the AR eligibility procedure been applied?	2	DR	Clear reference to the latest versions of the eligibility procedure (EB 35, Annex 18) has been included in the PDD.	☑	☑
Is adequate evidence provided which demonstrates that a) the land in the project boundary is not forest at project start b) the activity is an afforestation or reforestation by indicating historic land use (reforestation: unstocked by Dec. 1989; afforestation: unstocked >50 y)	2, 25	DR, IV, FV	The project activity is “reforestation”, as no forest has been on the area for several decades. The oldest publication proving that no forest was on the area dates back to 1967. Evidence from satellite images was provided for the years 1988, 2000 and 2003. Grassland prior to 31 Dec 1989 was confirmed with 1988 images. The process and results have been summarized adequately in the PDD. In addition, land eligibility has been assessed by site visits of the audit team. Surrounding, non-project areas show pasture as well as areas with forest patches. Forest patches have been identified using GIS data. No ground truthing has been carried out. The results of the eligibility study have demonstrated that the areas have been without forest cover. During field visit it was verified that any forest cover was excluded from the	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			project area.		
Has the assessment of the eligibility of the land been adequately described?	2, 25	DR, FV	See above	☑	☑
A.8 Approach for addressing non-permanence					
Has the approach to address non-permanence been specified (tCER, lCER)?	2	DR	lCER approach has been chosen.	☑	☑
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, 34	DR, IV	The summary table in section A.9 has been completed. Excel sheet and TARAM were provided during onsite visit. **Corrective Action Request No.6.** Summary tables in the PDD shall indicate the annual values (rather than cumulative; applicable to summary in section A, baseline, removal calculations) Updates may be necessary jointly with TARAM/ calculation adaptation.	**CAR 6**	☑
A.10 Public Funding					
Is there public funding from an Annex 1 country involved, and if yes, is an affirmation of non-deviation provided? (annex 2)	2	DR	No public funding from Annex 1 country is involved. There are two types of official sources from Argentina: Tax reduction by 50% and direct funding of plantations (national). **Clarification Request No. 4.**	**CR 4**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			Clarify if the subsidy programme and according legislation impacts the transfer of carbon rights from CDM projects. (impact of subsidy laws on carbon rights)		
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, 24	DR, IV	Project start was in 02/05/2007 The starting date was the beginning of the actual planting activities. Evidence was received.	☑	☑
B.2 Expected operational lifetime					
Has the expected operational lifetime been defined?	2	DR	60 years	☑	☑
B.3 Choice of crediting period					
Is the project fixed or renewable and does it has an appropriate crediting period length defined (in years and months)?	2	DR	A renewable crediting period of 20 years is chosen. **Clarification Request No. 5.** Clarify how it is avoided that peaks in carbon stocks systematically coincide with verification (over crediting period).	☑	☑
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	DR	The methodology is referenced: AR-AM0005 Version 01 was chosen in the GSP PDD and in the course of the validation it was updated to version 03. The most recent version of the additionality tool has been	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			followed.		
Has the most current version of the methodology been used (consider also PDD formats, eligibility tool, AR additionality tool)?	2	DR	Yes, the most current versions have been applied.	☑	☑
C.2 Assessment and justification of selected methodology					
AR-AM0005, section I (applicability criteria)					
Does the project use the baseline approach from paragraph 22 of the CDM A/R modalities and procedures: Changes in carbon stocks in the pools within the project boundary from the most likely land use at the time the project starts"?	2	DR	The project does consider the baseline approach of the most likely land use at project start. See also request below on role of reforestation rates.	☑	☑
Is the selected project an afforestation or reforestation activity undertaken to meet commercial or industrial needs?	2	DR	The AR project is designed to produce industrial processed wood. In previous sections on eligibility it was clarified that the project classifies as reforestation. Primary target is to produce timber of high value according to the rotation periods. Target diameter is 45 cm DBH, in a rotation of 25 - 75 years. Secondary option: fuelwood. In any case commercial use is foreseen (national market).	☑	☑
Is one of the following baseline scenarios complied with: 1. maintenance of unmanaged or extensively managed grassland (with low soil carbon content) 2. afforestation and reforestation activities undertaken intermittently prior to AR project.	2, 29	DR, IV	Considering the results of the eligibility study, the baseline requirements in regard to grassland / pastureland is considered to be complied with. It is indicated in the PDD that the land use before project start has been grazing / pasture. The present reforestation activity focuses at the production of wood for industrial purposes.	**CAR 7**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

Industrie Service

<table>
<tr><th>CHECKLIST QUESTION</th><th>Ref.</th><th>MoV</th><th>COMMENTS</th><th>Draft Concl</th><th>Final Concl</th></tr>
<tr><td></td><td></td><td></td><td>Natural regeneration is not expected to occur based on site conditions and prior land use.
Existing reforestation activities prior to project start have not been mentioned in PDD.
According to expert judgement of INTA during onsite visit the annual afforestation area in Corrientes is around 10’000 ha. This is driven by subsidies from the government. There are two main afforestation regions one in the south and one in the north. The project area is outside near the limit of the northern region.
<u>Corrective Action Request No.7.</u>
The baseline reforestation rate shall be specifically assessed for the region in the PDD..
If there is a reforestation rate in the region, it shall be considered. Based on this, compliance with step 4 of additionality tool shall be documented in section C.6.
In line with the methodology, project participants shall provide an estimate of the average regional (and project entity-specific) annual rates of A/R activities in the absence of the proposed A/R CDM project activity, so that it is considered within the listing of plausible land-use alternatives in Step 5 / baseline definition</td><td></td><td></td></tr>
<tr><td>The land cover within the project boundary is in steady state either as grassland.</td><td>2</td><td>DR, FV</td><td><table><tr><th>Incl. to PDD</th><th>Rationale / Assumptions referenced</th><th>Evidence Provided</th><th>Conclusion</th></tr><tr><td>☑</td><td>☑</td><td>☑</td><td>☑</td></tr></table>It has been demonstrated that on the project area no natural regeneration is expected because of the fact that</td><td>☑</td><td>☑</td></tr>
</table>

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			the seed bank in the soil is very low. No natural regeneration was found on the proposed project area during onsite visit and is not expected to occur.		
Applicability criteria is not relevant in version 03 any longer: Lands will be afforested or reforested by direct planting and/or seeding.	2, 18	DR, IV, FV	*Applicability criteria is not relevant in version 03 any longer* Incl. to PDD: ☑ | Rationale / Assumptions referenced: ☑ | Evidence Provided: No | Conclusion: n/a Direct planting and seeding is ongoing, as foreseen in the project's Management Plan.	-	**n/a**
Natural regeneration is not expected to occur in the project area because of the absence of seed sources or because land use practices do not permit the establishment of tree vegetation.	2	DR, IV, FV	Incl. to PDD: ☑ | Rationale / Assumptions referenced: ☑ | Evidence Provided: ☑ | Conclusion: ☑ Also during onsite visit, no natural regeneration was found on the proposed project area and is not expected to occur because of current natural conditions.	☑	☑
Carbon stocks in soil organic matter, litter and deadwood can be expected to decrease more or increase less in the absence of the project activity.	2, 12	DR, IV	Incl. to PDD: ☑ | Rationale / Assumptions referenced: No | Evidence Provided: ☑ | Conclusion: CAR There is low biomass productivity of the soils expected because of soil characteristics. Forest cover will protect degraded soil better from surface erosion. Thus, an increase of soil carbon under the project case is assumed.	**CAR 8**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			Corrective Action Request No.8. Provide further references (in PDD) to document and sustain compliance with each applicability criteria (as applicable for all criteria).		
Applicability criteria is not relevant in version 03 any longer Grazing will not occur within the project boundary once the project commences; the total number of grazing animals is not increased compared to the pre-project conditions and thus non-CO_2 emissions from displaced livestock are not accounted as leakage; Is corresponding evidence provided?	2, 37	DR, IV, FV	*Applicability criteria is not relevant in version 03 any longer* Incl. to PDD: ☑ / Rationale / Assumptions referenced: ☑ / Evidence Provided: ☑ / Conclusion: n/a By contract cattle is allowed to graze on the land not yet afforested until end of 2007. This was extended informally to the end of 2008. No cattle were found on plantations during filed visit. Compare leakage discussion.	☑	**n/a**
Flooding irrigation is not permitted;	2	DR, FV	Incl. to PDD: ☑ / Rationale / Assumptions referenced: ☑ / Evidence Provided: ☑ / Conclusion: ☑ No flooding irrigation will be done according to PDD or found during field visit. Not relevant to project context.	☑	☑
Soil drainage and disturbance are insignificant, so that non CO_2-greenhouse gas emissions from this type of activities can be neglected;	2	DR	Incl. to PDD: ☑ / Rationale / Assumptions referenced: ☑ / Evidence Provided: No / Conclusion: CAR Soil disturbances and drainage are considered negligible.	**CAR 8**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

Industrie Service

<table>
<tr><th>CHECKLIST QUESTION</th><th>Ref.</th><th>MoV</th><th>COMMENTS</th><th>Draft Concl</th><th>Final Concl</th></tr>
<tr><td>The amount of nitrogen-fixing species (NFS) used in the AR CDM project activity is not significant</td><td>2</td><td>DR, IV</td><td><table><tr><th>Incl. to PDD</th><th>Rationale / Assumptions referenced</th><th>Evidence Provided</th><th>Conclusion</th></tr><tr><td>☑</td><td>☑</td><td>No</td><td>CAR</td></tr></table>According to the results of the onsite visit also leguminous species are used.
<u>Corrective Action Request No.9.</u>
Leguminous species and percentage of planted trees respective plantation area covered by those species shall be indicated to proof that the quantity is negligible.</td><td>CAR 9</td><td>☑</td></tr>
<tr><td>Applicability criteria is not relevant in version 03 any longer
A Geographical Information System for the management of spatial data is installed</td><td>2</td><td>DR</td><td><table><tr><th>Incl. to PDD</th><th>Rationale / Assumptions referenced</th><th>Evidence Provided</th><th>Conclusion</th></tr><tr><td>☑</td><td>☑</td><td>☑</td><td>n/a</td></tr></table>The project uses GIS for forest management, stratification, monitoring and verification. GIS data was provided during onsite visit.</td><td>☑</td><td>n/a</td></tr>
<tr><td>C.3 Assessment of the selected carbon pools and emission sources</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Has an assessment of the appropriateness of choice of carbon pools and emission sources selected to the project activity been included to the PDD?</td><td>2</td><td>DR</td><td><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>No</td></tr><tr><td>Litter</td><td>No</td></tr></table></td><td>CAR 10</td><td>☑</td></tr>
</table>

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

<table>
<tr><th>CHECKLIST QUESTION</th><th>Ref.</th><th>MoV</th><th>COMMENTS</th><th>Draft Concl</th><th>Final Concl</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Soil Organic Carbon</td><td>No</td></tr>
</table>
<table>
<tr><th>Sources</th><th>Gas</th><th>Included to meth.</th><th>Con-clusion</th></tr>
<tr><td rowspan="3">Combustion of fossil fuels</td><td>CO2</td><td>Yes</td><td>☑</td></tr>
<tr><td>CH4</td><td>No</td><td>☑</td></tr>
<tr><td>N2O</td><td>No</td><td>☑</td></tr>
<tr><td rowspan="3">Burning of biomass (Fires)</td><td>CO2</td><td>No</td><td>☑</td></tr>
<tr><td>CH4</td><td>No</td><td>☑</td></tr>
<tr><td>N2O</td><td>No</td><td>☑</td></tr>
<tr><td rowspan="3">Removal of pre-existing non-tree vegetation</td><td>CO2</td><td>Yes</td><td>☑</td></tr>
<tr><td>CH4</td><td>No</td><td>☑</td></tr>
<tr><td>N2O</td><td>No</td><td>☑</td></tr>
</table>
The pools as defined per methodology are considered.
The sources as per methodology are not completely included. Sources are:
-Vehicle and machinery use in nursery, site preparation, thinning, harvesting,
-Biomass loss due to conversion of extensively, managed grassland to forest.
<u>Corrective Action Request No.10.</u>
Include in PDD the two sources of emissions of biomass burning and use of fertilizers or justify in the PDD that they are not relevant to the project context.
</td><td></td><td></td></tr>
<tr><td>C.4 Description of ex ante stratification</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>AR-AM0005, section II.3</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Has a hierarchical approach been used for the stratification</td><td>2</td><td>DR</td><td>A step wise approach has been followed.</td><td>CAR</td><td>☑</td></tr>
</table>

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
as defined by the methodology (regional to local data) and is the strata size not smaller than the area indicated by the national forest definition?			Two strata have been identified. No area is smaller than minimum forest area defined in national forest definition. **Corrective Action Request No.11.** In line with CAR above on boundary, only net planting / eligible areas shall be included to the boundary and constitute the basis for the stratification. Stratification remains to be adapted.	**11**	
Step 1: Stratification taking into account pre-existing conditions • Are the variables influencing carbon stocks identified (land use, soil, climate, vegetation, etc)? • Has the baseline information reflecting the status of grassland been collected from the most recent land use/cover maps, satellite images, soil, and vegetation maps? • Has data on pre-existing conditions of the grasslands in terms of its vegetation and composition been collected in order to demonstrate steady grasslands? • Has the information on the pre-project status of (managed / extensive) grassland been collected from official data sources? • Has preliminary stratification been carried out based on data on the pre-existing conditions of grasslands and on the pre-project use of grasslands? • Has the specific features of the stratum levels been identified e.g. on vegetation type, land tenure, etc.? • Can the differences in the strata demonstrate that the grassland areas are in steady state and/or under extensive management, and/or in a degraded state and/or with isolated vegetation that is expected to	2, 12	DR	The project areas includes two strata for ex-ante stratification which depend on soil type and vegetation cover. The project area has been classified into 6 categories. In each stratum 3 categories of similar conditions have been included. Stratum 1: Hydromorphic plains and alluvial complex: category 1-3 (without growing trees) Stratum 2: Hillocks and structural terraces: Category 4-6 (with growing trees) Stratification is considered adequate to the natural conditions and foreseen types of plantations. **Corrective Action Request No.12.** For the entire section C.4 the step wise approach of stratification and the compliance with specific methodology requirements (sub-items as indicated in checklist) shall be indicated and demonstrated in further detail in the PDD.	**CAR 12**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
remain in such states in the future? • When the analysis of preliminary data reflects significant variation within the strata has further stratification been carried out, and has a systematic sampling been carried out? • Are the strata identified and their respective areas indicated?					
Step 2: Criteria of stratification to be considered in the proposed CDM A/R project activity • Have the species and stand characteristics been specified (per site / of one plating year; of similar growth)? • Have the silvicultural/management details been considered (age class/ fertilizer/rotation etc)? • Is the temporal and spatial information on the plantation establishment specified including date, area, and geographic location? • Have the factors affecting actual net GHG removals by sinks been reflected in the stratification (i.e combining strata of similar growth).	2, 25	DR,	The stratification of the project scenario takes into consideration planting year and planting density. Strata have been located with GPS; have been geo-referenced and included into GIS. A map has been included to PDD, allowing clear identification of the strata. GIS data is available.	☑	☑
Step 3: Ex ante stratification of A/R CDM project activity taking into account the stratification criteria and land use within the project boundary Has the boundary of each stratum been delineated using land-use maps or geo-referenced data and is it consistent with the parcels identified for the project.	2, 25	DR	Satellite images and ground data (GPS) have been used for delineation. See above.	☑	☑
Step 4: Preparation of ex ante stratification map Has a stratification map showing different strata and their characteristic features been prepared?	2, 25	DR	For project stratification 5 strata have been identified. Maps that allow clear identification of the strata have been included in the PDD.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
Step 5: The changes to A/R project after the adoption of ex ante stratification shall be recorded Have / Will the relevant changes that occur during project activity implementation (after the ex ante stratification) been / be recorded? *(Relevant for monitoring stage)*	2, 39	DR	According to PDD / Monitoring Plan changes that occur to the project activity implementation after the ex ante stratification are going to be recorded so that these can be taken into account during the ex post stratification at the monitoring stage of the project.	☑	☑
Are the results of the stratification included to the PDD?	2	DR	Detailed results included. To be adapted in line with Corrective Action Request No.12.	**CAR 12**	☑
C.5 Identification of baseline scenario					
C.5.1 Description of the application of the procedure to identify the most plausible baseline scenario	2	DR	Step wise approach has been followed (6 steps)	☑	☑
AR-AM0005, section II.4					
Step 1 Demonstration of the most likely land use at the time of the project starts Is it demonstrated that the relevant lands would remain under the existing grassland use? Has this been demonstrated by at least one of the following • General – demonstrating that areas under similar land use in the vicinity are not expected to change. The barriers preventing alternatives can be identified. • Specifically for forest (step 2/3 of add. tool) • Specifically for other alternatives (step 2/3 of add. tool)	2	DR, IV	Continued extensive grazing is considered to be the most likely land use at project start. According to grazing specialists from INTA the annual of afforestation is 10'000 ha for whole Corrientes. Eucalyptus is not foreseen in the project plantations. There is some soy production in the region but on a very small and negligible percentage of the land. To be mentioned in the PDD (CAR above) **Corrective Action Request No.13.** Compliance of Step 1 of AR-AM0005, section II.4 remains to be sustained with evidence and this shall be documented in PDD.	**CAR 13**	☑
Have adequate sources been used in the analysis process for the most likely baseline scenario (archives,	2, 40	DR, IV	Main source of information are interviews with local farmers and grassland specialists from INTA.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
maps, images, etc)?					
Step 2 Assessment of national and sector policies and legislation a) Policies related to the creation of wood sources • Have the national or sector policies with direct influence on land use in the context of the A/R CDM project activity been considered? • Have the applicable policy incentives and constraints been analyzed (based on the decision 17/CP. 7, 11 November 2001) by the project participants? • If applicable, have policies in the competing industries or commercial end-uses been considered? • Have the project participants identified and analyzed specific policy contexts that had implications for A/R activities in the past or expected to have in the future?	2, 13	DR	Information on national and state programs on plantations is included to the PDD. • A subsidy program has been mentioned that finance reforestations with more than 2,001 ha with 15 %. • And a support for plantations focused on traditional species. • A national reforestation program will establish 3 million ha of cultivated forest land.	**CAR 13**	☑
b) Legislation related to the requirements of A/R activities and wood use • Have the project participants made an assessment of the impacts of prevailing legislation on the A/R activities, including the mandatory requirements on the land uses? • If applicable, has evidence on the non-compliance been presented if widespread non-compliance is observed? • Has an analysis of the national policies and regulations related to natural forests and A/R activities, and their implications in terms of demand and supply of forests products and the impacts of on the existing and future land uses been presented?	2, 13	DR	An overview on the analyzed legislation is provided in the PDD. • Argentina currently does not have restrictions limiting the cultivation of forests in private properties. • Only native forests are regulated by the government contingent upon the approval of the cultivation project by local government. Explanations of the relevant laws are included in the environmental impact assessment.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
c) Other policy incentives and constraints • Has the macroeconomic and sector policies related to credit, marketing and technology been evaluated in order to assess the influence multi-sector policies on the land use for forestry?	2	DR	See item a) above. The policies are considered to be sufficiently described.	☑	☑
Step 3 Assessment of demand and supply of wood resources for industrial and commercial purposes • Has an analysis of demand and supply balance of wood sources for industrial and commercial purposes been done? • Has long-term data for identifying the land use and plantation establishment trends been used?	2, 28	DR, IV	An overview on market demand in Argentina is given. Most demand until now is for low quality wood for paper production. There is no actual demand for high quality timber on the national market as for the export. It is considered adequate that the project will set an incentive to produce quality timber for quality wood products produced in Argentina. The small scale saw mill industry is able to saw also native species. The technology is locally available.	☑	☑
Step 4 Assessment of land-use practices and prevailing land uses in the project region • Have the project participants assessed the previous land uses in the region and the project area, and the management practices that are likely to impact the carbon stocks of the prevailing land uses now and in the future? • Have the impact of policies and regulations been assessed in order to guide the choice of the most likely land uses? • Is there an explanation on how the incentives and constraints identified in Step 2, impact on land uses within the project area (if applicable)? • Is there an estimate of the average regional and project entity-specific annual rates of A/R activities in the absence of the proposed A/R CDM project	2	DR	Main land use scenario is grassland for cattle raising. Some areas contain forest plantations. Forest plantations are not expected to expand as high investment and long pay back times are necessary. For discussion on reforestation also see Step. 1. **Corrective Action Request No.14.** Detail in the PDD and provide data that show prevailing land uses the project region, as requested per Step 4 of baseline definition / AR-AM0005, section II.4.	**CAR 14**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
activity? • Has the analysis focused on the rate of A/R activities that is likely to occur in the absence of the A/R CDM project activity?					
Step 5 Identification of plausible and credible land-use alternatives • Has the identification of plausible and credible land-use alternatives been based on the scope of maintaining current land use, including the possibility of undertaking A/R as per the applicable trends? • If there are no specific geographic trends in the pre-project A/R activities, has it been applied in proportion to all projects parcels? (as considered likely to be affected by the policies adopted prior to Nov 11, 2001)	2	DR	Three alternatives / scenarios have been identified: 1. Maintaining current land use cattle raising on grasslands for meat production 2. Combination of grassland with production of soy (only on dry project sites) 3. Plantation with exotic species. Land use scenario 2, the production of soy bean is restricted to the stratum 2 of ex-ante stratification with less humidity in the soil.	☑	☑
Step 6 Identification of the most likely land-use • Has the most likely land-use form among the alternatives (listed in the project boundary at the start of the A/R CDM project) been identified as the baseline scenario? • Is it demonstrated that in the absence of the proposed A/R CDM Project activity, the most likely land-use would correspond to the plausible scenario "grassland"?	2, 26	DR, IV	In the initial PDD it is argued that the complete absence of reforestations is the most likely baseline scenario. The most likely baseline scenario is considered to be: The continuation of the pre-project land use activities, cattle farming on extensively managed grasslands. In Corrientes the far major land use is cattle ranging. Corrientes: >8.5 mio ha Grazing 6.4 mio ha Forests 0.36 mio ha Corn, rice 0.092 mio ha Soy, Sunflower, Sugar cane 0.06 mio ha Tradition of land use is cattle ranging. Other agriculture use is marginal.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
C.5.2 Is the description of the baseline scenario applying to each stratum reasonable?	2, 12	DR, IV	Matching of baseline results with stratification results does exist. Initially two baseline strata were identified according to soil conditions and present vegetation. Those were merged finally to one baseline stratum because of the same carbon situation. Therefore no further consideration on stratification is necessary.	☑	☑
C.6 Assessment and demonstration of additionality					
Additionality (tool) Vers.2					
Step 0. Preliminary screening					
If the project participants claim that the afforestation or reforestation CDM project activity has a starting date after 31 December 1999 but before the date of its registration: a) Has evidence been provided that the starting date of the A/R CDM project activity was after 31 December 1999, b) and that the incentive from the planned sale of GHG emission allowances was seriously considered in the decision to proceed with the project activity (documentation that was available to third parties at, or prior to, the start of the project activity).	2, 24, 27	DR, FV	Correct and most recent version of the tool was applied. Project start was 2nd of May 2007. The eligibility that the land was not forest was discussed in A.7. Soil preparation started in Mai 2007. No older plantations were found during field visit. The project activity is addressed to be part of the internal climate strategy of Novartis. A/R projects are not business as usual for Novartis pharmaceutical company. The Novartis executive committee decided to conduct an AR-CDM on 16. June 2006; This proves CDM consideration before project start.	☑	☑
Step 1. Realistic and Credible Alternatives to the A/R project activity consistent with the current laws and regulations					
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: • Continuation of the pre-project land use	2	DR	Realistic land use scenarios have been chosen: Scenario 1: Continuation of pre-project land use activities, i.e. extensive grassland management; Scenario 2: The proposed project not undertaken as an	**CR 6**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
• AR of the land within the project boundary performed without being registered as the A/R CDM project activity If applicable, • 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 o legal requirements; o 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.			A/R CDM project; **Clarification Request No. 6.** In regard to credible alternatives, clarify consistency with identified baseline scenarios (it was included: reforestation with native species (CDM project) as well as exotic species (non-CDM). Agriculture is also included in table in C.6). Evidence on the existence of each mentioned barrier shall be provided.		
Are the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements (sub-step 1b)? 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.e. prevalent on at least 30% of the area of the smallest administrative unit that encompasses the project area;	2	DR	All alternatives (same as defined baseline scenarios) are considered to be in line with legal requirements. In section C.5.1 Step 2 of the PDD it is indicated that there is no legal obligation for private land owners, excepting native forests.	☑	☑
Is the project scenario not the only remaining alternative?	2	DR	No, the project scenario is not the only remaining scenario.	☑	☑
Step 2: Investment analysis			*Not applied*		
Step 3: Barrier Analysis					
In case of applying step 3 (barrier analysis) of the	2, 28,	DR	Yes a list of barriers is developed and included to the PDD.	**CR 7**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
additionality tool: Is a complete list of barriers developed that prevent the implementation of this type of proposed project activity; and do not prevent the implementation of at least one of the alternative land use scenarios.	29		The identified barriers are: • Investment barrier, including lack of attractiveness and lack of access to credit financing • Technological barrier (no nursery experiences of farmers, lack of infrastructure) • Institutional barrier (remote area, only few families living there) • Market risk (no market for native species) The project will be financed by project owners only because of the generation of lCERs. The investment and technological barrier has been mentioned as the most crucial one. The audit team concluded that the technological barrier is significant.. The use of native species is new for the region (which was indicated to be a precondition of Novartis to conduct the project). **Clarification Request No. 7.** Each barrier shall be sustained with evidence (provide to audit team) and referenced in the PDD in order to sustain the prohibitive character of the barrier. **Corrective Action Request No.15.** Correct in the PDD page 30 “Step 3 Barrier analysis” as it is indicated as Step 2. **Corrective Action Request No.16.** Describe in the PDD if one of the national incentives / subsidies for forest plantations can be / will be applied on the planed project activity.	**CAR 15** **CAR 16**	
In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and	2	DR	See above.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
significance of these barriers?					
In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	2	DR	The indicated barriers do not apply to the (current baseline) scenario: continuation of grazing. **Corrective Action Request No.17.** In regard to the table/matrix that documents in the PDD the barriers per alternative, include exact labelling of alternatives (in line with titles of alternatives). An updated table/matrix shall make sure that it is clarified which barrier applies to which alternative.	**CAR 17**	☑
Step 4. Common practice analysis					
Is the project activity common practice in the region? Has a common practice analysis been carried out in line with the requirement of the CDM and are there essential distinctions between them. Are there fundamental and verifiable changes in circumstances when compared to other projects (e.g. explain why the proposed CDM AR project cannot use e.g. political benefits granted in other projects)	2, 28, 29	DR, FV	There has been very limited reforestation with native species in northern Argentina. Most of the national reforestation program is covered by Pinus and Eucalyptus. For farmers the reforestation with natural species is financial unattractive. Compare Request above on reforestation rates in the same geographical areas.	**CAR 7**	☑
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	DR	Baseline removal calculations have been included to the PDD. For calculation existing single trees have been considered. An annual average of 7.55 tCO_2-e has been calculated. A list with all collected data is available in the PDD. Right format is applied. **Corrective Action Request No.18.**	**CAR 18**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			Summarize actual results for baseline stocks and removals in the PDD. Furthermore clarify/document the tree counting approach in the PDD in further detail as part of the baseline assessment.		
AR-AM0005, section II.5 (Estimation of baseline net GHG removals by sinks)					
Is the baseline net GHG removal set zero under the baseline scenario, maintenance of grassland in its state?	2	DR	Baseline removals in grassland areas are set zero for baseline stratum "grassland" with no living trees. This is accepted.	☑	☑
Have the changes in carbon stocks of the living biomass for isolated trees (if present in the area) been estimated?	2, 30	DR	Yes, changes in carbon stock for single trees have been estimated in baseline stratum 2. Baseline trees were counted and removals estimated.	**CAR 18**	☑
Has the pre-project reforestation rate been estimated and frozen over the crediting period?	2	DR	See CAR above on consideration of baseline AR rate.	**CAR 7**	☑
Have the changes in carbon stock in living biomass of trees been estimated using one of the following methodologies? • Method 1: Carbon gain-loss method • Method 2: stock change method	2, 30, 31	DR	Excel spread sheets containing the calculations were provided. A volume function from literature was used. This function considers as height only stem height. For baseline estimations the total height of the 130 living trees was taken. This means an overestimation of nearly 100%, which is on the one hand very conservative. One the other hand not all living trees were considered. They have to be taken into account. See also Corrective Action Request No.18 **Clarification Request No. 8.** Document in the PDD if carbon gain-loss method or if stock change method was applied. Same applies for ex-	**CR 8**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			ante removal estimates.		
Has the corresponding formula been applied correctly, are used values in line with onsite conditions and are they clearly sustained / referenced?	2	DR	The formulae were applied. All 130 living trees were measured for baseline assessment. .	☑	☑
Have *Dj, BEF1,j, BEF2,j, CFj* and *Rj* been defined according to methodology indications (hierarchical order of sources)?	2, 32	DR	Local data used for wood density, national data from literature for BEF, and IPCC GPG LULUCF data for CF and R are used. Local and regional data was used where available. This was sufficiently documented for the baseline estimates (and its small amounts).	☑	☑
Have conservative values been used for all parameters? Is the conservativeness of any parameter used to estimate tree biomass substantiated in the PDD?	2	DR	See above	☑	☑
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	DR	Company and name of persons have been included to the PDD. **Corrective Action Request No.19.** Date (DD/MM/YYYY) of completion of baseline study to be given in PDD / section C.8.	**CAR 19**	☑
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, 31, 32	DR,	After presentation of generic formula for calculation of ex-ante actual net removals aggregated results of calculations are included to PDD. It is indicated that requirements of section II.7 of the	**CR 9 CAR 20 CAR**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			methodology have been considered. Key values like D, BEF, RS, and CF have been included to the PDD. With exception of Baccara all native species are hardwood of high wood density. For the ex ante calculations wood density of Peltophorum dubium was chosen as representative for the native species (0.88). For ex-post calculations specific wood densities for each species will be taken. **Clarification Request No. 9.** Clarify conservativeness of chosen wood density and document this in PDD. Availability of other national or regional data for RS and CF shall be clarified (hierarchical approach). **Corrective Action Request No.20.** Include information on yield data used for tree species planted in the project as basis for calculation of ex-ante actual net GHG removals by sink (based on given references/sources). **Corrective Action Request No.21.** Complete section D. with actual main calculation steps (not only formula references) on actual net anthropogenic GHG removals by sinks (i.e. main results from excel spreadsheets).	**21**	
AR-AM0005, section II.1 (Project boundary)					
Are all gases / emissions of other sources considered that are included to the boundary definition?	2	DR	All relevant sources are considered to be included in the calculations.	☑	☑
AR-AM005, section II.7					

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
Ex ante actual net GHG removal by sinks					
Has the formula for the ex-ante estimation of actual removals been correctly applied?	2	DR	The reference to the main formula for ex-ante actual GHG removals is included in the PDD, See Corrective Action Request No.20	**CAR 20**	☑
a) Changes in carbon stocks of living biomass of trees Is the calculation carried out according the gain and loss in the living biomass of trees method provided by the methodology?	2	DR	The calculation are not included in the PDD, see Corrective Action Request No.21	**CAR 21**	☑
b) Increase in emissions of greenhouse gases Is the calculation carried out considering the sources of emissions of greenhouse gases assumed in the methodology if the implementation of the A/R CDM results in such sources?	2	DR	Potential sources of GHG emissions have been included to the calculations.	☑	☑
Estimation of $E_{FuelBurn}$ (GHG emissions from burning of fossil fuels): Have the emissions from fuel burn been estimated adequately and in line with the methodology requirements? Is sufficient evidence provided on input values?	2	DR	The formula used for estimation on fuel consumption is in line with methodology. The assumptions are in line with project design.	☑	☑
Estimation of $E_{BiomassLoss}$ (GHG emissions from biomass loss due to the conversion of grasslands to forests): Have the grassland and other pre-existing vegetation been removed to afforest or reforest? If Yes, have emissions been estimated adequately and in line with the methodology requirements?	2	DR	The formula used for estimation of GHG emissions from biomass loss due to the conversion of grasslands to forests is in line with methodology.	☑	☑
Estimation of $E_{BiomassBurn}$ *(burning of pre-existing vegetation*	2	DR	No biomass burn is foreseen in the project activity.	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
for site preparation or from forest fires) Have the emissions from biomass burning considered, including not only CO2 but also other greenhouse gases resulting from incomplete combustion of biomass in line with the methodology description?(formulae B.29-32)					
Have all relevant data been provided for ex-ante estimation? Has data provision been cross-checked with section II, item 11, table 2 of AR-AM0005	2	DR	Yes all main values have been cross checked.	**CR 9 CAR 20** **CAR 21**	☑
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, 33, 34	DR	Emissions from transport are considered, A table with potential combustion has been included to the PDD. **Corrective Action Request No.22.** Include relevant calculations steps and assumptions on leakage to Section D.2	**CAR 22**	☑
AR-AM0005, section II.8					
a. Determination of leakage due to displacement od grazing activities Estimation of LK $_{Displacement\ Grazing}$ - Carbon stock decreases caused by displacement of pre-project grazing: Have the emissions from LK $_{Displacement\ Grazing}$ been estimated adequately and in line with the methodology requirements? Is sufficient evidence provided on input values?	2, 22, 23	DR, IV	LK $_{Displacement\ Grazing}$ due to displacement of grazing activities has been set zero. In the PDD it is indicated that there is considered to be sufficient grazing capacity in the region to temporarily carry the displaced animals. Compare comments in section A.5.6 of this checklist above. The audit team accepts that leakage is set zero also in light of the fact that animals are sold. There are no indications that fuel wood collection is relevant in the project region.	☑	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
Estimation of LK $_{Fuelwood}$ - Carbon stock decreases caused by displacement of fuelwood collection: Have the emissions from $LK_{ActivityDisplacement}$ been estimated adequately and in line with the methodology requirements? Is sufficient evidence provided on input values?	2, 22, 23	DR, IV	$LK_{Fuelwood}$ due to displacement of fuelwood has been set zero, as there is no indications that fuel wood collection is relevant in the project region.	☑	☑
E. Monitoring Plan					
E.1 Monitoring of the project implementation					
Has the data to be collected for monitoring of the project boundary been listed adequately? (AR-AM0005, section III, 1.a)	2, 39	DR	Data for monitoring the project boundary has been included to the PDD: Plot location, UTM of each polygon corner and parcel areas is foreseen.	☑	☑
Has data to be collected for monitoring of forest establishment been listed adequately? (AR-AM0005, section III, 1.b)	2	DR	A table with data to be monitored has been included, some relevant parameters required by the methodology are missing: **Corrective Action Request No.23.** Complete the tables with data to be monitored: 2.1.1.01 Stratum ID 2.1.1.02 Sub-stratum ID 2.1.1.03 Confidence level 2.1.1.04 Accuracy 2.1.1.05 Standard deviation of each stratum 2.1.1.06 Number of sample plots 2.1.1.11 Number of trees 2.1.1.16 Merchantable volume 2.1.1.17 Wood density 2.1.1.18 BEF	**CAR 23**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			2.1.1.23 Carbon stock in above ground biomass of plot 2.1.1.24 Carbon stock in belowground biomass of plot Consistency with methodology requirements is to be assured. Relevant tables shall be fully completed.		
Has data to be collected for monitoring of forest management been listed adequately? (AR-AM0005, section III, 1.c)	2	DR	See Corrective Action Request No.23	**CAR 23**	☑
Is the SOP for field data collection and QA/QC procedures as included in the methodology described or referenced to.	2	DR	According to PDD QA/QC will be implemented. **Corrective Action Request No.24.** SOP for field data collection including forest inventory nd QA/QC procedures to be provided.	**CAR 24**	☑
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, 3, 18	DR, IV	Typical forest mensuration practices are followed. Documentation was provided during onsite visit.	☑	☑
E.2 Sampling design and stratification					
Have results of the application of the stratification procedure from the selected methodology been adequately described?	2	DR	A description has been included in the PDD.	☑	☑
AR-AM005 Section III.2					
Is the project strata and their boundaries incorporated to monitoring schemes?	2	DR	Strata and boundary monitoring have been included. Monitoring will be carried out with GPS and other usual ground measurements.	☑	☑
Is the sampling framework, including sample size, plot size, plot shape, plot location, treatment of samples and management of sample plot data specified in the PDD as	2	DR, IV	Plots are circular, (400 m^2 plot size) at least 3 plots will be established per stratum. Centre point measured with GPS and permanently invisible	**CAR 25**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
described in the methodology?			marked. 95 % confidence level will be assured, systematic location with random start. **Corrective Action Request No.25.** SOP or manual for conducting the carbon inventory to be provided and summary to be included to the PDD / Monitoring Plan.		
Is the sample size (systematic, permanent plots) calculated according to methodology requirements? Is random location foreseen?	2	DR	Formula included as per methodology. See above.	☑	☑
Is the sample plot size defined according to methodology requirements?	2	DR	Yes, requirements according to the methodology are fulfilled.	☑	☑
E.3 Monitoring of the baseline net removals					
Is monitoring of the baseline net removals required by the selected methodology? If yes, ▪ 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	DR	Monitoring of baseline net removals is not required.	☑	☑
E.4 Monitoring of the actual net removals					
Has the data to be collected in order to monitor the changes in carbon stock resulting from the project been adequately defined? (AR-AM0005 section III.6)	2	DR	Data have been listed correctly. **Corrective Action Request No.26.** In the PDD it is indicated that BEF and RS will be the same as used for ex-ante estimates. This shall be corrected as better data may be available in future: BEF and RS are subject to monitoring.	**CAR 26**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
Has the data to be collected in order to monitor the GHG emissions that are increased as a result of the project activity within the project boundary been adequately defined? (AR-AM0005 section III.6)	2	DR	Data have been listed. **Clarification Request No. 10.** Clarify and document in the PDD the relevant of the monitoring of biomass loss (sustain exclusion of parameters from monitoring while assuring consistency with baseline stock estimates). This is relevant in order to assure consistency for ex-post calculations at verification. **Corrective Action Request No.27.** Biomass burning and corresponding parameters are to be considered although burning is not foreseen as this may be unintentional (therefore also included in forest management monitoring) **Corrective Action Request No.28.** Erase footnotes in PDD that are actually coming from the Methodology and which are not relevant for PDD.	**CR 10** **CAR 27** **CAR 28**	☑
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	DR	Forest monitoring procedures are defined in the context of regular forest management. See Corrective Action Request No.25	**CAR 25**	☑
Are all GHG emissions increased by the project over time included to monitoring (fossil fuels, slash and burn, N_2O)	2	DR	Fossil fuel combustion has been considered for increase of GHG emissions. Biomass loss is fixed ex ante. Other sources are not relevant. Burning to be included.	**CAR 27**	☑
E.5 Leakage					
If monitoring of leakage is required by the selected methodology has this been stated and has the data and information that will be collected to monitor leakage been adequately defined?	2	DR	According to the sources of leakage mentioned in the PDD the table with data to be monitored is complete in regard to parameters **Corrective Action Request No.29.**	**CAR 29**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
(AR-AM0005 section III.8)			Parameter E.5.1.01 does not indicate if measured / estimated / calculated. Adapt table and clarify how corresponding monitoring is going to occur.		
Are the procedures for measurements for the monitoring of leakage clearly defined and do they follow typical forest mensuration practices?	2	DR	See CAR above.	**CAR 29**	☑
Have procedures for the periodic review of the implementation of activities and measures to minimize leakage been adequately defined?	2	DR	See A.5.6. Corresponding indications are considered sufficient.	☑	☑
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?	2, 35	DR	All main items relevant for QC/QC included in E.6	☑	☑
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	DR	A description of the structure is given: GMF will be in charge of practical forest management, monitoring and measurement. Novartis international will provide financial and management backstopping.	☑	☑
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	DR	The persons / entities applying the Monitoring Plan are partly indicated in the PDD. It is indicated that contacts are included to the Annex. All parties are project participant. **Corrective Action Request No.30.** For NA a contact person or at least an e-mail address	**CAR 30**	☑

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			should be included to the table of E.8. Assure consistency of names and their clear identification.		
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, 13, 3, 14, 15,16	DR, I	An environmental risk analysis and its results are described in the PDD. Potential risks: • Water resources: impact on water quality due to forest machinery, when buffer zone to river will not be considered. • Fire: will be prevented by monitoring and awareness training for farmers. • Pesticides: Only pesticides in line with FSC will be applied. • Soil erosion, exotic species, pest outbreaks. None of these risks are considered being significant. The FSC report is available including several studies on the environmental impact of the project. The provided information is considered to document compliance with requirements as per CDM. Impacts are considered not to be negative. **Corrective Action Request No.31.** Provide information on the Environmental Impact Assessment in the PDD, including impacts on biodiversity and natural ecosystems and impacts outside the project boundary. **Corrective Action Request No.32.** Indications on planting areas in section F are not	**CAR 31** **CAR 32**	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			consistent and shall be adapted.		
Does the analysis include (where applicable) adequate information on hydrology and soils, and risk of fires, pests and diseases?	2	DR	See above	**CAR**	☑
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, 35	DR, I	See F.1 No significant negative impacts have been identified by the project participant. There is a certain fire risk. Fire protection and fire fighting are organised in the region. This reduces the fire risk.	☑	☑
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	DR	Not applicable.	☑	☑
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, 36	DR, I	The section of the PDD describes the additional activities of the project in field of socio-economic development. No negative socio-economic impacts have been detected in the audit. A study on social aspects of the project has been conducted. A small number of families live in the vicinity of the project. No further settlements on the future planting area. It was clarified during the onsite visit that further items as indicated as per PDD guidelines are not relevant for the	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			project context. (inter alia, local communities, indigenous peoples, land tenure, local employment, food production, cultural and religious sites, and access to fuelwood and other forest products).		
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 fuelwood and other forest products?	2	DR; I	See above	☑	☑
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	DR, I	Not applicable.	☑	☑
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	DR, I	Not applicable.	☑	☑
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	2, 3	DR	The stakeholder process has been carried out. A list of identified and invited stakeholders is included to the PDD. Introduction of the project has been done by mail or verbally. A public summary, the management plan and EIA has been provided to the stakeholders. Evidence	☑	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
understand the project?			(invitations / letters / interviews) is also documented in the FSC process.		
H.2 Comments received					
Have stakeholders who made comments been identified and has a summary of the comments been provided?	2, 3	DR	No comments have been provided. A statement is given that no negative comments have been delivered until now. **Corrective Action Request No.33.** Provide a summary of the stakeholder comments and provide information/documentation/evidence on the process and answers.	**CAR 33**	☑
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	DR	See above	**CAR 33**	☑
Annexes					
Annex 1 Contact information on project participants					
Is contact information on participants of the project complete?	2	DR	Contact information is given and included to the PDD. The information is considered complete. Consistency with Table A.3 is to be assured.	☑	☑
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?			No public funding from Annex I is involved.	☑	☑
Annex 3 Baseline information					

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

CHECKLIST QUESTION	Ref.	MoV	COMMENTS	Draft Concl	Final Concl
Has information additional to that required in Section C or in the approved methodology been provided (or stated as not required)?	2	DR	Information on stratification of the baseline has been provided in Annex 3.	See CARs section C	☑
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	DR	No further information provided.	See CARs section E	☑

Ref. = Reference as included to Information Reference List; MoV = Means of verification (Document Review / DR; Interview / IV; Field Visit / FV)

Industrie Service

Table 2: CDM responses to CAR and CR

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
Corrective Action Request No.1. Clarify who shall project participants. Assure consistency with Annex 1. For completion of table consider to put participants from one country in one cell only (Switzerland)	A.3	Response Project Team: "Novartis International" replaced by "Novartis Pharma" throughout PDD. Participant from one country are in one cell only (see A.3). Annex 1 adapted accordingly. Audit Team 12.08.09: Project participants are clearly indicated and corrections were made accordingly. The project participants indicated in the PDD are Novartis Argentina S.A and Novartis Pharma AG. Corresponding letters of approval and MoC were provided.	☑
Corrective Action Request No.2. Include a map that indicates the boundary and only the project area that will be planted during project activity, excluding natural forest patches and old Eucalyptus plantation. The boundary shall only include the net planting / reforestation areas. If there is discrete parcels they shall carry an identifier.	A.4.2	Response Project Team: Map included with clear indication of the project area and the areas that were excluded: Eucalyptus plantation, Forest patches, buffer zone, lodging area. The discrete parcels (potreros) are accordingly numbered. Coordinates are included in the map. The map is found in section A.4.2 Audit Team 12.08.09: - Exclude from the delineation of the project boundary all non eligible areas (forest patches and old Eucalyptus plantation). - Translate the information of the maps to English. Response Project Team: All maps have been adapted accordingly. Non-eligible areas were excluded and information translated to English. Audit Team 12.01.10 Non-eligible areas were excluded from the project boundary as requested. - Figure 2 contains information in Spanish. This shall be translated to English	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Response Project Team 12.05.10: Figure 2 was translated to English. Audit Team 14.06.10 Information of figures translated to English as requested.	
Corrective Action Request No.3. Evidence on rare and endangered species (flora and fauna) and on impacts of the plantations on those species shall be provided.	A.5.2	Response Project Team: Investigations on fauna and flora on the project area have been conducted in 2008 and all species have been recorded. Some of the species, especially birds, appear on IUCN list of endangered species. The studies will be provided to the DOE. A confirmation letter provided by Smartwood for actual annual FSC verification states that adequate and necessary measures are taken by project activity to protect endemic species and their habitats. This is mainly done through protection of existing natural forest patches and a sufficient buffer zone along the river. In addition, the project works largely with a mix of native species that occur in the natural forest patches. Confirmation letter will be provided to the DOE. Audit Team 12.08.09: A description of the species found on the project area is included to the PDD and site specific studies were provided as evidence to the DOE; however indication on which of the species found on the project area are under any national list of endangered species or IUCN category is missing. Response Project Team: The report Categorization of the Fauna and Flora of the Santo Domingo Estate, Ituzaingó, Corrientes, Argentina. developed by Cecilia Domecq. indicates the lists of endangered species. Two tables (birds and mammals) have been included in the PDD indicating on which national lists or IUCN category the species appear. The report will be sent to the DOE.	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Audit Team 12.01.10 The updated PDD provides a clear indication on the species found in the project area and also indicates that measures are to be taken to protect these species which is sustained with the FSC assessment. A detailed assessment on the presence of species and its conservation status was developed in March 2009 and extended in June 2009 and provided to the DOE to cover this request. (Domecq, C. 2009. Categorizacion de la Fauna y Flora del Establecimiento "Santo Domingo" Ituzaingo, Ctes., Argentina. 37 pp.)	
Corrective Action Request No.4. In the management documents and excel sheet the plantations of native species shall be documented species wise.	A.5.3	Response Project Team: According to email sent by Mr. Martin Schröder (29.04.2009): Table 7 (Section C.4) was accordingly adapted with planting distance of the different cases. A field manual (Manual de Diseño de Plantacion Año 2009) will be provided to the DOE. The Excel calculation sheets (Native and *Grevillea robusta*) are documented species wise and all single cases. The Excel calculation sheets will be provided to the DOE. The equations used are documented in the PDD Section C.7 and D.1. Audit Team 12.08.09: The list of species to be planted for the proposed CDM project is documented in the PDD.	☑
Corrective Action Request No.5. Incorporate to the Monitoring plan a parameter on monitoring of land ownership and access to carbon rights during the crediting period.	A.6	Response Project Team: Land ownership and access to carbon rights during the crediting period ("Operating and Forestry Rights Agreement" and "Purchase Agreement") described in "Operating and Forestry Rights Agreement" and "Purchase Agreement". The transfer of owner rights from trustee to Novartis Argentina and Novartis Pharma AG shall be recorded in the monitoring before first verification. An according statement is made in monitoring section (E.1) An official statement by trustee will be provided. Validity of	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		this transfer will be confirmed before verifications. Audit Team 12.08.09: The carbon rights are clarified via Purchase agreement between Novartis Argentina to Novartis Pharma AG and corresponding evidence was provided.	
Corrective Action Request No.6. Summary tables in the PDD shall indicate the annual values (rather than cumulative; applicable to summary in section A, baseline, removal calculations) Updates may be necessary jointly with TARAM / calculation adaptation.	A.9	Response Project Team: Baseline removal calculations adapted in TARAM accordingly: -reforestation rate was included (see CAR 7) -According to EB 44 para 37 emissions from fossil fuel combustion can be neglected. - According to EB 42 emissions from the removal of herbaceous can be neglected. Changes in carbon stocks of living biomass of trees was adapted to the new planting plan. The new planting plan was included in the PDD (Section A.5.4, Table 7). Excel sheets with new calculations will be provided to the DOE. Audit Team 12.08.09: Table in section A.9 indicates annual values as requested.	☑
Corrective Action Request No.7. The baseline reforestation rate shall be specifically assessed for the region in the PDD.. If there is a reforestation rate in the region, it shall be considered. Based on this, compliance with step 4 of additionality tool shall be documented in section C.6. *In line with the methodology, project participants shall provide an estimate of the average regional (and project entity-specific) annual rates of A/R*	C.2	Response Project Team: The annual average reforestation area in Corrientes for the period of 2003 to 2008 is 9,226 ha. Compared to the total forestable area in Corrientes (6.860.000 ha) this is equivalent to an annual reforestation rate of 0.13%. The total forestable area in Corrientes used for the calculation of the reforestation rate is equal to the actual grazing land in the Province of Corrientes. As described in the methodology the region considered for determination of average regional annual pre project A/R rate should contain the area with the same biophysical and socio-economic preconditions of the project area. This was included in Step 5	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
activities in the absence of the proposed A/R CDM project activity, so that it is considered within the listing of plausible land-use alternatives in Step 5 / baseline definition		of the baseline definition (section C.5) and Step 4 of section C.6. As stated above reforestation was used in baseline removal models. Audit Team 12.08.09: The requested CAR is further discussed in section C.5 and C.6. The baseline reforestation rate was assessed for the region.	
Corrective Action Request No.8. Provide further references (in PDD) to document and sustain compliance with each applicability criteria (as applicable for all criteria).	C.2	Response Project Team: References that document and sustain the compliance with each applicability criteria have been provided in the PDD. Evidence that a shift from pasture to forest plantations leads to significant carbon storage in soils especially in wet or moist tropical regions is e.g. given in Silver et al. (2009). In addition the plantation contains large amounts native broadleaf species managed in long rotations which provides a long term continuous cover of the soil. This has been included in section C.2. Audit Team 12.08.09: In order to comply with the applicability criteria of the methodology, provide evidence regarding insignificance of soil drainage and disturbance and refer to it in the PDD. Response Project Team: The following paragraph was included in the PDD with reference to the Environmental Impact Assessment and FSC Report (2009): The planting process follows a cultivation technique which minimizes soil impact and optimizes the use of water. These procedures are in conformance with according FSC requirements (6.1), which include among others adoption of soil conservation techniques, monitoring of water quality and quantity and preservation of legal reserve areas. As such, soil drainage and disturbance are insignificant. Audit Team 12.01.10 The provided evidence refers to a qualitative assessment on soil impact	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		developed by FSC auditors but does not provide a concrete indication whether soil drainage and disturbance are insignificant as per applicability criteria. - Provide concrete evidence to the DOE sustaining that soil drainage and disturbance are insignificant Response Project Team 12.05.2010: In addition an internal report was drafted about laminary soil erosion in Santo Domingo. The report describes that since the beginning of the project activity mitigation measures have been undertaken in order to avoid any kind of erosion. Soil erosion does not take place in significant way. The report will be sent to the audit team (Document Reporte interno Erosión laminar ECO 100315_CAR9.pdf). In addition to the above mentioned, the project team provides to Audit Team a report which determines the net area affected by the taipero roll for site preparation. This is calculated as percentage of all soils affected and specifically of soils with highest amount of organic matter, compared to total net planting area. The total area of soils with rather high organic matter is quite low. The net area affected by taipero roll on these soils is less than 2% of total net area planted. This is considered as a insignificant disturbance. This report will be send to the audit team (Document Informe interno suelo-taipa 100329_CAR9.pdf). Audit Team 14.06.10 The evidence provided sustains the fact that soil drainage and disturbance are insignificant and complies with the applicability criteria of the methodology.	
Corrective Action Request No.9. Leguminous species and percentage of planted trees respective plantation area covered by those species shall be indicated to proof that the	C.2	Response Project Team: As per decision by CDM EB 44 Nitrous oxide (N2O) emissions from decomposition of litter and fine roots from N-fixing trees are insignificant in A/R CDM project activities and may therefore be neglected in A/R	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
quantity is negligible.		baseline and monitoring methodologies. This CAR was therefore not considered. Audit Team 12.08.09: According to EB 44, emissions from N-fixing species are neglected and do not need to be accounted.	
Corrective Action Request No.10. Include in PDD the two sources of emissions of biomass burning and use of fertilizers or justify in the PDD that they are not relevant to the project context.	C.3	Response Project Team: Emissions of biomass burning and use of fertilizers are included in Table 6 of section C.3.No nitrogenous fertilizer will be applied and no slash and burn and overall tillage will be used in the site and soil preparation, therefore no greenhouse gas (GHG) emissions from these sources are expected to occur. The table was adapted to the latest EB decisions related to AR projects: As per decision by CDM EB 44 sources related to fossil fuel combustion are insignificant and may be neglected. As per decision in EB 42 emissions from the removal of herbaceous can be neglected. Therefore, no gaseous emissions from sources other than those resulting from changes in carbon pools are included in this project activity. Section C.3, D.1, D.2 (leakage) and E.5.1 are accordingly adapted. Audit Team 12.08.09: A justification regarding to the two sources of emissions of biomass burning and use of fertilizers emissions was included to the PDD as requested. Justify why emissions from removal of shrubs are not considered since EB 42 only refers to herbaceous vegetation. Response Project Team: The term “shrub” in the PDD was a misformulation from early development stage that was not corrected. As can be seen on the	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		photos and during field visit and in the several reports describing the land (including FSC reports) there are no shrubs within the project area but only few scattered trees of different size and age which's biomass was considered in baseline removals calculation. The area consists therefore of single standing trees and herbaceous biomass, without shrubs. We therefore deleted the term "shrubs" from PDD. Audit Team 12.01.10 The PDD was amended and the term "shrub" excluded. It was confirmed that there are not such vegetation type in the project area based on the field visit and the vegetation inventories provided to the audit team as evidence.	
Corrective Action Request No.11. In line with CAR above on boundary, only net planting / eligible areas shall be included to the boundary and constitute the basis for the stratification. Stratification remains to be adapted.	C.4	Response Project Team: Two maps are provided with net planting areas/eligible lands. One map depicts the 13 cases of different planting years, densities and species mixes. The second map depicts the 13 cases integrated into 5 strata. The breakdown of the 13 cases to the strata is described in the PDD (C.4; Table 7). Audit Team 12.08.09: While it is clear that "Area de Manejo forestal" refers to the land owned by the PP, this contains also non-eligible areas that must be excluded from the project boundary. Ensure that all maps only refer to the (eligible) project boundary (e.g. Figure 3 and Figure 4 contain non eligible area inside the project boundary). Response Project Team: Non-eligible areas were excluded from the maps. Audit Team 12.01.10 The project boundary was delineated to include only planting/eligible areas as requested.	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
Corrective Action Request No.12. For the entire section C.4 the step wise approach of stratification and the compliance with specific methodology requirements (sub-items as indicated in checklist) shall be indicated and demonstrated in further detail in the PDD.	C.4	Response Project Team: Step-wise approach included in section C.4 and C.5 of the PDD as described in the methodology. C.5.1. Step 2: An analysis of specific political contexts and legal frameworks was conducted. There are several governmental legal measures that support forestry development in Argentina. Argentina currently does not have restrictions limiting the cultivation of forests in private properties. Incentives for forestry plantations are described in Forestry Law number 25,080. The main incentives are summarized in the PDD. The detailed description of the forestry Law number 25,080 is described in: http://www.sagpya.mecon.gov.ar/. Relevant documents will be provided to the DOE. Audit Team 12.08.09: The step wise approach was followed according to the methodology. A detailed description on the assessment of the stratification process is found in the Annex 3. - Include to Step 2 indication of similar growth characteristics of species representing mix of species. Response Project Team: The following paragraph was included in the PDD with according references: With regard to growth characteristics pure Pinus ssp., mixes of Pinus ssp. with native species and mixes with *Grevillea robusta* and native species were distinguished. This approach has been chosen because of the different growth characteristics of Pinus ssp , Grevillea robusta and native species mixes. Further explanations regarding calculation of native species' biomass is given in Section D.1. Audit Team 12.01.10 Section D.1 provides a justification on the selection of *Peltophorum dubium* as a representative because of the availability of information for	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		native species but does not indicate whether the mix of species share similar growth characteristics or on which proportion each of the species are present in the group. - Include information of the growth characteristics of species representing mix of species Response Project Team 12.05.2010: A table with the list of species planted in the year of 2009 and the number of seedlings planted of each species was included in the PDD (Section D.1, Table 15). *Peltophorum dubium* represents 68.88% of all native species planted. There is no literature on growth characteristics of most the other species planted. Growth models for these species are largely not available yet. Given the high percentage of *Peltophorum dubium* planted, we consider taking *Peltophorum dubium* as representative species as justified. Growth characteristics of *Peltophorum dubium* are described in the literature already sent to audit team earlier. A short summary on native species planted will be sent to the audit team (Document: Informe % nativas plantadas SD 100223 CAR13.pdf). Audit Team 14.06.10 Further explanation and sustaining documents clarifies the higher participation of *Peltophorum dubium* as a representative of mix of species.	
Corrective Action Request No.13. Compliance of Step 1 of AR-AM0005, section II.4 remains to be sustained with evidence and this shall be documented in PDD.	C.5.1	Response Project Team: Compliance of Step 1 is sustained with evidence looking at land use statistics and traditional land uses from three perspectives: Generally - Specifically for a forest as alternative land use - Specifically, for one other alternative land uses Data sustained with evidence included in the PDD.	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Audit Team 12.08.09 Step 1 of the section II.4 is introduced. The options general, specifically for a forest alternative Eucalypt / pine) and specifically for other land use (soy) is presented. As required by the methodology, use a barrier or investment analysis to show that these alternatives are not the baseline scenario, and sustain the explanations with evidence. This should also be reflected in Step 5. Response Project Team: A table with a detailed description of different land use scenarios (Scenario 1-4) and their barriers was included in C.5.1, Step 5 of the PDD. The explanations are sustained with evidences. Audit Team 12.01.10 A barrier analysis was conducted to demonstrate that the most plausible baseline scenario is the continuation of grazing in the project area due to technological barrier. The evidence provided shows that the establishment of forestry plantations in the region of corrientes is mostly with exotic species and there are not experiences (documented) with native species. The explanations and evidence provided are therefore considered adequate to cover the request.	
Corrective Action Request No.14. Detail in the PDD and provide data that show prevailing land uses the project region, as requested per Step 4 of basline definition / AR-AM0005, section II.4.	C.5.1	Response Project Team: Prevailing land uses sustained by statistical data are described in PDD in section C 5, Step 1. See also CAR 14. Management practices and prevailing land uses in the project region are documented in the document Corrientes en Cifras 2008 (Direccion de Estadistica y censos; Secretaria General de Gobernacion).The reforestaion rate was calculated for the years 2003-2008 using data of the Secretaría de Agricultura Ganadería y Pesca de la Nación (SAGPyA), Dirección de Forestación (http://www.sagpya.mecon.gov.ar). Audit Team 12.08.09	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Provide the corresponding documentation (or direct internet link) for the data used for calculating the reforestation rate. Since the forestable area is the same as the grazing land, this may implicate that these land uses compete to each other which may not be feasible. The forestable area might be obtained (i.e) from a territorial plan in which the area suitable for reforestation is defined. Response Project Team The forestable area in Corrientes is 2,700,000 ha as cited in Banco Mundial (2009): Provincia de Corrientes Informe final Mayo 2009. This reference area was used to recalculate baseline reforestation rate. Table in A.9 and in C.7 have been adapted with the new figures. Audit Team 12.01.10 The rate of A/R activities that is likely to occur in the absence of the A/R CDM project activity was estimated based on a recent publication from the World Bank which indicates a forestable area of 2 700,000 ha. - Provide the following document to the audit team as evidence: "INTA, EEA Bella Vista (2000) cited in Banco Mundial (2009): Provincia de Corrientes Informe final Mayo 2009". Response Project Team 12.05.2010: We found a new World Bank publication that names directly the figures for reforestable area in Corrientes (page 17, section III.5). The new WB publication is cited in the PDD and will be sent to the audit team (Document Banco mundial May 2009 CAR15.pdf). Audit Team 14.06.10 The new evidence provided indicates the forestable area in Corrientes which was applied to estimate the baseline reforestation rate.	
Corrective Action Request No.15. Correct in the PDD page 30 "Step 3 Barrier analysis" as it is indicated as Step 2.	C.6	Response Project Team: Barrier Analysis numeration has been accordingly changed in Section C.6.	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Audit Team 12.08.09 The correction to "Step 3: Barrier Analysis" was made as requested.	
Corrective Action Request No.16. Describe in the PDD if one of the national incentives / subsidies for forest plantations can be / will be applied on the planed project activity.	C.6	Response Project Team: The project activity has chosen not to apply any of the direct subsidies that are size-dependent. The subsidies schemes are described in section Section C.5.1 (Step 2). The according Forest Law number 25,080 will be provided to the DOE. The project will apply governmental tax benefits as described in Section C.5.1 (Step 2) and in abovementioned Forest Law. These benefits do not impact any tenure rights or carbon rights. In addition, they do not directly impact initial investment risks taken by project owner. Audit Team 12.08.09 Project participants state that no incentives from the government will be used. It must be analyzed whether existing incentives would lead to the consideration of reforestation as the most economically attractive alternative (done potentially as an investment analysis). Response Project Team: The following paragraph was iincluded in C.5.1 and C.6 (Investment barrier): According to Law 25,080 (as described in Section C.5.1, Step 2 of the PDD) fiscal stimuli and non-refundable economic support (subsidies) are available only for plantations smaller than 500ha. The project activity has no access to this kind of economic support. Audit Team 12.01.10 The referred law 25080 indicates that incentives are available for forestation activities up to 500ha/year, not as a total. - Clarify why this is not applicable to the proposed A/R CDM project activity. If the case, it must be analyzed whether existing incentives would lead to the consideration of reforestation as the most	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		economically attractive alternative (done potentially as an investment analysis). Response Project Team 12.05.2010: It was adapted accordingly in the PDD that incentives due to law 25080 are available for forestation activities up to 500ha/year. We included following sentence in the PDD: Given this, the project activity would have access to direct subsidies only for planting area of the year 2009. In any case, the project activity does not receive subsidies for either of the planting years as documented in an official renounce letter from the authorities. The incentives are applicable for the project activity only in the last planting year (2009). A renounce letter from the representative of the fiduciary, officially signed by the Dirección de Producción Forestal de la SAGPyA (Secretaría de Agricultura ganadería y pesca de la Nación) stating that Santo Domingo will not accept any direct subsidies will be provided to the audit team (Document Nota FISADO_nosubsidies CAR17.jpg). Audit Team 14.06.10 As indicated in the provided official letter, the proposed project activity will not apply to the financial benefits provided by the government. It is therefore clear that the incentives will not be part of the project implementation.	
Corrective Action Request No.17. In regard to the table/matrix that documents in the PDD the barriers per alternative, include exact labelling of alternatives (in line with titles of alternatives). An updated table/matrix shall make sure that it is	C.6	Response Project Team: Table excluded. Relevant information included in section C.6 Step 3 (Barrier analysis). Audit Team 12.08.09 In order to visualize how the baseline scenario was defined, show which	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
clarified which barrier applies to which alternative.		land use alternative is hindered by which barrier(s). Response Project Team: Table 13 to visualize which land use alternative is hindered by which barrier(s) was included in the PDD. Audit Team 12.01.10 A table indicating the land use alternatives and the barriers for each alternative was included as requested to cover this CAR.	
Corrective Action Request No.18. Summarize actual results for baseline stocks and removals in the PDD. Furthermore clarify/document the tree counting approach in the PDD in further detail as part of the baseline assessment.	C.7	Response Project Team: Section C.7 adapted with actual results of fieldwork of GMF. The fieldwork was realised in October 2008. In a first step GMF identified via actual satellite images, the sectors within the project area with existing growing trees, all in the baseline stratum 2 (see section C.4). These sectors are described in Section C.4. This assessment was combined with fieldwork. During the fieldwork the DBH and tree height have been measured. The mean DBH is 20 cm and mean height 5 m. During the fieldwork 290 trees were counted, The document with the results will be provided to the DOE. Audit Team 12.08.09: - The reforestation rate may be subject to modifications after considering the forestable area not as the same as the grazing land in Corrientes but the area defined according to an official source (i.e. territorial order plan). - The tree counting approach in the PDD must be described in further detail in the Annex 3, including the number of sample plots taken for the field work, the sampling accuracy, the standard deviation of the sample, etc. This must also include information on woody non-tree vegetation (shrubs). Response Project Team: - A new forestable area was considered (see Response CAR 15). A new	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		reforestation rate was recalculated accordingly. - Regarding single standing trees, no sample plots have been defined. After determining the specific areas with single growing trees a census was realized. This is described in Annex 3, 4. The document describing the census will be sent to Audit Team. Since all trees were counted there was no need for sampling. For explanation regarding woody non-tree vegetation see CAR 11. Audit Team 12.01.10 - The recalculated reforestation rate was included to the baseline scenario as requested. - As clarified in Annex 3, a census was conducted in the project area. Provide the document describing the census to the Audit Team. - Text in the PDD indicates the application of version 01 of AR-AM005. Clarify and modify text. Response Project Team 12.05.2010: - The document describing the census will be sent to the DOE (SD Informe árboles dispersos Nov08 CAR19.pdf). - The version of the methodology indicated in the PDD was adapted accordingly. Audit Team 14.06.10 Evidence on the census conducted for estimating baseline stocks was provided as requested. The version of the methodology applied was also clarified.	
Corrective Action Request No.19. Date (DD/MM/YYYY) of completion of baseline study to be given in PDD / section C.8.	C.8	Response Project Team: The exact date of completion of the baseline study Environmental Impact Assessment) is 6th of August 2007. Audit Team 12.08.09: The exact date of the completion of the baseline is indicated in the PDD.	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
Corrective Action Request No.20. Include information on yield data used for tree species planted in the project as basis for calculation of ex-ante actual net GHG removals by sink (based on given references/sources).	D.1	Response Project Team: For the Carbon fraction (CF) and Root to shoot ratio default values from the GPG LULUCF 2006 (Table 4.4 and 4.5) were used. This is due to lacking information on local or regional scale. With exception of Baccara all native species are hardwoods of high wood density. For the ex ante calculations the wood density of *Peltophorum dubium* (0.90) was choosen as representative for the native species. This is considered conservative since *Peltophorum dubium* is planted frequently. For ex-post calculations specific wood density for each species will be taken. The wood density of Pinus elliotti and Pinus taedaare based on publications on local surveys (reference included in PDD). The wood density of Grevillea robusta is 0.55.References for wood densities are found in the PDD. The biomass expansion factor (BEF) uses default values from the GPG LULUCF 2003 (Table 3A.1.10). The calculations were performed for each stratum and each species: The growth data of Pinus elliottii is based on SISPINUS, which models growth and yield to calculate volume (m3/ha) of the 4 cases with different planting densities (800, 1140, 1317 trees/ ha). Reference to SISPINUS is made in PDD. The growth data for Grevillea robusta was calculated using local data and volume functions. Given the small dataset available for native species data of an species often applied in project activity were used, i.e. *Peltophorum dubium*. According tree height (H) and Diameter at breast height (DBH) and volume function are based on studies conducted in the region. References in the PDD. Audit Team 12.08.09: - Previously the wood density of *Peltophorum dubium* was chosen as	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		representative for the native species with a value of 0.88 $dm.m^{-3}$ and now it is 0.90 $dm.m^{-3}$. Provide to the DOE the reference used for considering this value and also further justification must be provided for selecting this species as representative (i.e. considering the density of this species in relation to the other native species or the plantation density ,etc) - Provide to the DOE the calculations of the growth models were information was taken as well as the references used. -Clarify why the value of 0.28 for root to shoot ratio (R) was chosen. <u>Response Project Team:</u> - The previous wood density was from a old source: Libro del árbol . Tomo 2. Esencias forestales indígenas de la Argentina de aplicación industrial. Celulosa Argentina S.A. Segunda edición Agosto de 1976. Since a more actual source is available the latest one was chosen (Atencia, Maria Helena, 2003, INTI- CITEMA (Instituto Nacional de tecnología Industrial) (Centro de Investigación y Desarrollo de la Industria de la madera y Afines). The new reference is included in the PDD. Given the small dataset available for native species, data of *Peltophorum dubium* were used to represent native species mix. This approach was chosen because *Peltophorum dubium* is the most frequently planted native species and survival and growth rates are best known. The approach is considered conservative since *Peltophorum dubium* has a moderate biomass growth compared to other native species (Montagnini et al. 2005). Because a weighted mean of wood densities of all species is currently not applicable (due to e.g. ongoing planting and unknown survival rates) for consistency reasons wood density was also applied from *Peltophorum dubium.* With a wood density of 0.9 *Peltophorum dubium* lies within a typical range of native hardwood species (see Atencia, Maria Helena, 2003, INTI- CITEMA). Considering	

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		the above reasons the approach of applying *Peltophorum dubium* as representative species is considered conservative. This is shortly described in PDD section D.1. - Growth models and biomass calculations of Pinus, Grevillea and native species will be provided to the Audit Team. - The value 0.28 for root to shoot ratio (R) was a wrong assumption (Subtropical dry forest > 20 tonnes ha-1). The correct value is 0.24 (Subtropical humid forest > 125 tonnes ha-1). The value has been corrected in table 11 of the PDD and in the TARAM calculations. <u>Audit Team 12.01.10</u> - Provide the reference "Atencia, Maria Helena, 2003, INTI- CITEMA (Instituto Nacional de tecnología Industrial) (Centro de Investigación y Desarrollo de la Industria de la madera y Afines" were the value of wood density for *Peltophorum dubium* was obtained. - As already indicated in section C.4 above, in order to ensure conservativeness, it must be clarified in which proportion each of the species participate in the native species mix and also include to the PDD indication to the growth characteristics of the other selected native species. - The complete reference of the sources of the growth models for *Pinus sp* and for *Peltophorum dubium* must be provided to the Audit Team. The current evidence provides only the equations but background information is missing. - The value of 0.24 for shoot to root ratio was cross checked with IPCC GPG2006 and is considered adequate for the proposed project characteristics. <u>Response Project Team 12.05.2010:</u> - The official reference for wood density of *Peltophorum dubium* was adapted: I.Fo.NA. – Istituto Forestal Nacional (1960) . Fichas Técnicas	

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		de Especies Forestales. Argentina. Available online: http://www.sagpya.mecon.gov.ar/new/0-0/forestacion/biblos/ficha120.htm. - see Response Project Team in CAR 13. - The complete reference of the sources for *Peltophorum dubium is: Silvia Marisel Korth 2009: Modelo de Produccion para Peltophorum dubium.: The report Modelo_caniafistola_100226_CAR21.pdf will be sent to the audit team. It contains a description of the sources for biomass growth models.* *- The complete reference of the sources for Pinus is:* *Revista IDIA XXI: Forestales N° 8 Julio de 2005* *The relevant article is found in the section Manejo Forestal. The title is El Simulador Forestal. Authors: Ings. Ftles. Ernesto H. Crechi, Hugo E. Fassola e Ing. Agr. Roberto A. Fernández, INTA Montecarlo, Misiones, Ing. Ftal. Ramón A. Freid, Alto Paraná S.A.* *We send this article to the audit team (Document Simuldaror forestal_08072005_CAR21.pdf)* Audit Team 14.06.10 The requested references used for wood density for *Peltophorum dubium* and sources of the growth models for *Pinus sp* and for *Peltophorum dubium* were provided to the audit team.	
Corrective Action Request No.21. Complete section D. with actual main calculation steps (not only formula references) on actual net anthropogenic GHG removals by sinks (i.e. main results from excel spreadsheets).	D.1	Response Project Team: The main calculations steps are included in the PDD. The SISPINUS outputs for *Pinus elliotti* are part of Annexes sent with PDD. The volume calculations of *Grevillea robusta* (Modelos de Producción de *Grevillea robusta*) document will also be sent with the PDD as well as the native species calculations. Audit Team 12.08.09: Description of procedures and parameters used for calculations were	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		included to the PDD as requested.	
Corrective Action Request No.22. Include relevant calculations steps and assumptions on leakage to Section D.2	D.2	Response Project Team: Main calculation steps and assumptions regarding leakage included in section D.2. Nevertheless, guidance provided in para 37, EB 44 meeting report (November 28th, 2008) regarding accounting of GHG emissions in A/R CDM project activities, includes the agreement that emissions from fossil fuel consumption may be considered as insignificant in A/R CDM project activities and may therefore be neglected. Therefore there are no potential leakage emissions attributable to the AR CDM project activity. Audit Team 12.08.09: Evidence to sustain that leakage from displacement of grazing is negligible must be provided and relevant calculations according to the methodology requirements must be included. Response Project Team: The following paragraph was included in the PDD (Section D.2): Since 2007 and until the end of 2008 all cattle were sold, partly directly to slaughterhouses partly to other livestock farmers in the vicinity. The displacement of cattle outside the project boundary is temporarily, i.e. cattle are fed for few months and than being slaughtered in short term. Accordingly the overall number of cattle will stay constant or decrease in the region. According to the methodological tool “Estimation of GHG emissions to displacement of grazing activities in A/R CDM project activity” (Version 2); the sale of grazing animals to an entity not involved in the CDM project activity or slaughter of grazing animals does not result in leakage. No permanent vegetation loss or land use change will occur outside the project boundary due to the project activity. Therefore there are no potential leakage emissions form activity displacement. attributable to the AR CDM project activity.	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Audit Team 12.01.10 The methodological tool "Estimation of GHG emissions to displacement of grazing activities in A/R CDM project activity" (Version 2) was properly applied and referenced to the PDD. - Provide the corresponding evidence to the audit team indicating the sale of the cattle between 2007 and 2008. Response Project Team 12.05.2010: The purchase contract between former owner and Novartis (fiduciary) clearly states that the cattle was not sold to Novartis. There is no means to have access to the purchase contracts of cattle between former owner of cattle (former owner of land) and new owner of cattle. However, as described in PDD cattle was sold in 2007, 2008 and 2009. During this time cattle was allowed to stay in some areas of project activities where no planting occurred. The new owners of cattle rented these lands before selling cattle to slaughterhouses or moving them on own grazing lands. The rent of these parcels on Santo Domingo is bound by contracts. We send to audit team these contracts as evidence that all cattle was sold. All cattle are removed from the project activity. The documents include: 2007 SD Pastaje.pdf, 2008 SD Pastaje.pdf, 2009-04-20 SD Pastaje.pdf, 0001-00000001.pdf, 0001-00000003.pdf, 0001-00000004.pdf, 0001-00000005.pdf, 0001-00000101.pdf, 0001-00000103.pdf, 0001-00000104.pdf, 0001-00000105.pdf Audit Team 14.06.10 Evidence sustaining the rent of the land for grazing the sold cattle was provided sustaining the sale of the animals to other owners.	
Corrective Action Request No.23. Complete the tables with data to be monitored:	E.1	Response Project Team: Table with data to be collected for monitoring of forest establishment and forest management completed. Table with data to be collected and	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
2.1.1.01 Stratum ID 2.1.1.02 Sub-stratum ID 2.1.1.03 Confidence level 2.1.1.04 Accuracy 2.1.1.05 Standard deviation of each stratum 2.1.1.06 Number of sample plots 2.1.1.11 Number of trees 2.1.1.16 Merchantable volume 2.1.1.17 Wood density 2.1.1.18 BEF 2.1.1.23 Carbon stock in above ground biomass of plot 2.1.1.24 Carbon stock in belowground biomass of plot Consistency with methodology requirements is to be assured. Relevant tables shall be fully completed.		archived for Actual net GHG removals by sinks fully completed as described in the methodology. Audit Team 12.08.09: All parameters required by the methodology which are relevant for the monitoring of the project implementation were included to the PDD.	
Corrective Action Request No.24. SOP for field data collection including forest inventory and QA/QC procedures to be provided.	E.1	Response Project Team: The data collection and organization are based on the Manual (Manual de Procedimiento) described in Annex 4 of the PDD. Audit Team 12.08.09: Annex 4 contains procedures for QA/QC. This must be translated to English. Response Project Team: Annex 4 was translated to English Audit Team 12.01.10	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		As requested, annex 4 was translated to English where the SOP for field data collection and QA/QC procedures are included	
Corrective Action Request No.25. SOP or manual for conducting the carbon inventory to be provided and summary to be included to the PDD / Monitoring Plan.	E.2	Response Project Team: The data collection and organization are based on the Manual (Manual de Procedimiento) included in Annex 4 of the PDD. Audit Team 12.08.09: SOPs for conducting the carbon monitoring is included in the Monitoring Plan described in Annex 4 in Spanish. The Monitoring Plan must be translated to English since it is the official language defined by UNFCCC Response Project Team: Annex 4 was translated to English Audit Team 12.01.10 As requested, annex 4 was translated to English, it contains the SOP for conducting the carbon inventory.	☑
Corrective Action Request No.26. In the PDD it is indicated that BEF and RS will be the same as used for ex-ante estimates. This shall be corrected as better data may be available in future: BEF and RS are subject to monitoring.	E.4	Response Project Team: More adequate data for the biomass expansion factor (BEF) and root-shoot-ratio (R) shall be used in case they are available. BEF (E4.1.17) and R (E4.1.17) are included in table in Section E.4.1. Audit Team 12.08.09: The monitoring of the biomass expansion factor (BEF) and root-shoot-ratio (R) was included to the PDD.	☑
Corrective Action Request No.27. Biomass burning and corresponding parameters are to be considered although burning is not foreseen as this may be unintentional (therefore also included in forest management monitoring)	E.4	Response Project Team: As per EB 42 the emissions from the removals of herbaceous can be neglected in accounting GHG emissions in A/R CDM activities. CAR 28 is therefore not relevant. Audit Team 12.08.09: According to EB 42 emissions from removal of herbaceous vegetation	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		and transportation are neglected, however emissions from biomass burning (which may include also shrubs) are still considered, therefore: - Parameters for monitoring emissions from this source shall be included as required by the methodology. - Emissions from removal of no-tree vegetation are considered by the methodology and these also include woody vegetation as shrubs which are not included in EB 42 (only herbaceous) and therefore shall also be considered if relevant (see also comment in CAR 19 regarding baseline information) Response Project Team: Non-tree vegetation, besides herbaceous vegetation, does not exist. See Response CAR 11. Audit Team 12.01.10 As already clarified in section C.3, there are no shrubs present in the project area and therefore emissions from this type of source are neglected. - Parameters for monitoring emissions from biomass burning are to be considered (although burning is not foreseen as this may be unintentional). Response Project Team 12.05.2010: These parameters are already included in the PDD Section E.1. Audit Team 14.06.10 Parameters for monitoring emissions from biomass burning were included as requested.	
Corrective Action Request No.28. Erase footnotes in PDD that are actually coming from the Methodology and which are not relevant for PDD.	E.4	Response Project Team: Irrelevant footnotes have been erased in the PDD. Audit Team 12.08.09: The PDD was adapted according to the request. Irrelevant footnotes	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		were deleted.	
Corrective Action Request No.29. Parameter E.5.1.01 does not indicate if measured / estimated / calculated. Adapt table and clarify how corresponding monitoring is going to occur.	E.5	Response Project Team: As per decision by CDM EB 44 sources related to fossil fuel combustion are insignificant and may be neglected. Table of Section E.5.1 is not relevant and was therefore deleted. Audit Team 12.08.09: It is indicated that leakage from activity displacement will not occur and therefore it is not monitored; however in order to ensure that leakage from displacement of grazing is not happening as a result of project implementation, parameters for monitoring possible leakage from this source must be included. Response Project Team: See also CAR 23. The following paragraph was included in the PDD (Section E.5): Since animals were slaughtered or sold to entities not involved in the project activity leakage from activity displacement is zero. In order to assure that entities involved in the project activity do not manage animals formerly managed on the project activity area this will be monitored during first monitoring year in form of official confirmation in written by entities involved in project activity. This was included in Section E.5.1. Audit Team 12.01.10 A confirmation letter was included as a parameter to monitor leakage in the first monitoring year. Since leakage is not expected to occur in the project area, this is considered to be sufficient to cover the CAR.	☑
Corrective Action Request No.30. For NA a contact person or at least an e-mail address should be included to the table of E.8. Assure consistency of names and their clear	E.8	Response Project Team: Table of E.8 was adapted. The company in charge of monitoring has not been contracted yet. Several candidates are being looked at. Project participants will select locally available and experienced staff from National Universities. The persons in charge of managing monitoring	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
identification.		plan are Griselda Guarino (forest engineer at GMF) and Heinrich Burschel (GMF). Audit Team 12.08.09: The name of the people in charge of the supervision of the implementation of the monitoring plan is indicated in the PDD. The entity in charge of the implementation has not been contracted yet which is considered not to cause any diversion of the implementation of monitoring plan since first monitoring is expected to occur on 2012.	
Corrective Action Request No.31. Provide information on the Environmental Impact Assessment in the PDD, including impacts on biodiversity and natural ecosystems and impacts outside the project boundary.	F.1	Response Project Team: The project activity aims at establishing a plantation consisting of 75% of native timber species and 25% of exotic species well adapted to local growing conditions. The native species mix to be planted reflect native species that occur in natural forest patches in the project area that are kept to protect water resources and local species' habitats. The native species will be managed in long rotations and in some areas native species groups are planted (instead of interplanting in rows). This plantation design is favourable to local fauna and flora and, compared to prevailing pure exotic species plantations, contributes to biodiversity protection in the area. It is known that plantations consume more water than grassland and that they intercept and evaporate a greater quantity in their crowns than grasslands. Nevertheless the new systematization of the land can increase the proportion of runoff and consequently to contribute to the riverine areas and water bodies in the surrounding areas. All the impacts are described in the Environmental Impact Assessment conducted by ECO-CONSULTING S.R.L. The EIA/SEIA report will be made available as supporting information to the DOE as required. Audit Team 12.08.09: An specific Environmental Impact Assessment was developed for the	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		projects and main findings are described in the PDD, therefore the request is closed.	
Corrective Action Request No.32. Indications on planting areas in section F are not consistent and shall be adapted.	F.1	Response Project Team: The net project area is 2292 ha. The number was corrected in section F. Audit Team 12.08.09: Section F.1 was corrected properly. The net planting area is correctly indicated.	☑
Corrective Action Request No.33. Provide a summary of the stakeholder comments and provide information/documentation/evidence on the process and answers.	H.2	Response Project Team: Summary of stakeholders consultation and comments provided in Section H.2 of this PDD. None of the concerns expressed by the stakeholders required an action to be taken by GMF during the project activity stage or any other stage. Audit Team 12.08.09: A summary of the previously identified stakeholders is included to the PDD in conformity with the request..	☑
Clarification Request No. 1. It shall be clarified based on which document carbon rights were forwarded from the Trustee to Novartis (Argentina).	A.4.2	Response Project Team: The transfer of the carbon rights and ownership of the property from trustee to Novartis Pharma AG (via Novartis Argentina) is based on the Operating and Forestry Rights Agreement. Extracts from this document will be sent to DOE with the PDD. The carbon rights are forwarded from Novartis Argentina to Novartis Pharma AG via the Purchase Agreement. Extracts from this document will be sent to DOE with the PDD. Audit Team 12.08.09 The corresponding evidence was provided to clarify the transfer of the Carbon Rights from trustee to Novartis Pharma AG.	☑
Clarification Request No. 2. Describe / mention the activities to minimize	A.5.6	Response Project Team: Leakage minimization: The use of fossil fuel in project activities will be	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
leakage (fossil fuels).		minimized and optimized by using machinery only where necessary and using cars and vehicles strictly for project purposes. Land preparation method will not involve ploughing, nor slash and burn practice. According to EB 42 fossil fuel consumption can be neglected. Audit Team 12.08.09 Measures to minimize potential leakage are properly described in the PDD as requested.	
Clarification Request No. 3. Clarify and sustain with evidence that carbon rights are held by the land owner according to the Argentinean legal setting.	A.6	Response Project Team: The ownership of carbon credits is clarified in the Operating and Forestry Rights Agreement. The Agreement is governed by law of Argentina. Extracts of the according document will be sent to DOE with the PDD. Audit Team 12.08.09 Evidence on carbon rights was provided as evidence. The CR is closed	☑
Clarification Request No. 4. Clarify if the subsidy programme and according legislation impacts the transfer of carbon rights from CDM projects. (impact of subsidy laws on carbon rights)	A.10	Response Project Team: As described in Section C.5.1 (Step 2) the project will not apply any direct subsidies but chose to apply for tax benefits. The according taxation scheme as described in Forest Law number 25,080 does not impact any tenure rights or carbon rights. Audit Team 12.08.09 The PPs will not apply for subsidies from the government as indicated and it was clarified that these do not impact the carbon rights.	☑
Clarification Request No. 5. Clarify how it is avoided that peaks in carbon stocks systematically coincide with verification (over crediting period).	B.3	Response Project Team: The verification and monitoring schedule is described in section E.2. The planting activity has been conducted from 2007 to 2009. The trees in the present project activity would be thinned at the age of 8/9, 13/14 and 19 (Stratum 5). Native species and *Grevillea robusta* will only be thinned in Strata 5. This distribution allows for a smoothing of the carbon	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		sequestration curve, avoiding extreme peaks and minimums. The first monitoring will be conducted in the year 2012 with subsequent monitoring in 5 year periods of 2017and 2022. Audit Team 12.08.09 The description provided is considered adequate in order to avoid coincidence of peaks in carbon stocks with verification.	
Clarification Request No. 6. In regard to credible alternatives, clarify consistency with identified baseline scenarios (it was included: reforestation with native species (CDM project) as well as exotic species (non-CDM). Agriculture is also included in table in C.6). Evidence on the existence of each mentioned barrier shall be provided.	C.6	Response Project Team: Scenario 3 is plantation with exotic species. The use of native species for value added wood product does almost not exist in the region besides the proposed project activity. Scenario 3 was included in Step 1 of this section. For more evidence see CR 7. Audit Team 12.08.09 - The consideration of the proposed project not registered as a CDM project must be also included as an alternative. - Explain the difference of the proposed project to other reforestation in the region and how will the CDM overcome the presented barrier(s). Response Project Team: - Scenario 4 (The project activity undertaken without the CDM incentive) was included in the PDD. The difference of the proposed project activity and other reforestation projects in the region is explained in Section C.5.1, Step 5. In addition, the following paragraph was included in the PDD (section C.6): The CDM incentive will help to overcome the main barriers. The A/R CDM project activity is part of Novartis' carbon offsetting targets. The goal of the project activity is not based on optimizing timber returns. Optimization of timber returns would require a plantation setup with exotic fast growing species that have shorter pay back periods and provide sooner timber revenues. The generation of lCERs as main	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		incentive allows for the establishment of a long term native species plantation, which would hardly be possible from a purely timber-return driven point of view. Only with the generation of lCERs the project owners were willing to commit the required capital in order to realize the proposed A/R CDM project activity and to take the above-mentioned market risks. This is sustained by the fact that there is hardly experience in the region with regard to native species plantations. It is therefore evident that forestry investors in the region usually do not overcome the abovementioned barriers related to native species plantations. Audit Team 12.01.10 - The proposed project not registered as a CDM project was included as requested and barriers were analyzed and sustained with evidence. This evidence shows that most of the plantations developed in Corrientes are with exotic species which indicates that there isn´t experiences with native species underlining the technological barrier. - As already indicated before, the main difference of the proposed project with other reforestation activities in the region is the use of native species which are poorly known for plantations in the region.	
Clarification Request No. 7. Each barrier shall be sustained with evidence (provide to audit team) and referenced in the PDD in order to sustain the prohibitive character of the barrier.	C.6	Response Project Team: As concluded during field visit, technological barriers are seen as the main ones. Other barriers are still described in PDD. We provided references for each one of the barrier including: a) Technological barrier: Juan Modesto Dellacha et al. 2007: Cadena forestal Argentina, FAM; see Page 7 Table 3. Informe Aspectos Sociales Del Proyecto Forestal Santo Domingo by Eco Consuting (2007) b) Investment barrier	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Ley 25,080 Montos, Superficies, Forestadores y Planes por Provincia por Año http://www.sagpya.mecon.gov.ar/ c) institutional barrier Informe Aspectos Sociales Del Proyecto Forestal Santo Domingo by Eco Consuting (2007) Environmental Impact Assessment (2007) Tree Plantation Project Santo Domingo by Eco Consulting S.R.L (p.29) d) market barrier Juan Modesto Dellacha et. al (2007); La Cadena Forestal Audit Team 12.08.09 - Provide the documents sustaining each barriers - Explain how the CDM project overcomes the presented barriers. Response Project Team: - The document will be provided to the DOE - See Response Project Team CR 6 above. Audit Team 12.01.10 - The above references where provided to the audit team as evidence. - It was explained and sustained with evidence that the incomes from the CDM would allow to overcome the risks of using native species.	
Clarification Request No. 8. Document in the PDD if carbon gain-loss method or if stock change method was applied. Same applies for ex-ante removal estimates.	C.7	Response Project Team: Stock change method was applied for the calculations. Included in the PDD (Section C.7 and D.1) Audit Team 12.08.09 It was clearly indicated in the PDD that stock change method was applied.	☑
Clarification Request No. 9.	D.1	Response Project Team: With exception of Baccara all native species are hardwood species of	☑

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
Clarify conservativeness of chosen wood density and document this in PDD. Availability of other national or regional data for RS and CF shall be clarified (hierarchical approach).		high wood density. For the ex ante calculations the wood density of Peltophorum dubium was applied as representative for the native species (0.90). From all native species planted in the project Peltophorum dubium is the most frequently planted (almost 90%). We therefore consider the applied wood density as appropriate.. For the Carbon fraction (CF) and Root to shoot ratio (RS) default values from the GPG LULUCF 2006 (Table 4.4 and 4.5) were used. This is due to lacking information on local or regional scale Audit Team 12.08.09 As previously commented in CAR 21, there is some inconsistency with the previous information provided in regard to wood density of *Peltophorum dubium*. A conservative approach should consider the lowest value of the wood density of the species found or a weighted average among the native species selected. Response Project Team: See Response Project Team CAR 21. In line with email exchange of 30.10 2009 and 6.11.2009 we showed that our approach regarding natives species is the most conservative and accurate one because Peltophorum is the most planted species and known to grow relatively slow compared to other native species. In addition, we argue that calculating the weighted mean wood densities currently is not possible because planting is still ongoing and survival rates and percentage of each species is currently hard to assess. For consistency reasons we therefore applied wood density from Peltophorum, which is in a typical range of native hardwood species. In total we consider our approach conservative, accurate and consistent. Audit Team 12.01.10 As already pointed out in sections C.4 and D.1 of this table, further justification remains to be provided to ensure a conservative approach on the use of Peltophorum as a representative of the species mix.	

Validation Report clarifications and corrective action requests by validation team	Ref. to Table 1 and 2	Summary of project owner response	Validation team conclusion
		Response Project Team 12.05.2010: See also response Project Team CAR 13. Further to the fact that *Peltophorum dubium* makes almost 70% of all planted native species, the second most planted native species (*Tabebuia heptaphylla*, local name Lapacho negro) has a higher wood density than *Peltophorum dubium,* as can be seen in table of wood densities provided to audit team. Considering these various evidences we are confident that the approach chosen is adequate and conservative. Audit Team 14.06.10 The use of *Peltophorum dubium* as a representative of species mix was already justified sustaining the major participation of this species in the group of native species.	
Clarification Request No. 10. Clarify and document in the PDD the relevant of the monitoring of biomass loss (sustain exclusion of parameters from monitoring while ensuring consistency with baseline stock estimates). This is relevant in order to assure consistency for ex-post calculations at verification.	E.4	Response Project Team: As per EB 42 decision emissions from the removal of herbaceous can be neglected in accounting GHG emissions. Hence, this CR is not relevant. Audit Team 12.08.09 EB 42 accounts only for herbaceous vegetation while the methodology foresees the biomass loss of grasslands and other pre-existing vegetation. Therefore, clarify the relevance of monitoring of biomass loss as requested. Response Project Team: See response CAR 15 Audit Team 12.01.10 It was already clarified, only grasslands and sparse trees (accounted in baseline) are found in the project area and no sources of emissions were identified.	☑

Information Reference List

<table>
<tr><th>Ref. No.</th><th>Author/Editor/ Issuer</th><th>Title/Type of Document</th><th>Issuance and/or submission date</th><th>Additional Information (Relevance in CDM Context)</th></tr>
<tr><td>0.</td><td>UNFCCC Webpage</td><td>“Reforestation of grazing Lands in Santo Domingo, Argentina” http://cdm.unfccc.int/Projects/Validation/DB/JBQRATSO9YD14WIEW0AUGUDA65K16M/view.html</td><td>12/08/2008</td><td>Published PDD for GSP</td></tr>
<tr><td>1.</td><td></td><td>Onsite interview (03.11.08 – 07.11.08) carried out by TÜV SÜD:
Validation Team: Hubertus Schmidtke and Juan Chang
Interviewed Persons:
<table>
<tr><th></th><th>Name</th><th>Organisation</th></tr>
<tr><td>1</td><td>Griselda Guarino</td><td>GMF</td></tr>
<tr><td>2</td><td>Jorge Esquivel</td><td>GMF</td></tr>
<tr><td>3</td><td>Heinrich Burschel</td><td>GMF</td></tr>
<tr><td>4</td><td>Markus Lehni</td><td>Novartis International AG</td></tr>
<tr><td>5</td><td>Daniel Magnano</td><td>Novartis Argentina S.A.</td></tr>
<tr><td>6</td><td>Joachim Sell</td><td>First Climate AG</td></tr>
<tr><td>7</td><td>Maria Cristina Goldfarb</td><td>Forage Resource: Rangelands and Pastures- INTA</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>2..</td><td>Novartis Pharma AG</td><td>PDD GSP version and PDD final version</td><td>GSP version: 12/08/2008
Final version: 15/11/10</td><td></td></tr>
<tr><td>3.</td><td>SmartWood</td><td>Evaluation Report for the Certification under FSC Standard
(Informe de Evaluación para la Certificación del Manejo Forestal de: Fideicomiso</td><td>Feb 2008</td><td>Information used for the description of the project</td></tr>
</table>

Ref. No.	Author/Editor/ Issuer	Title/Type of Document	Issuance and/or submission date	Additional Information (Relevance in CDM Context)
		Santo Domingo Ituzaingó, Corrientes, Argentina.		
4.	Novartis Pharma AG	Contract between GMF and Novartis: Operating and Forestry Rights Agreement signed on June 2007	2007	Information used for the description of the project
5.	Novartis Pharma AG	E-mail communication from DNA of Argentina of the process of getting the LoA		Confirmation on the authencity of the LoA
6.	Novartis Pharma AG	Land registry of the Santo Domingo farm		Land tenure evidence
7.	Juan Miguel Thurburn	Sale contract between the previous land owner and Mr. Juan Miguel Thurburn, representative of Novartis.	05/02/2007	Land tenure evidence
8.	Novartis Pharma AG	Contract between Novartis and Juan Miguel Thurburn signed in February 2007 transferring the land to Novartis Argentina S.A.	05/02/2007	Land tenure evidence
9.	Novartis Pharma AG	Document of transfer of the administration from Juan Miguel Thurburn to Julio Pedro Naveyra signed	05/02/2007	Land tenure evidence
10.	Novartis Pharma AG	Contract between Novartis Argentina and Novartis Pharma AG for the transfer of the carbon rights	07/07/2008	Carbon rights evidence
11.	Government of Corrientes	Positive statement of the Provincial Government of Corrientes on transfer of Land to Novartis		Land tenure evidence
12.	INTA	Soil analysis document. 'Establecimiento Santo Domingo, departamento Ituzaingó – Corrientes'.	07/2007	Applicability evidence
13.	Eco Consulting S.R.L	Environmental Impact Assessment. 85p.	2007	Evidence on technology to be employed.
14.	Keller, H., Ritter, L., Franco, M.	Biodiversity assessment in forest patches of the project. 'Estudio de biodiversidad Vegetal en Fragmentos de Selvas y Bosques Marginales del Predio Santo Domingo,	2008	Evidence on presence of endangered species.

Ref. No.	Author/Editor/ Issuer	Title/Type of Document	Issuance and/or submission date	Additional Information (Relevance in CDM Context)
		Departamento de Ituzaingó, Corrientes, Argentina'.		
15.	Krauczuk, E.	Birds of La Estancia, Santo Domingo.	2008	Evidence on presence of endangered species.
16.	Krauczuk, E	Amphibians of La Estancia, Santo Domingo	2008	Evidence on presence of endangered species.
17.	Goldfarb, C.	Grassland identification document. 'Identificación de los pastizales Ea. Santo Domingo S.A. Ituizango, Corrientes, Argentina'.	2008	Evidence on presence of endangered species.
18.	GMF	Forest Management Plan. 'Plan de Manejo Forestal 2008 Establecimiento Santo Domingo, Departamento de Ituzaingó, Corrientes, Argentina'.	2008	Evidence on technology to be employed.
19.	Balducci, E.	Evidence about a plantation with native species nearby the project area. 'Informe del Estado de la Plantación Experimental Valle Morado. Fundación Pro Yungas'.	2005	Evidence on technology to be employed.
20.	Crechi, E. Domecq, C., Hennig, A., Fernández, R. Eibl, B.	Silviculture of 3 native species of economic interest in Misiones. 'Silvicultura inicial de 3 especies latifoliadas nativas de interés económico en Misiones. En: Novenas Jornadas Técnicas Forestales. El dorado, misiones, Argentina. 17p'.	2002	Evidence on technology to be employed.
21.	HUAGRO S.A.	Safety protocol for the use of insecticide. 'Hoja de seguridad Sulfa Mirex S (Argentina)/ Sulfa max (Uruguay) Insecticida Hormiguicida'.	03/11/2008	Evidence on technology to be employed.
22.	Chiosonne, G.	Grazing Production Systems of Northeast Argentina. 'Sistemas de Producción Ganaderos del Noreste de Argentina. INTA'.	2006	Evidence on technology to be employed.

Ref. No.	Author/Editor/ Issuer	Title/Type of Document	Issuance and/or submission date	Additional Information (Relevance in CDM Context)
23.	INTA	The grazing capacity of Corrientes Province. 'La carga ganadera "real" en la provincia de Corrientes'.	2008	Evidence on technology to be employed.
24.	Novartis Pharma AG	Internal Report of Activities No 2 performed at la finca with date 10.04.07 to 05.05.07	05/05/2007	Evidence on technology to be employed.
25.	Novartis Pharma AG	GIS database of the project in ArcView format	03/11/2008	Boundary delineation and stratification evidence
26.	Government of Corrientes	Statistics of Corrientes 2008. 'Corrientes en cifras 2008. Secretaría General de la Gobernación'.	2008	Additionality evidence
27.	Novartis Pharma AG	Extract of the monthly Executive Board Meeting of Novartis dated on 16th of June 2006	16/06/2006	Additionality evidence
28.	FAB	Forestry Chain in Corrrientes Document. 'La Cadena Forestal en Corrrientes'.	2007	Additionality evidence
29.	Gobienro de Misiones	El Sector Forestal en Misiones y Noreste de Corrientes (http://www.misiones.gov.ar/ecologia/Todo/Bosques/Plan%20Maestro/InformeOlsenII.htm)	14/06/2010	Last accessed on 14/06/2010
30.	Costas et al.	Allometric equations for secondary forest species. 'Funciones de volumen para especies de bosque secundario de la Reserva Guarani, Misiones (Argentina). Rev. FCA UNCuyo Tomo XXXVIII No. 2 49-57'.	2006	Sections C. 7 and D.1
31.	Gomez, C., Cardozo, F.	Enrichment of native forest with Peltophorum. 'Enriquecimiento del bosque nativo con Ibira Puita Guazú (Peltophorum dubium Spreng).INTA, Presidencia de la Plaza'.	2003	Sections C. 7 and D.1
32.	Gasparri, I.,	Volume and biomass estimation and carbon content of the Argentina regions.	2004	Sections C. 7 and D.1

Ref. No.	Author/Editor/ Issuer	Title/Type of Document	Issuance and/or submission date	Additional Information (Relevance in CDM Context)
	Manghi, E.	'Estimación de volumen, biomasa y contenido de carbono de las regiones forestales argentinas. Informe Final. Dirección de Bosques. Secretaría de Ambiente y Desarrollo Sustentables'.		
33.	Novartis Pharma AG	Fossile fuel comsumption_SD_071024.xls Excel sheet.		Sections C. 7 and D.1
34.	Novartis Pharma AG	TARAM_Santodomingo_081023_AM.xls	14/06/2010	Sections C. 7 and D.1
35.	GMF	Procedures for mitigating forest fires,.'Procedimientos ante eventuales incedios forestales'.	2008	
36.	Eco-consulting S.R.L.	Socio economic study of the project. 'Informe aspectos sociales del proyecto forestal Santo Domingo. 15p'.	2007	Section G
37.	Novartis Pharma AG	Grazing Contract as evidence of sale of the animals to other farmers. 'Contrato de Pastaje'.	10/05/2007	Section D.2
38	GMF	GMF communication to Novartis on the living situation of the former owner and its intentions and conditions to sell the land.	07/09/2006	Section C.5
39.	Novartis Pharma AG	Excel file of the planting activity in the project	03/11/2008	Section D.1 and D.2
40.	TÜV-SÜD	Interview notes with INTA experts regarding reforestation activities in the region	07/11/2008	Additionality evidence
41.	TÜV-SÜD	Auditor field forms of data gathered during the onsite visit	07/11/2008	Boundary delineation evidence
42.	Novartis Pharma AG	Printed maps of the project boundary and stratification	03/11/2008	Boundary delineation evidence
43.	Novartis Pharma	Satellite Imagery LANDSAT TM in digital version.	03/11/2008	Boundary delineation

Ref. No.	Author/Editor/ Issuer	Title/Type of Document	Issuance and/or submission date	Additional Information (Relevance in CDM Context)
	AG			evidence and eligibility
44.	DNA of Argentina	Letter of Approval of Argentina	08/02/2010	
45.	Banco Mundial	Strategy for Productive Development. 'Estrategia de Desarrollo Productivo – Informe primera fase. Estrategia Competitiva para la Provincia de Corrientes'.	2009	Additionality evidence
46.	Secretaría de Agricultura Ganadería y Pesca de la Nación (SAGPyA),	Forestry Statistics of Corrientes. 'Dirección de Forestación (http://www.sagpya.mecon.gov.ar/)'.	03/11/2008	Additionality evidence
47.	Korth, Silvia Marisel	Production Model for "*Peltophorum dubium*".	2009	Section D.1 and D.2
48.	Secretaria de ambiente y Desarollo Sustentable.	Volume Estimation of Biomass and Carbon content. 'Estimación de Volumen, Biomasa y Contenido de Carbono de las Regiones Forestales Argentinas'.	2004	Section D.1 and D.2
49.	Fideicomiso Santo Domingo	Scanned copies of grazing contracts	03/11/2008	Section D.2
50.	Moura Dias, Fabricio, et al.	Relation between the Compaction Rate and Physical and Mechanical Properties of Particle boards	2005	Section D.1 and D.2
51.	Obdulio, Oereyra; Fidelina, Silvia	Natural resistance of forestry species for construction. 'Durabilidad Natural de la Madera de cinco especies aptas para la Industria de la Construcción'.	2004	Section D.1 and D.2
52.	I.Fo.NA. – Istituto Forestal Nacional	Technical data of forestry species. 'Fichas Técnicas de Especies Forestales. Argentina. Available online: http://www.sagpya.mecon.gov.ar/new/0-	1960	Section D.1 and D.2

Ref. No.	Author/Editor/ Issuer	Title/Type of Document	Issuance and/or submission date	Additional Information (Relevance in CDM Context)
		0/forestacion/biblos/ficha120.htm		
53.	Bracamonte, P.	Territorial Order Plan. 'La Provincia de Corrientes y su Ordenamiento Territorial. Secretaria de Planeamiento, Gobierno de Corrientes (http://www.plancorrientes.gov.ar/articulo/articuloDetalle.aspx?articuloid=268)	2006	Last accessed on 14/06/2010
54.	Republic of Argentina	Law 25080 regarding incentives for forestry plantations	03/11/2008	Section C.5
55.	Brandan, S. et al.	Forestry Sector 2008. Direccion de Produccion Forestal, Ministerio de Agricultura, Ganaderia y Pesca..	2009	Additionality evidence
56.	DNA of Switzerland	Letter of Approval of Switzerland	23/08/2010	
57	Mr. Yvan Keckeis	E-mail communication from the representative of the DNA of Switzerland: confirming the authenticity of the Letter of Approval.	01/09/2010	Confirmation on the authencity of the LoA