Monitoring report form for CDM project activity
(Version 06.0)

Complete this form in accordance with the instructions attached at the end of this form.

MONITORING REPORT	
Title of the project activity	Facilitating Reforestation for Guangxi Watershed Management in Pearl River Basin
UNFCCC reference number of the project activity	Ref 0547
Version number of the PDD applicable to this monitoring report	02
Version number of this monitoring report	03
Completion date of this monitoring report	21/04/2019
Monitoring period number	Second monitoring period
Duration of this monitoring period	01/01/2012 - 09/06/2018
Monitoring report number for this monitoring report	01
Project participants	• Xinghuan Forestry Development Company Ltd • International Bank for Reconstruction and Development (IBRD) as Trustee of the BioCarbon Fund (BioCF) • Eco-Carbone; • Idemitsu Kosan Co., Ltd.; • Japan Petroleum Exploration Co., Ltd.; • The Japan Iron and Steel Federation; • Sumitomo Chemical; • Sumitomo Joint Electric Power Co., Ltd.; • The Okinawa Electric Power Co., Inc.; • The Tokyo Electric Power Company Holdings, Inc.; • Suntory Holdings Limited; • Government of Luxembourg – Ministry of sustainable Development and Infrastructure Department of Environment; • Government of Italy – Ministry of the Environment, Land and Sea; • Kingdom of Spain – Ministry of Agriculture, Food and Environment and Ministry of Economy and Competitiveness;
Host Party	People's Republic of China

Sectoral scopes	14 : Afforestation and reforestation	
Applied methodologies and standardized baselines	• AR-AM0001 ver. 2 - Reforestation of degraded land • AR-ACM0003 ver. 02.0 (applied in MR) - Afforestation and reforestation of lands except wetlands	
Amount of GHG emission reductions or net anthropogenic GHG removals achieved by the project activity in this monitoring period	Amount achieved before 1 January 2013	Amount achieved from 1 January 2013
		318,563
Amount of GHG emission reductions or net anthropogenic GHG removals estimated ex ante for this monitoring period in the PDD	540,202	

SECTION A. Description of project activity

A.1. General description of project activity

>>The A/R CDM project activity, Facilitating Reforestation for Guangxi Watershed Management in Pearl River Basin has been under implementation since 2006 in the Guangxi province of China. The project has been implemented afforestation and reforestation (A/R) activities to achieve multiple objectives of restoring the degraded areas, soil, water and biodiversity conservation and poverty alleviation in the Guangxi watershed in the Pearl River basin. The specific objectives of the project are:

(1) To sequester CO2 through forest restoration in small watershed areas and pilot reforestation activities to generate high-quality GHG emission reductions that can be measured, monitored and verified;

(2) To enhance biodiversity conservation by increasing the connectivity of forests adjacent to nature reserves;

(3) To improve soil and water conservation;

(4) To generate income for local communities.

To achieve the objectives, the 3,100.0 ha of multiple-use forests have been established on degraded lands in Huanjiang County and Cangwu County of Guangxi Province, compared to 4,000 ha planned in registered PDD and 3008.8 ha in the first verification. The major species covered in the forestation/models are: Masson pine (*Pinus massoniana*) 1,460.4 ha, Chinese fir (*Cunninghamia lanceolate*) 215.0 ha, Schima (*Schima superba*) 289.9 ha, Eucalyptus (*Eucalyptus* sp.) 858.6 ha, Liquidambar (*Liquidambar formosana*) 82.6 ha, Oak (*Quercus griffithii*) 29.6 ha, Masson pine mixed with Liquidambar 112.9 ha, and Masson pine mixed with Chinese fir 51.0 ha.

The A/R CDM project activity has been implemented involving farmers/communities and forest companies through following cooperative arrangements.

(1) Shareholding arrangements between local farmers/communities and forest company. The farmers/communities contribute land and labour and local forest companies invest in planting activities, provide technical inputs and manage plantations during the crediting period. The contractual arrangements between the farmers/communities and the companies cover the plantation establishment and management responsibilities, inputs and benefit sharing. The forest companies pay farmers for labour input to the project, providing income to farmers through temporary employment.

(2) Arrangements involving farmers groups. Individual farmers voluntarily invest in groups and undertake project activities such as site preparation, planting and forest management. The local forestry agencies provide assistances for the design of planting models, training, supervision, and other technical services. Income from forest products and sale of CERs accrue solely to local farmers.

The farmers of the project have contracted the forest company to conduct project registration, implementation and monitoring of the A/R CDM project activity, and sale of CERs on behalf of the project. The A/R CDM project activity has been implemented separately, but linked with a larger umbrella Guangxi Integrated Forestry Development and Conservation Project (GIFDCP), which supports monitoring of environmental and social impacts of the project in relation to natural forest, watershed and biodiversity aspects of the Guangxi Zhuang Autonomous Region.

The project implemented reforestation through direct planting of tree spcies to restore the degraded lands using environmental-friendly techniques. Good practice guidance of reforestation and experience gained from the World Bank financed forestry projects were adopted in the project. The following technical and regulatory standards have been followed:

- Artificial Afforestation Technical Regulation: GB/T 15776-2006;
- Non-commercial Forest Artificial Afforestation Technical Regulation: GB/T 15776-2006;

- Non-commercial Forest Construction: GB/T 18337.1-2001, GB/T 18337.2-2001, GB/T 18337.3-2001;
- Non-commercial forest construction-verification regulation: GB/T 18337.4-2008;
- Design Code for Afforestation Operation: LY/T 1607-2003;
- Regulations for Tending of Forest: GB/T 15781-1995;
- Tree Seedling Quality Grading of Major Species for Afforestation: GB 6000－1999;
- Technical Regulations for Cultivation of Tree Seedlings: GB/T 6001-1985;
- Technical Standard for Cultivation of Container Seedlings: LY1000-1991;
- Seed Certification Regulations (GB2772-1999);
- Technical regulations for forest harvest and regeneration;
- Technical Regulations for Chinese fir plantation in Guangxi;
- Technical Regulations for masson pine plantation in Guangxi

The local forestry agencies, i.e., Guangxi Provincial Forestry Department, Cangwu and Huanjiang County Forestry Bureaus, Guangxi Forestry Inventory and Design Institute and Guangxi Forestry Research Institute provided guidance, and quality control in the implementation of the A/R CDM project activity. The up-to-date technologies and silvicultural models were adopted. No technology has been transferred to the host party.

To prevent soil erosion, reduce GHG emission and protect existing carbon stocks, site burning and overall tillage were not employed. Small pits of diameter 40-50cm and depth of 40cm were dug along the contours. To minimize risk of natural events (fire, pest, insects and disease) and to maximize environmental and social benefits, mixed species arrangements were adopted. All species except eucalyptus are native to the region.

seedlings of eucalyptus deveoped using tissue culture method were purchased from Guangxi Dongmen Forestry Farm, and then cultured in the nurseries of Cangwu and Huangjiang Counties. Seeds of other species were collected from local seed orchards or parent tree gardens and grown in temporary on-site nurseries. All seed and tissue cultured seedlings were subjected to quality certification. Seedlings are produced in plastic tubes. This technique ensures the control of growing conditions in the early stages of planting, and imrpoves the growth and survival of planted seedlings.

Planting activities were completed over seven years, starting in 2006. The major species of the project and their spacing is as follows:

- Eucalyptus: 2 m × 4 m;
- Masson and Schima: 2 m × 2.5 m;
- Oak and Chinese fir: 2 m × 2 m;
- Liquidambar: 2 m × 3 m.

To ensure high survival rates and good growth in the early stages, manual weeding was conducted two to three times a year during the first three years of planting. Survival rates were checked and re-planting was conducted as necessary such as on lands affected from snowstorms.

On poor soils, small quantities of nitrogenous fertilizer with 10% nitrogen content was applied to eucalyptus at the rate of: 750g per tree at planting, 300g per tree in the second year and 400g per tree in the third year.

578.5 ha of eucalyptus have been harvested and regenerated during the monitoring period.

A.2. Location of project activity

>> The A/R CDM project activity is located in Cangwu County (in the Eastern part of map) and Huanjiang County (in the Northern part of map), Guangxi Zhuang Autonomous Region, in southern China (Fig.A-1).

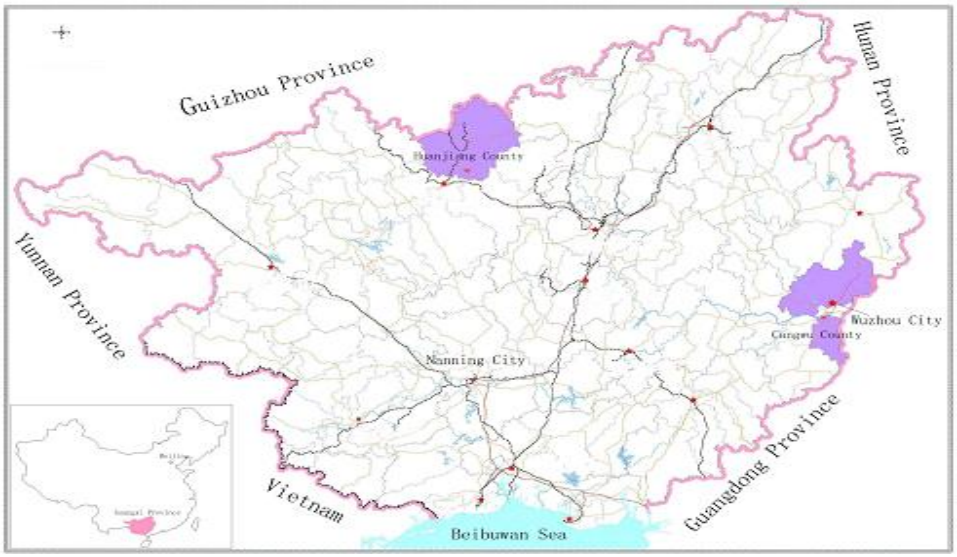


Figure A-1 Location of project counties

Reforested lands are located in 13 villages of 4 townships in Cangwu County and 14 villages of 6 townships in Huanjiang County.

Table A-1 List of Counties, towns/townships and villages involved[1]

Cangwu County		Latitude (N, degree)	Longitude (E, degree)
Townships	Villages		
Dapo	Shengzhou	111.30214-111.38319	23.18890-23.24468
	Xinlong	111.26641-111.31870	23.18389-23.23788
	Dayan	111.32941-111.39390	23.14746-23.18596
Xindi	Diancun	111.14224-111.18855	23.26278-23.31513
	Dongxin	111.14349-111.18876	23.30142-23.32902
	Xunchun	111.13368-111.20041	23.15172-23.18319
	Dacun	11.189990-111.21657	23.33486-23.35340
	Daton	111.16250-111.20237	23.30050-23.35690
Longxu	Enyi	111.24467-111.27654	23.38740-23.44081
	Daen	111.18076-111.24528	23.34605-23.39321
Shatou	Cantian	111.48480-111.58910	24.04140-24.15430
	Shichuan	111.48530-111.53740	24.09310-24.17200
	Shentang	111.38871-111.47016	23.93381-24.04026
Huanjiang County			
Xunle	Taiping	108.30170-108.36460	25.24880-25.34270
	Shangang	108.28420-108.41080	25.44830-25.54000
Chuanshan	Hedun	108.07210-108.18020	25.11300-25.20940
Mulun	Leyi	107.96206-108.02698	25.07901-25.13427
Minglun	Minglun	108.32830-108.47680	25.15100-25.23620
	Baixiang	108.38310-108.44510	25.13800-25.19440
	Cuishan	108.34180-108.45050	25.26620-25.34140

[1] The coordinates in the table are Beijing 1954 geographical coordinate system.

Longyan	Huangzhong	108.36910-108.46960	25.37330-25.45990
	Jiuwei	108.35310-108.43720	25.31870-25.37580
	Dake	108.50030-108.61030	25.27220-25.33440
	chaoge	108.49880-108.59050	25.31400-25.41600
	Longyan	108.44375-108.51672	25.25342-25.30658
	Chenghuang	108.34800-108.42300	25.35410-25.42670
Shangchao	Beishan	108.12510-108.23410	25.18670-25.30860

A.3. Parties and project participants

Table A-1 Project participants

Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
People's Republic of China (host)	Xinghuan Forestry Development Company Ltd	No
France	Eco-Carbone	No
Japan	Idemitsu Kosan Co., Ltd.; Japan Petroleum Exploration Co., Ltd.; The Japan Iron and Steel Federation.; Sumitomo Chemical; Sumitomo Joint Electric Power Co., Ltd.; The Okinawa Electric Power Co., Inc; The Tokyo Electric Power Company Holdings, Inc; Suntory Holdings Limited	No
Luxembourg	Government of Luxembourg – Ministry of sustainable Development and Infrastructure Department of Environment	Yes
Italy	Government of Italy – Ministry for the Environment, Land and Sea	Yes
Spain	Kingdom of Spain – Ministry of Agriculture, Food and Environment and Ministry of Economy and Competitiveness	Yes

A.4. Reference to applied methodologies and standardized baselines

>> The approved afforestation and reforestation baseline and monitoring methodology "Reforestation of degraded land" (AR-AM0001/version 02) was applied in PDD, while A/R large-scale consolidated methodology "Afforestation and reforestation of lands except wetlands" (AR-

ACM0003/version 02.0)[2] is applied in this monitoring report); and methodological tools, guidelines and guidance listed below has been implemented in the project[3].

- A/R Methodological Tool "Calculation of the number of sample plots for measurements within A/R CDM project activities" (Version 02.1.0);
- A/R Methodological Tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" (Version 04.2);
- A/R Methodological Tool "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" (Version 01.1.0);
- Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities (Version 01.1)
- Guidelines on accounting of specified types of changes in A/R CDM project activities from the description in registered project design documents (Version 02.0)
- A/R Methodological Tool "Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity" (Version 04.0.0)
- A/R Methodological Tool "Demonstrating appropriateness of volume equations for estimation of aboveground tree biomass in A/R CDM project activities" (Version 01.0.0)
- Guidelines on conditions under which increase in GHG emissions related to displacement of pre-project grazing activities in A/R CDM project activity is insignificant" (version 01)
- A/R Methodological Tool "Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity" (version 02.0)

In addition, relevant technical guidelines for national and local forest inventory followed in the project, include:

- Technical guidelines for forest resource planning and design. State Forestry Administration (SFA), April 2003
- Technical guidelines for national forest inventory. SFA 2004 No.25
- Technical guidelines for forest resource planning and design in Guangxi. Guangxi Forestry Department, Feb 2009
- Standard Operation Procedures for 8th forest inventory in Guangxi. Guangxi Forestry Department, April 2010

A.5. Crediting period type and duration

>> Start date: 01/04/2006
Crediting period: 30 years (from 01/04/2006 to 31/03/2036), fixed.

SECTION B. Implementation of project activity

B.1. Description of implemented project activity

>>The project started on April 1st 2006. As outlined in the PDD, 4,000 ha was proposed to be planted during 2006 and 2007. However, the actual project area for the second monitoring period is 3100.0 ha, i.e., 77.5% of the area proposed. The details of area planted in each land parcel by year are outlined in Annex I. The comparison of the planted area by year vis-à-vis area proposed for planting in the registered PDD is presented in table B.1 below.

[2] http://cdm.unfccc.int/methodologies/ARmethodologies/approved

[3] http://cdm.unfccc.int/Reference/tools/index.html

Compared to the first monitoring period (3,008.8 ha), the project area increased by 91.2 ha including,

a) land use changed on 24.1 ha of land in Cangwu county due to infrastructure construction (e.g. roads);

b) 115.3 ha of additional lands was planted (excluded in the first monitoring due to land tenure conflicts that was resolved in the second monitoring period).

As specified in the first monitoring report, the adverse climate events such as snow/ice storms and droughts damaged significant area of the project, resulted in a significant replanting even repeatedly. Since the first monitoring, 230.4 ha of planted lands have been suffered from additional severe drought.

The replanting and gaping filling on planted lands, with low survival rate or after suffering from climate disasters as well as harvesting, were conducted throughout the second monitoring period from 2012 to 2018. In many case different species have to be selected. For example, 0.3 ha of eucalyptus was replanted with Masson pine and Liquidambar after harvesting in 2012, and 2.2 ha of eucalyptus was replanted with Chinese fir in 2016. 10.8 ha of lands suffered from drought in 2015 and 2018 was replanted with Eucalyptus.

Table B.1 Planted/replanted area in project[4] as compared to planting plan in PDD and 1st monitoring period (ha)

Plantation model	Year													
	Total	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Eucalyptus - area planted/replanted	858.6	478.9	30.1	166.5	6.3	110.9	7.0	10.5	20.7	7.2	18.1		2.0	0.4
- area in the 1st verification	821.7	487.7	30.3	176.9	6.7	113.1	7.0							
- area proposed in the PDD	**1000.0**	850.0	150.0											
Masson pine - area planted/replanted	**1460.4**	209.3	159.3	730.9	48.9	5.0	89.1		32.3	58.7	97.1	7.6	4.5	17.7
- area in the 1st verification	1464.8	212.9	184.7	790.7	67.7	34.6	174.2							
- area proposed in the PDD	**1320.0**	388.0	932.0											
Oak - area planted/replanted	**29.6**			16.9	0.9			6.0		1.1	2.1			2.6
- area in the 1st verification	**26.8**			22.3	4.5									
- area proposed in the PDD	**360.0**	40.0	320.0											
Schima - area planted/replanted	**289.9**	120.1	32.0	13.1	88.6					28.1	7.0	0.5	0.5	
- area in the 1st verification	**297.6**	120.6	32.0	18.3	101.3		25.4							
- area proposed in the PDD	**240.0**	88.0	152.0											
Liquidambar - area planted/replanted	**82.6**	19.1	11.8	51.7										
- area in the 1st verification	**89.4**	19.1	11.8	58.5										

[4] Calculated from Annex I

- area proposed in the PDD	**900.0**	294.0	606.0											
Chinese fir- area planted/replanted	**215.0**	16.8	21.0	94.4			16.1	9.2	12.9	26.2	5.2	2.2	10.0	1.0
- area in the 1st verification	**148.3**	16.8	21.0	94.4			16.1							
- area proposed in the PDD	**180.0**		180.0											
Pine+ Liquidambar +oak irregular- area planted/replanted	**112.9**	25.7		83.5				3.7						
- area in the 1st verification	**109.2**	25.7		83.5										
Pine + Chinese fir irregular- area planted/replanted	**51.0**			51.0										
- area in the 1st verification	**51.0**			51.0										
Total area planted/replanted	**3100.0**	**869.9**	**254.2**	**1208.0**	**144.7**	**115.9**	**112.2**	**29.4**	**65.9**	**121.3**	**129.5**	**10.3**	**17.0**	**21.7**
- total area in the 1st verification	**3008.8**	**882.8**	**279.8**	**1295.6**	**180.2**	**147.7**	**222.7**							
- total area proposed in the PDD	**4000.0**	**1660.0**	**2340.0**											

B.2. Post-registration changes

B.2.1. Temporary deviations from the registered monitoring plan, applied methodologies or standardized baselines

>> N.A

B.2.2. Corrections

>> N.A

B.2.3. Changes to the start date of the crediting period

>> N.A

B.2.4. Inclusion of monitoring plan

>> N.A

B.2.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other applied standards or tools

>> N.A

B.2.6. Changes to project design

>> N.A

B.2.7. Types of changes specific to afforestation or reforestation project activity

As per the "Guidelines on accounting of specified types of changes in A/R CDM project activities from the description in registered project design documents" (Version 02.0) (Annex 24, EB 66), the types of changes from the project description of the A/R CDM project activity in the PDD as listed below are identified as minor in nature, therefore shall be addressed through the verification stage by the designated operational entity without prior approval by the board.

Table B.2 Types of changes from the description in the registered PDD as outlined in the guidelines (Annex 24, EB66) and their applicability to the implemented project

No.	Types of changes from the project description in the PDD of an A/R CDM project activity	Applicability to the project
a)	Changes in year-wise areas planted, possibly resulting in a part of the project area not being planted;	Yes, as a result of changes in year-wise areas planted, 3100.0 ha out of 4000.0 ha were planted. Therefore, 900.0 ha of the project area was not planted or will not be planted.

b)	Changes in species composition, if the changes are demonstrated at verification to be consistent with the baseline identification and additionality demonstration made at the validation stage;	Yes, changes in species composition and stand models occurred during the project implementation. It was found that due to poor site conditions and location specific factors, survival and growth rates of most species were not as projected in the PDD (see table B-1 above). In addition, small changes to the stand models needed to be made as per the project implementation requirements, the changes in species and composition of the project are consistent with the baseline identification and additionality demonstration made at the validation stage. **For the baseline identification:** As the changes in project area do not affect the baseline information. The 35 ha with growing trees in stratum II remains unchanged, hence the baseline net removals by sinks remains same as PDD). The changes of area in other baseline strata also do not affect baseline removals given no growing trees on these strata. **For the additionality**: - In the project design the revenue from the project activity was expected from the short rotation oak (7 years) and eucalyptus (10 years). The area of eucalyptus and oak actually planted is 28.6% of total planted area, compared to 34% designed in PDD. The revenue will reduce relative to PDD; - Price level (for labors and seedlings) in China has been increasing year after year, while the unit costs in PDD were based on 2004 price level. The actual cost is much higher than those used in PDD; - The adverse climate events such as snow/ice storms and droughts damaged significant area of the project. The snow/ice storms in early 2008 damaged 595.1 ha of plantation, and were re-established. Out of the re-established area, 120.3 ha of eucalyptus plantation again suffered from the snow/ice storms again during early 2011. 197.8 ha of planted area also was affected by extreme droughts during 2009-2011 and 230.4 ha during 2012-2018, and had to be re-planted. The repeated planting has significantly increase the project cost. - In summary, the reduction of project revenue and increase of the project cost would reduce the project internal return rate relative PDD. Therefore, the change in the project area will not affect the additionality.
c)	Changes in stocking density, if the changes are demonstrated at verification to be consistent with the baseline identification and	No changes in stocking density.

	additionality demonstration made at the validation stage;	
d)	Changes in timing and choice of silvicultural operations;	Yes, changes in species composition and stand models resulted in the changes to potential timing and choice of silvicultural operation.
e)	Changes in timing of harvest occurring before the third verification;	Yes, changes in species composition and stand models resulted in the changes to potential harvesting before the third verification (harvesting of eucalyptus and thinning for other species).
f)	Changes related to collection of non-timber forest products;	Yes, changes in species composition and stand models resulted in the changes to the resin collection of pine plantation.
g)	Changes in tree/shrubs propagation method;	No
h)	Changes in post-harvest re-planting/regeneration methods;	578.5 ha of eucalyptus has been harvested and regenerated during the monitoring period. Small portion of harvested lands was regenerated with other species (Masson pine, Chinese fir, etc) which are less economically attractive.
i)	Changes in technology employed;	No
j)	Changes in inputs (e.g. fertilizers, certified seeds, watering);	No
k)	Changes in stratification for sampling;	Yes, *ex post* stratification has been implemented taking into account of the changes to ex-ante strata resulting from impacts of site conditions, planting/replanting time, growth rates of specie and other location specific factors.
l)	Changes in type of sample plots (e.g. temporary, permanent, point-sampling);	No
m)	Changes in number of sample plots and their allocation to strata;	Yes, as a follow up to ex post stratification, the calculation of number sample plots and their allocation to project strata has been revised.
n)	Changes in the project boundary (limited to reduction in project area), if the changes are demonstrated at verification to be consistent with the baseline identification and additionality demonstration made at the validation stage;	Yes, Changes in project boundary occurred as a consequence of the reduction in project area by 900.0 ha. The changes to project boundary as a consequence of reduction in project area are consistent with the baseline identification and additionality demonstration at the validation stage.
o)	Changes in quality assurance/quality control (QA/QC) procedures, where it can be demonstrated that the changed QA/QC procedures are used by the National Forest Inventory or were applied in another registered A/R CDM project activity;	Yes, Changes in quality assurance/quality control procedures are consistent with procedures used by the national forest inventory and are applied in another A/R CDM project activity.

p)	Changes in parameters, equations, or methods used in tree biomass estimation, if the applicability of the changed parameters, equations, or methods is demonstrated at verification using the .Tool for demonstration of applicability of allometric equations and volume equations in A/R CDM project activities" when available, or if the changed parameters, equations, or methods do not result in a decrease in precision of the estimate of tree biomass;	No
q)	Changes from provisions regarding shifting of pre-project activities, if the related emissions are estimated at verification using the tool "Changes from provisions regarding shifting of pre-project activities, if the related emissions are estimated at verification using the tool "Estimation of the increase in greenhouse gas (GHG) emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity". and are accounted for as leakage;	Not Applicable
r)	Changes in use of fire in site preparation, if the related emissions are estimated at verification using the tool "Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity" and are accounted for as project emissions;	Not Applicable
s)	Changes in extent of soil disturbance in site preparation, if the related emissions are estimated at verification using Equation (2) of the "Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities" and are accounted for as project emissions;	No
t)	Changes in methods of estimation of changes in any carbon pool, if the method applied at verification uses the latest version of the relevant approved tool and the applicability conditions of the	Yes. AR-AM0001 ver.2 - Reforestation of degraded land –used in PDD was updated and consolidated to AR-ACM0001 ver.05.2.0 which was used for the 1st monitoring and adopted in 1st verification and certification. The AR-ACM0003 (version 02.0) applied in this monitoring report has

	methodology applied are consistent with the applicability conditions of the tool.	a broader scope of application, e.g., allowing to choose to exclude or include accounting of any of the three carbon pools of dead wood, litter, and soil organic carbon. The project adopts the latest versions of A/R methodological tool(s) and the applicability conditions of the methodology are consistent with the applicability conditions of the tool(s).

As per the "Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities" (Version 01.1), several early versions of methodologies applied in registered A/R CDM project activities contain requirements that were withdrawn during revisions/improvements of these methodologies as part of the improvement process of the standards, and the guidelines allow a registered A/R CDM project activity to apply, at the time of verification, the improvements in the methodology that occurred after the date of registration of the project activity. The applicability of these guidelines to the implemented project are listed in table B.3 below.

Table B.3 Applicability of guidelines to the implemented project

Requirement	Methodology	Guidelines	Applicability to the project
Monitoring of data and parameters	AR-AM0003 v.03, et al	(i) Only data and parameters obtained from field measurement are required to be monitored; (ii) Monitoring is not required for data, parameters, or variables appearing as intermediate values in calculation steps and those taken from existing sources (e.g. published literature)	Not applicable to the methodology applied
Sampling design, sample plot lay-out, and marking of permanent sample plots	AR-ACM0001 v.03 et al	(i) Use of temporary sample plots; (ii) Random lay-out of sample plots; (iii) A maximum allowable relative margin of error of the mean, for estimation of above ground tree biomass, of ± 10% at 90%confidence level shall be allowed.	Yes, 90% confidence level was applied
Accounting for uncertainty	AR-ACM0001 v.03 et al	Requirements related to uncertainty assessment, uncertainty analysis, methods of combining uncertainties, and uncertainty inexpert judgement is superfluous and compliance with these requirements shall not been forced.	Yes, uncertainty analysis was conducted following the latest version of methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"
Field measurement of soil organic	AR-AM001 v.02 et al	(i) Instead of field measurement of soil organic carbon, the "Tool for estimation of change in soil organic carbon stocks due to	Not applicable to the methodology applied

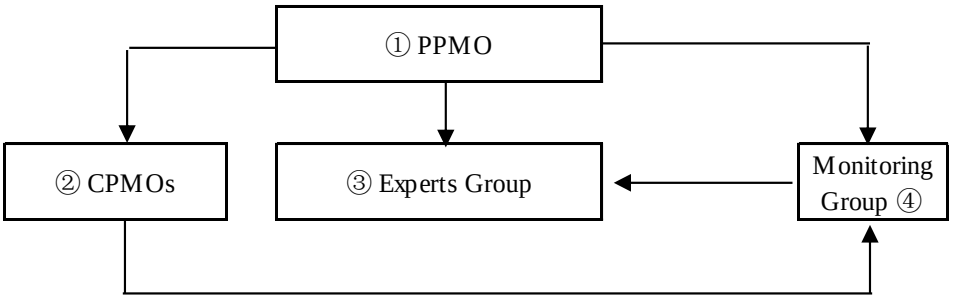
carbon		the implementation of A/R CDM project activities" shall be used for areas which meet the applicability conditions of the tool; or (ii) The value of change in soil organic carbon shall be set to zero. Consequently, monitoring of data and parameters related to estimation of changes in soil organic carbon shall not be required.	
Clearance or burning of herbaceous vegetation	AR-AM001 v.02 et al	(i) Changes in carbon stocks resulting from clearance of herbaceous vegetation shall beset to zero; (ii) Emissions resulting from clearance or burning of herbaceous vegetation shall be set to zero. Consequently, monitoring of data and parameters related to (i) and (ii) above shall not be required.	Not applicable to the methodology applied
Estimation of emissions of nitrous oxide from use of fertilizers	AR-AM001 v.02 et al	Estimation and accounting of emissions of nitrous oxide from use of fertilizers shall not be required. Consequently, monitoring of data and parameters related to the above-mentioned emissions shall not be required.	Not applicable to the methodology applied
Burning of fossil fuel	AR-AM001 v.02 et al	Estimation and accounting of emissions from burning of fossil fuel, both within and outside the project boundary, shall not be required. Consequently, monitoring of data and parameters related to the above mentioned emissions shall not be required.	Not applicable to the methodology applied

SECTION C. Description of monitoring system

>>For the purpose of the monitoring, standard operating procedures have been developed and followed throughout the monitoring process. The monitoring system is summarized as follows.

1. Organizational structure, roles and responsibilities of personnel

The figure below shows the organizational structure with responsibilities for the management of the project.



Responsibility and roles

① Provincial Project Management Office (PPMO)

(1) Organization of project management works;

(2) Coordination the related participants;

(3) Communicating with World Bank Carbon Finance team and country representative staff;

(4) Supervising and facilitation of project implementation;

(5) Organization training for CPMO, entities/farmer households;

(6) Review of monitoring schedule and annual monitoring reporting;

(7) Coordination of key technical and economic issues encountered during project implementation;

(8) Organization of monitoring and verification arrangements;

(9) Quality assurance for monitoring.

② County Project Management Office (CPMOs)

(1) Organization of project implementation on the sites located in the county;

(2) Supervising project implementation progress of the areas located in the county;

(3) Development and implementation of annual plan of operations;

(4) Supervision and facilitation of entities/farmer households to raise funds;

(5) Reporting of project implementation progress on the sites in the county;

(6) Organization of trainings for forest farms/farmer households participating in the project;

(7) Provision of technical guidance and supervision of project activities;

(8) Survival check of planted areas in the first three years;

(9) Organization of technical staff for field measurement;

(10) Archival and management of data at county level (including farmer groups);

(11) Coordinating of communication with the forest farms/companies and communities/households;

(12) Management of the carbon revenue sharing among the farmers

(13) Coordination to resolve technical problems in project implementation.

③ Experts Group

(1) Development of guidance manuals to support project monitoring and verification, standard operational guidelines for measuring forest growth, etc;

(2) Provision of technical training and consultation to the monitoring personnel;

(3) Checks of field data collected, e.g., data on survival rates of planted areas;

(4) Review of quality control and quality assurance procedures of field measurement;

(5) Preparation of monitoring report.

④ Monitoring Group

The monitoring group is composed of forestry experts and technicians from Guangxi Forestry Planning and Inventory Institute, and is responsible for:

(1) Periodical monitoring of project boundaries;

(2) Project stratification;

(3) Development and implementation of the sampling scheme;

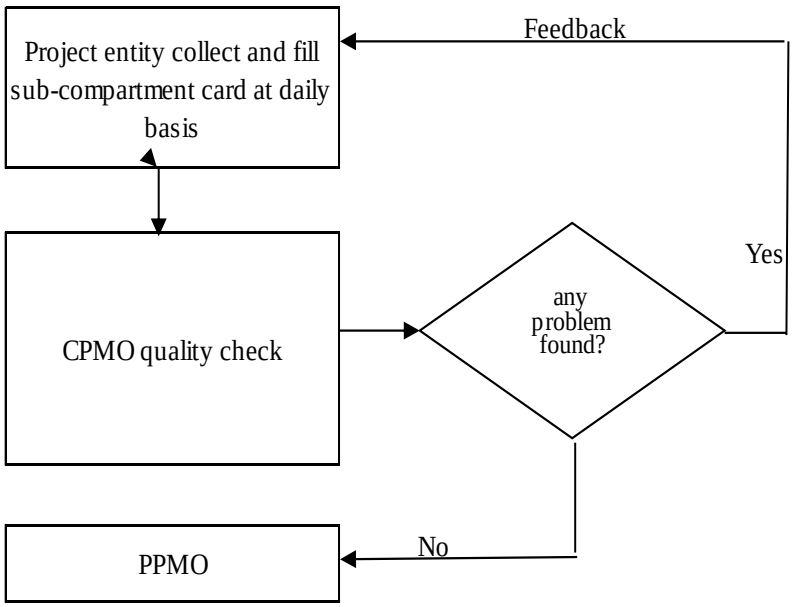
(4) Development of SOP for field measurement;

(5) Preliminary analysis of field measurement;

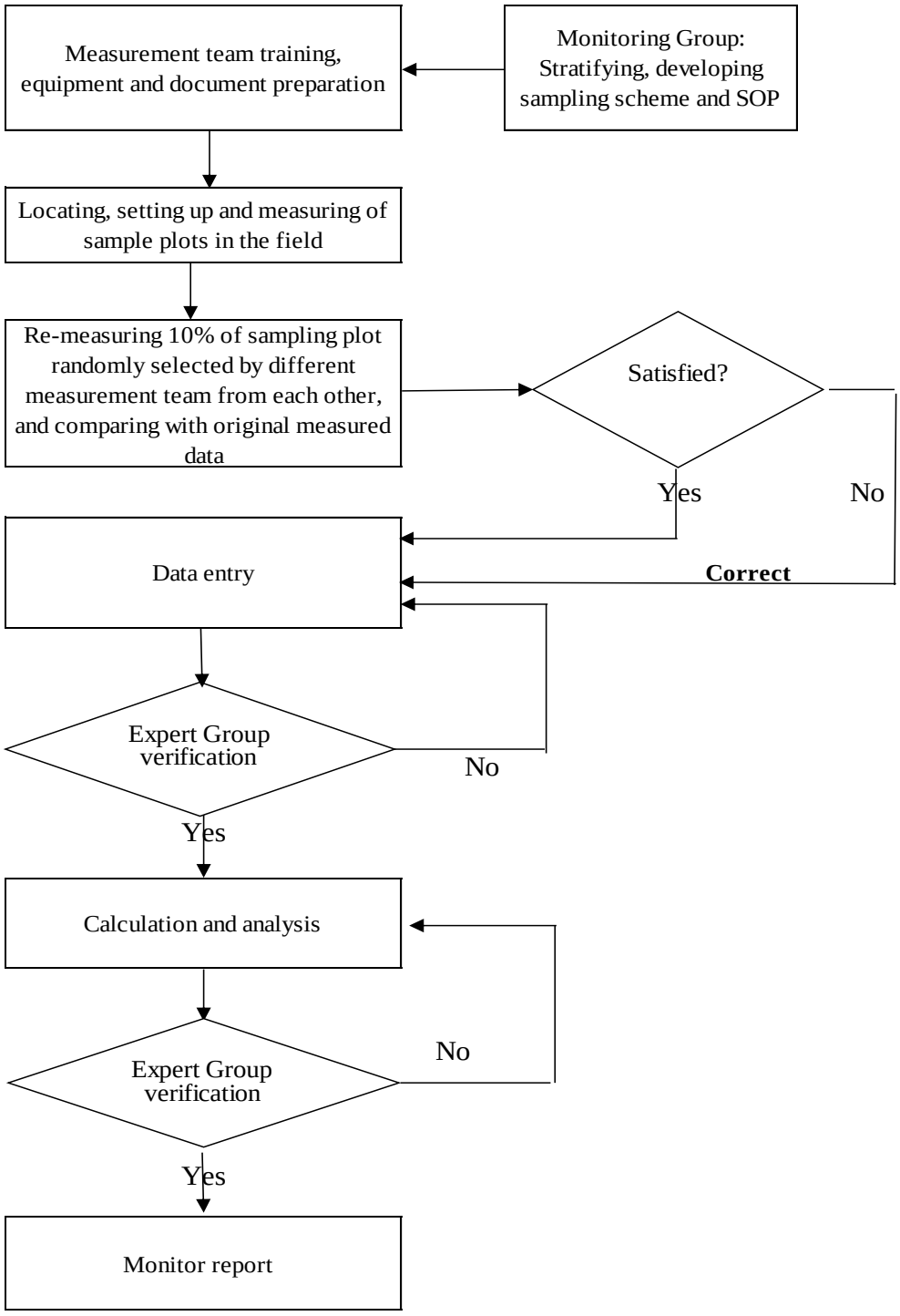
(6) Assistance to the expert group in the analysis of measured data;

(7) Assistance to expert group in the preparation of monitoring report.

2. Flow chart for monitoring of project implementation



3. Flow chart for field measurement of sampling plots and data entry/analysis



4. QA/AC procedures

Quality assurance and quality control (QA/QC) procedures are implemented to ensure the net anthropogenic GHG removals by sinks are measured and monitored precisely, credibly, and transparently.

a) Quality checks on field measurements

To ensure the reliable field measurements,

- Standard Operating Procedures (SOPs) followed for each step of the field measurements, including all phases of the field measurements enable collection of data for preparing monitoring report and supporting documentation for verification purposes.
- Training courses on the field data collection data entry, analysis and archival were held for persons involving in the field measurement work. The training courses were conducted to ensure that each field-team member is fully aware of all procedures and the importance of collecting data as accurately as possible.
- A document showing implementation of the QA/QC steps has been presented as part of the project documents. The document lists the names of the team leader and personnel involved in field level monitoring;

b) Quality checks of field data collected

To verify that the plots have been installed and the measurements taken correctly, the following measures have been undertaken:

- Re-measurement of at least one (randomly selected) plot per every 10 plots by another team, and comparison of the measurements to check for errors; any errors found are recorded, resolved and corrected.
- Key re-measurement elements include the location of plots, DBH and tree height of all trees present. The procedures implemented as part of the re-measurement are checking of the field record of both original measurement and re-measurement. If any calculation error is found, it is checked and corrected.

c) Quality checks of data entry and analysis

To minimize the possible errors in the process of data entry, the entry of field data was reviewed by expert group. Communication among personnel involved in measuring and analyzing data was used to resolve any anomalies in the monitoring data.

d) Data maintenance and archival

Data were archived in both electronic and paper forms, and copies of all data shared with each project participant. All electronic data and reports were copied on durable media such as CDs and copies of the CDs and stored in multiple locations. The archives include:

- Copies of all original field measurement data, laboratory data, data analysis spreadsheet;
- Estimates of the carbon stock changes in all pools and non-CO_2GHGemissions covered by the project and corresponding calculation spreadsheets;
- GIS products;
- Copies of the measuring and monitoring reports.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante

(Copy this table for each data or parameter.)

Data / Parameter	$BEF_{2,j}$	
Unit	Dimensionless	
Description	Biomass expansion factor for conversion of stem biomass to above-ground biomass for tree species j	
Source of data	GHG inventory in LULUCF sector for national communication on GHG inventory	
Value(s) applied	*Tree species*	$BEF_{2,j}$
	Pinus massoniana	1.46
	Cunninghamia lanceolata	1.53

	Eucalyptus sp.	1.48
	Quercus sp.	1.54
	Schima superba	1.79
	Liquidambar formosana	1.54
Choice of data or measurement methods and procedures	NA	
Purpose of data/parameter	Calculation of actual net GHG removals	
Additional comments		

Data / Parameter:	D_j	
Unit	t d.m. m^{-3}	
Description	Basic wood density for tree species *j*	
Source of data	GHG inventory in LULUCF sector for national communication on GHG inventory	
Value(s) applied	Tree species	D_j
	Pinus massoniana	0.380
	Cunninghamia lanceolata	0.307
	Eucalyptus sp.	0.578
	Quercus sp.	0.676
	Schima superba	0.598
	Liquidambar formosana	0.443
Choice of data or measurement methods and procedures	NA	
Purpose of data/parameter	Calculation of actual net GHG removals	
Additional comment		

Data / Parameter:	R_j	
Unit	Dimensionless	
Description	Root-shoot ratio for tree species *j*	
Source of data	GHG inventory in LULUCF sector for national communication on GHG inventory	
Value(s) applied	Tree species	R_j
	Pinus massoniana	0.283
	Cunninghamia lanceolata	0.255
	Eucalyptus sp.	0.201
	Quercus sp.	0.340
	Schima superba	0.217
	Liquidambar formosana	0.283
Choice of data or measurement methods and procedures	NA	
Purpose of data/parameter	Calculation of actual net GHG removals	
Additional comment		

Data / Parameter:	$V_{TREE,j,p,i,t}$
Unit	m^3/tree
Description	Stem volume of trees of species *j* in sample plot *p* of stratum *i* at a point of time in year *t*, estimated by using the tree dimension(s) as entry data into a volume table or volume equation
Source of data	Guangxi forest inventory manual or yield table, which are

	appropriate based on A/R Methodological Tool "Demonstrating appropriateness of allometric equations for estimation of aboveground tree biomass in A/R CDM project activities" (Version 01.0.0)
Value(s) applied	Tree species $V_{TREE,j,p,i,t}$
	P.massoniana $V = 0.0000714265437 \cdot DBH^{1.867010} \cdot H^{0.9014632}$ *C.lanceolata* $V = 0.000065671 \cdot DBH^{1.769412} \cdot H^{1.069769}$ Other broadleaves $V = 0.0000667054 \cdot DBH^{1.8479545} \cdot H^{0.96657509}$ *Eucalyptus* sp. $V = 0.000109154145 \cdot DBH^{(C_1 - C_2 \cdot (DBH+H))} \cdot H^{(C_3 + C_4 \cdot (DBH+H))}$ C_1=1.8789237; C_2=0.00569185503 C_3=0.65259805; C_4=0.00784753507
Choice of data or measurement methods and procedures	NA
Purpose of data/parameter	Calculation of actual net GHG removals
Additional comment	It represents the parameter V=f(DBH,H) in PDD.

Data / Parameter:	CF_j
Unit	dimensionless
Description	carbon fraction of species j
Source of data	PDD and IPCC default
Value(s) applied	0.5
Choice of data or measurement methods and procedures	NA
Purpose of data/parameter	Calculation of actual net GHG removals
Additional comment	

Data / Parameter:	$A_{p,i}$
Unit	ha
Description	Area of sampling plot in stratum i
Source of data	PDD
Value(s) applied	0.04
Choice of data or measurement methods and procedures	NA
Purpose of data/parameter	Calculation of actual net GHG removals
Additional comment	

D.2. Data and parameters monitored

(Copy this table for each data or parameter.)

Data / Parameter:	*DBH*
Unit	**cm**
Description	the diameter at breast height of the tree (1.3 m)
Measured /Calculated /Default	Measured
Source of data	Field measurement
Value(s) of monitored parameter	
Monitoring equipment	Vinyl tape, wooden stake

Measuring/ Reading/ Recording frequency	Every five years since the year of the initial verification
Calculation method (if applicable):	
QA/QC procedures	Manual/guidelines for national and local forest inventory and Manual for Monitoring of CDM Afforestation and Reforestation Projects: Part I - Standard Operational Procedures by World Bank (also section C.4 above)
Purpose of data/parameter	Calculation of actual net GHG removals
Additional comment	

Data / Parameter:	*H*
Unit	**m**
Description	Height of tree
Measured /Calculated /Default	Measured
Source of data	Field measurement
Value(s) of monitored parameter	
Monitoring equipment	- HypsometerCGQ-1: accuracy 1%, last calibration: June 09 2018, valid. - metric tape
Measuring/ Reading/ Recording frequency	Every five years since the year of the initial verification
Calculation method (if applicable):	
QA/QC procedures	Manual/guidelines for national and local forest inventory and Manual for Monitoring of CDM Afforestation and Reforestation Projects: Part I - Standard Operational Procedures by World Bank (also section C.4 above)
Purpose of data/parameter	Calculation of actual net GHG removals
Additional comment	

D.3. Implementation of sampling plan

>>

1. Monitoring of the baseline net GHG removals by sinks

The baseline net GHG removals by sinks do not need to be monitored as per the applied methodology AR-ACM0003/version 02.0.

2. Monitoring of the boundary of the implemented A/R CDM project activity

Monitoring of the project boundary is done using the below procedures.

- Field survey of the discrete areas of the project on which tree planting was undertaken.
- Confirmation of the geographical boundary of the sites using GPS. In case that the boundary of land parcel overlaps with existing land management unit (compartment and/or sub-compartment), latitude and longitude of major corner of the land parcels were confirmed using GPS.
- Checking to ensure that the actual boundary is consistent with the description in the PDD section A.
- If the actual boundary falls outside of the boundary referred in section A of the PDD, the part of lands that are outside the designed boundary would not be accounted as a part of the implemented A/R CDM project activity.

- Input the measured geographical positions into GIS system and calculate the eligible area of each stratum.
- The project boundary will be monitored periodically through the crediting period. If the boundary is changed during the crediting period, the boundary will be modified and reported to DOE for subsequent verifications. The area will then be excluded from the project monitoring. Similarly, if the planting on certain lands within the project boundary fails, and other land uses take the place, these areas will be documented and excluded from the project.

3. Monitoring of the project implementation

To ensure the project implementation and the practices described in section A of the PDD are well-implemented, the monitoring covered following activities:

- Confirmation that the site preparation practices as per those outlined in the PDD, and no slash and burn and overall tillage are used in the site and soil preparation.
- Confirmation that site preparation does not cause significant long-term net emissions from soil carbon. This is done by checking and confirming that site preparation techniques are as described in Section A.4.8 of the PDD. As the area disturbed through site preparation accounts for only 2-5% of the total area of the discrete areas, it is inferred that there are no significant long-term net emissions from site preparation activities.
- Survival checking
  - The initial survival rate of planted trees was checked1-3 months after the planting, and re-planting was conducted if the survival rate was lower than 90%.
  - Final survival checking was conducted for each plantation site after three years of planting.
- Confirmation that the weeding and fertilizer application practice are implemented as planned.
- Checking the area of planted species and planting year for each stratum.

The project implementation was monitored through sub-compartment monitoring card.

4. Stratification

The ex ante stratification was done based on the information on the site conditions (soil type, soil organic matter and nitrogen content, etc) and planting years available prior to the start of the project. In the first monitoring, a revision to the *ex ante* stratification has been conducted taking into account the changes in the area, species/stand models included in the project, the schedule of planting adopted during project implementation, and growth rates of species relevant to site conditions and disturbance of natural disaster (snowstorm/drought). Based on pre-assessment of the growth and harvest of plantation, existing stratification has been further adjusted in the second monitoring, so that the within-stratum variance would be minimized. The new stratification map was created on a GIS platform. The project area was stratified into 21 strata (see table D.1 for the detailed ex post stratification). The boundary of strata was determined using PDA and GPS by going along the demarcation line of two connected strata.

Table D.1 ex post stratification for living biomass

Tree species/Models	Stratum ID	area (ha)	Comments
Eucalyptus	S-1	125.4	mean DBH 6-10cm
	S-2	636.1	mean DBH >10cm
	S-3	97.1	below minimum DBH (2cm) to be measured (1 ha new planted and 96.9 ha harvested in 2017 and 2018 followed by resprouting)

Masson Pine (Cangwu)	S-4	174.7	mean DBH 8cm-14cm
	S-5	340.5	mean DBH>14cm
	S-6	213.8	failed in initial reforestation followed by replanting with DBH < 2cm
Masson Pine (Huanjiang)	S-7	155.0	mean DBH 2cm-8cm
	S-8	137.6	mean DBH 8cm-10cm
	S-9	256.1	mean DBH>10cm
	S-10	182.7	failed in initial reforestation followed by replanting with DBH <2 cm
Chinese fir	S-11	112.6	mean DBH 2-10cm
	S-12	89.2	mean DBH>10cm
	S-13	13.2	failed in initial reforestation followed by replanting with DBH <2 cm
Schima	S-14	189.1	mean DBH>2cm
	S-15	100.8	failed in initial reforestation followed by replanting with DBH <2 cm
Liquidambar	S-16	82.6	mean DBH>2cm
Oak	S-17	17.1	mean DBH>2cm
	S-18	12.5	failed in initial reforestation followed by replanting with DBH <2 cm
Masson+Liquidambar	S-19	86.5	DBH>2cm
	S-20	26.4	failed in initial reforestation followed by replanting with DBH <2 cm
Chinese fir +Masson pine	S-21	51.0	DBH>2cm
Total		**3,100.0**	

Note: Tree growth not measured on strata for sample plots with trees that have tree DBH below minimum measurable threshold (2 cm)

5. Sampling scheme

Permanent sample plots were used for sampling over time to measure and monitor changes in carbon stocks of the relevant carbon pools. The plots were located with GPS and are invisible so as to be treated in the same way as other lands within the project boundary, e.g., during fertilization, tending, thinning, harvesting, etc.

5.1 Determining sample size

A/R Methodological Tool "Calculation of the number of sample plots for measurements within A/R CDM project activities" (Version 02.1.0) was applied to re-calculate the number of sample plots for each stratum outlined in the PDD.

$$n = \frac{N \cdot t_{VAL}^2 \cdot (\sum_i w_i \cdot s_i)^2}{N \cdot E^2 + t_{VAL}^2 \cdot \sum_i w_i \cdot s_i^2} \qquad \text{(D.1)}$$

$$n_i = n \cdot \frac{w_i \cdot s_i}{\sum_i w_i \cdot s_i} \quad \text{(D.2)}$$

Where

n	Number of sample plots required for estimation of biomass stocks within the project boundary, dimensionless
n_i	Number of sample plots allocated to stratum i for estimation of biomass stocks within the project boundary, dimensionless
t_{VAL}	Two-sided Student's t-value, at infinite degrees of freedom, for the required confidence level; dimensionless
N	Total number of possible sample plots within the project boundary (i.e. the sampling space or the population); dimensionless
w_i	Relative weight of the area of stratum i (i.e. the area of the stratum i divided by the project area); dimensionless
s_i	Estimated standard deviation of biomass stock in stratum i; t d.m. ha^{-1}
E	Acceptable margin of error (i.e. one-half the confidence interval) in estimation of biomass stock within the project boundary; t d.m. ha^{-1}

The standard deviation of biomass stock for each stratum (s_i) was conservatively determined as 30%. The t_{VAL} was determined based on the 90% confidence level. A default value equal to 10% of the mean biomass stock was used as the acceptable margin of error. The mean biomass stock is the expected biomass at the time of monitoring, which was estimated based on preliminary measurement.

For the purposes of statistics, if calculated n_i<3, then n_i=3. Furthermore, to ensure that 10% of the precision level can be achieved, the minimum area represented by each sample plots was set as 50 ha for some strata based on expert judgement, and additional sampling plots are added for strata with relative high variation based on pre-assessment. The sample plots were allocated to each stratum based on size of each stratum relative to the total project area. The number of sampling plots used for monitoring and measurement are listed in table D.3 below. The sampling size is larger than the first monitoring due to the re-stratification and the recalculation.

98 out of 102 sampling plots for the first monitoring remained in the second monitoring. 2 out of 102 sample plots for the first monitoring was removed due to land use changes. The other two sample plots in the first monitoring was not measured due to inaccessibility after a huge flooding and landslide. 22 additional sampling plots were added in the respective strata.

Table D.3 number of sampling plots

Stratum ID	Area (ha)	Number of sampling plots
S-1	125.4	5
S-2	636.1	24
S-3	97.1	3
S-4	174.7	5
S-5	340.5	7
S-6	213.8	8
S-7	155.0	5
S-8	137.6	4
S-9	256.1	6
S-10	182.7	7
S-11	112.6	3
S-12	89.2	6
S-13	13.2	3

S-14	189.1	4
S-15	100.8	7
S-16	82.6	4
S-17	17.1	3
S-18	12.5	4
S-19	86.5	6
S-20	26.4	3
S-21	51.0	3
total	**3100.0**	120

5.2 Locating sampling plots

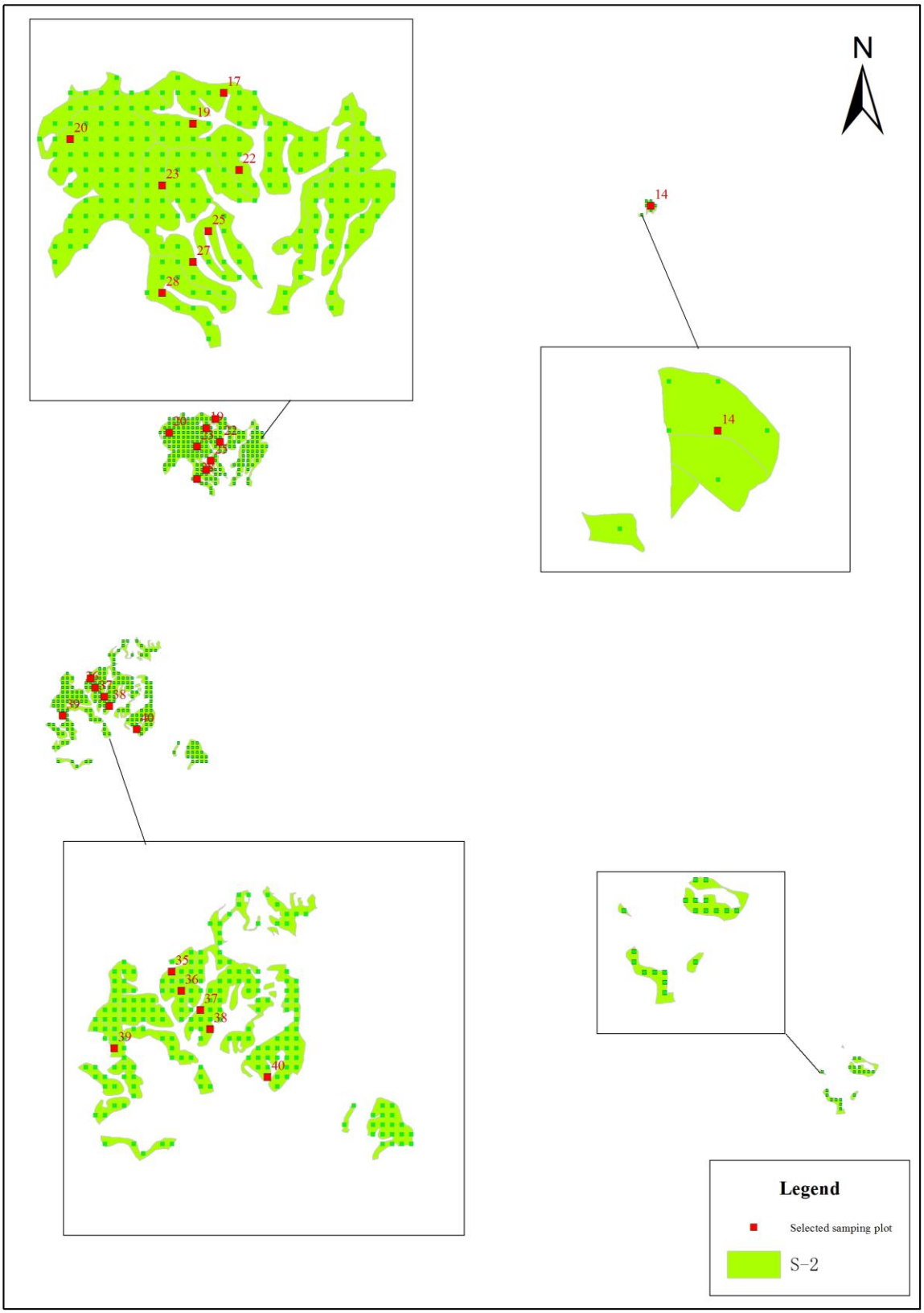
To avoid subjective choice of plot locations (plot centres, plot reference points, movement of plot centres to more “convenient” positions) and to ensure that the sampling plots evenly spread in each stratum as much as possible, the permanent sample plots were laid out systematically with a random start. This was achieved by procedures below:

Step 1: 100 m × 100 m grids was created on ArcGIS platform and overlapped on the project area. The number of cross points (potential plot centre) was counted for each stratum. A series number starting at 1 was assigned to each cross point in a stratum.

Step 2: A random number was produced using function “ROUND (RAND()*(N),0) in excel spread, where N is the total number of cross points in the stratum. The cross point in series number that corresponds to the random number was assigned as the centre of the first sampling plot in a stratum.

Step 3: Starting at the first plot and moving along the cross points following a fixed direction of west-east-south-north, one sample plot was assigned for a fixed interval of cross points. The interval is dependent on the total number of cross points and the number of sample plots in a stratum.

Distribution of sampling plots for stratum 2 in Cangwu County



The size of sample plots is 400 m^2 (20m × 20m). However, if the shortest distance between sampling plot boundary and project boundary is less than 10 m, or if the plot is across the project or stratum boundary, the sample plot shall be moved toward the centre of the parcel of land. The geographical coordinates of all sample plots were listed in table D.4 below.

As per the monitoring procedures, if after the field measurement, the precision level is over 10%, the number of sample plots would need to be recalculated using above mentioned method, based on measured standard deviation of biomass stock to layout the additional sampling plots.

Table D.4 GPS coordinates of sampling plots

Stratum ID	Plot ID	Longitude	Latitude	Notes	Stratum ID	Plot ID	Longitude	Latitude	Notes
S-1	c-24	111.1682	23.3513	*	S-9	h-10	108.3956	25.4309	*
S-1	c-41	111.1613	23.2944	*	S-9	h-15	108.3665	25.3362	*
S-1	c-42	111.1642	23.2917	*	S-9	h-17	108.3655	25.3317	*
S-1	h-31	108.3644	25.3001	*	S-9	h-24	108.5501	25.3077	*
S-1	h-38	108.1638	25.2517	*	S-9	h-52	108.0218	25.0984	*
S-2	c-14	111.2710	23.3990	*	S-9	h-61	108.3556	25.3335	**
S-2	c-17	111.1790	23.3576	*	S-10	h-1	108.3620	25.4852	*
S-2	c-19	111.1770	23.3558	*	S-10	h-14	108.5811	25.3410	*
S-2	c-20	111.1692	23.3549	*	S-10	h-2	108.3600	25.4798	*
S-2	c-22	111.1799	23.3531	*	S-10	h-21	108.5512	25.3149	*
S-2	c-23	111.1751	23.3522	*	S-10	h-3	108.3580	25.4789	*
S-2	c-25	111.1780	23.3495	*	S-10	h-48	108.3858	25.1611	*
S-2	c-27	111.1770	23.3477	*	S-10	h-5	108.3610	25.4743	*
S-2	c-28	111.1750	23.3459	*	S-11	h-27	108.5372	25.3032	*
S-2	c-35	111.1525	23.3071	*	S-11	h-29	108.5372	25.3014	*
S-2	c-36	111.1535	23.3053	*	S-11	h-30	108.5114	25.3006	*
S-2	c-37	111.1554	23.3035	*	S-12	h-18	108.5711	25.3265	*
S-2	c-38	111.1564	23.3017	*	S-12	h-19	108.5641	25.3221	*
S-2	c-39	111.1466	23.2999	*	S-12	h-26	108.5402	25.3041	*
S-2	c-40	111.1623	23.2971	*	S-12	h-35	108.5094	25.2925	*
S-2	h-28	108.3684	25.3028	*	S-12	h-6	108.3739	25.4716	*
S-2	h-34	108.3634	25.2929	*	S-12	h-9	108.4603	25.4371	*
S-2	h-36	108.3545	25.2866	*	S-13	c-56	111.4958	24.1325	**
S-2	h-37	108.1459	25.2518	*	S-13	h-32	108.5104	25.2997	*
S-2	h-40	108.1588	25.2174	*	S-13	h-60	108.5114	25.2997	**
S-2	h-45	108.0774	25.1661	*	S-14	c-10	111.5418	24.0646	*
S-2	h-47	108.3938	25.1646	*	S-14	c-29	111.1936	23.3450	*
S-2	h-49	108.0704	25.1579	*	S-14	c-4	111.5352	24.1387	*
S-2	h-53	108.3525	25.2866	*	S-14	c-8	111.5536	24.0772	*

S-3	c-30	111.1711	23.3423	*	S-15	c-1	111.5382	24.1468	*
S-3	h-44	108.3849	25.1719	*	S-15	c-12	111.3961	24.0064	*
S-3	h-46	108.0734	25.1642	*	S-15	c-18	111.1917	23.3567	*
S-4	c-34	111.1633	23.3089	*	S-15	c-32	111.1946	23.3413	*
S-4	c-5	111.4968	24.1307	*	S-15	c-46	111.2823	23.1922	*
S-4	c-54	111.4929	24.1289	**	S-15	c-50	111.5025	24.0882	**
S-4	c-55	111.1701	23.3007	**	S-15	c-7	111.5085	24.0954	*
S-4	c-6	111.5065	24.0954	*	S-16	h-11	108.4063	25.3614	*
S-5	c-16	111.1653	23.3594	*	S-16	h-33	108.5074	25.2961	*
S-5	c-57	111.5467	24.0691	**	S-16	h-41	108.1548	25.1768	*
S-5	c-58	111.3146	23.2274	**	S-16	h-42	108.1538	25.1750	*
S-5	c-60	111.1535	23.3134	**	S-17	c-47	111.1758	23.1725	*
S-5	c-61	111.5438	24.0691	**	S-17	c-52	111.1758	23.1734	**
S-5	c-62	111.5536	24.0781	**	S-17	c-59	111.1545	23.3161	**
S-5	c-9	111.5457	24.0673	*	S-18	c-15	111.2671	23.3936	*
S-6	c-11	111.3912	24.0145	*	S-18	c-49	111.1758	23.1680	*
S-6	c-13	111.3980	24.0019	*	S-18	c-51	111.1691	23.3071	**
S-6	c-21	111.1907	23.3540	*	S-18	c-53	111.2651	23.3981	**
S-6	c-26	111.1946	23.3495	*	S-19	h-16	108.3625	25.3326	*
S-6	c-31	111.1936	23.3413	*	S-19	h-43	108.1498	25.1732	*
S-6	c-43	111.3156	23.2292	*	S-19	h-50	108.0228	25.1011	*
S-6	c-44	111.2804	23.2229	*	S-19	h-51	108.0248	25.0993	*
S-6	c-45	111.2823	23.1931	*	S-19	h-7	108.4553	25.4443	*
S-7	h-12	108.5603	25.3483	*	S-19	h-8	108.4503	25.4389	*
S-7	h-22	108.5492	25.3131	*	S-20	h-4	108.3719	25.4770	*
S-7	h-39	108.1509	25.2472	*	S-20	h-57	108.3749	25.4770	**
S-7	h-56	108.1359	25.1832	**	S-20	h-58	108.3759	25.4752	**
S-7	h-59	108.3476	25.3083	**	S-21	h-20	108.5562	25.3176	*
S-8	h-13	108.5553	25.3429	*	S-21	h-23	108.5541	25.3095	*
S-8	h-54	108.3956	25.4345	**	S-21	h-25	108.5531	25.3068	*
S-8	h-55	108.0198	25.1002	**					
S-8	h-62	108.5383	25.3303	**					

*same plots as the 1st monitoring

** added plots in the 2nd monitoring

Notes: The coordinates are based on Beijing1954 3 degree zone and Gauss-kruger projection.

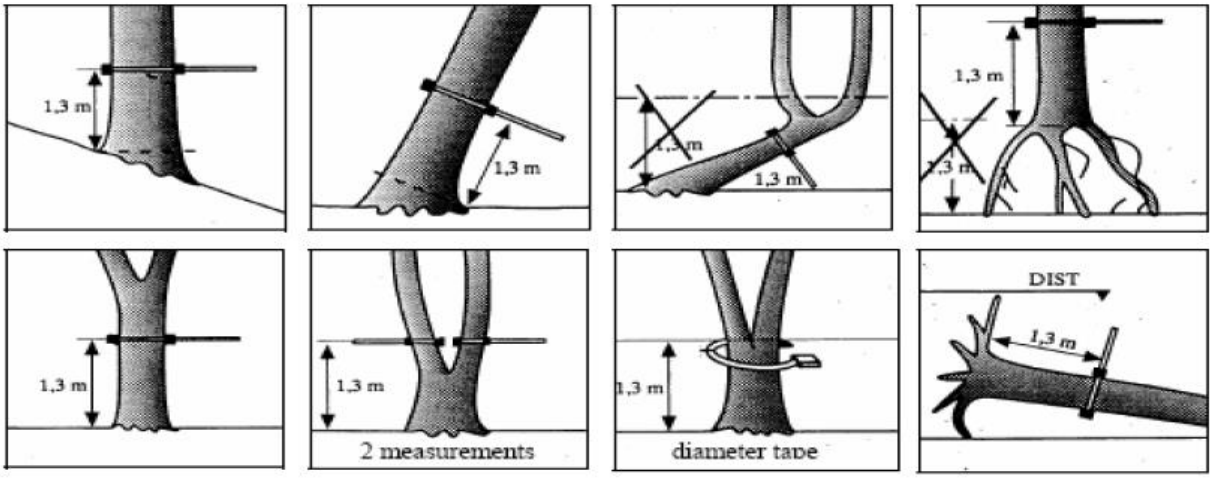
5.3 Field measurements

The field measurements are accomplished using the GPS to identify the geographical position (GPS coordinates) of sample plots and their location and stratum information are recorded and archived.

After the four corners of sample plots were located, a permanent marker (a PVC pipe with 5cm in diameter and 30cm in length) was put at the centre and four corners of the sample plot (placed vertically up to 20 cm deep in soil and 10 cm above soil surface), to enable the location of the sample plot at the future monitoring events.

The minimum diameter at breast height (DBH) measured is 2.0 cm. The DBH of many young trees especially those planted with delay have not reached the threshold. If over 2/3 of trees in a sampling plot have DBH less than 2.0 cm, then the plot was not measured and its carbon stock in living biomass was assumed to be zero.

DBH and height of each tree with DBH equal or over 2.0 cm in all sample plots were measured. DBH was measured at 1.3 m above the ground in the manner as shown in figure below. After measuring the DBH of trees, their respective height measurements were conducted. The measured DBH and height were recorded on the field form (Annex II).



6. Pre-project tree and shrub biomass

6.1 Pre-project shrub biomass

Destructive method has been used to measure the pre-project shrub biomass in 2006 (Section C.6 of the 1st MR) and relevant carbon stocks were presented in Section E.2.3 of the 1st MR. The measured carbon stock in shrub biomass (6962.0 tCO2 as specified in Table E-3 of the 1st MR) was used to calculate the biomass loss of pre-project shrub due to the project activity in the first monitoring and verification. Due to the changes of project area in the second monitoring, the carbon stock in pre-project shrub biomass is recalculated to be 7,337.6 tCO2.

6.2 Pre-project tree biomass

The 35 ha of land with pre-project trees remains in the 1st and 2nd monitoring periods.

SECTION E. Calculation of emission reductions or net anthropogenic removals

E.1. Calculation of baseline emissions or baseline net removals

>> The baseline net removals by sinks were fixed as the ex ante estimation. The total of the baseline net removals by sinks during the monitoring period (from 01/04/2006 to 09/06/2018) were 151.3 tCO_2 (Table E-1).

Table E-1 Baseline net GHG removals by sinks[5] for the second monitoring period

Year No.	Years	Baseline net GHG removals by sinks (t CO2)	Cumulative Baseline net GHG removals by sinks (t CO2)
1	2006	7.8	7.8
2	2007	8.7	16.5
3	2008	9.5	26.0
4	2009	10.2	36.2
5	2010	11.0	47.2
6	2011	11.7	58.9
7	2012	12.5	71.4
8	2013	13.2	84.6
9	2014	13.9	98.5
10	2015	14.5	113.0
11	2016	15.2	128.2
12	2017	15.9	144.1
13	2018(Jan 1 to June 9)	7.2	151.3
	Total baseline net GHG removals by sinks until the end of the 2nd monitoring period	151.3	

E.2. Calculation of project emissions or actual net removals

>>The actual net GHG removals by sinks were estimated as the change in the carbon stocks in project occurring in the selected carbon pool, minus the increase in non-CO2 GHG emissions within the project boundary as a result of the implementation of the A/R CDM project activity (Equation (2) in the applied methodology). The change in the carbon stocks in project was estimated as the change in carbon stock in tree biomass following methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2), as described below.

1. ***Estimation of carbon stock in trees biomass***

(1) Volume equations (listed in Section D.1) were used to convert measured DBH and height to stem volume of trees for each tree with sampling plot.

(2) Stem volume of each tree in sample plot was converted to above-ground tree biomass using basic wood density and biomass expansion factors, and the above-ground tree biomass was expanded to total tree biomass using root-shoot ratios. Thus, biomass of trees of species *j* in sample plot *p* is estimated as (Equation (3) and (5) in Appendix 1 Methods of plot biomass measurement in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$B_{TREE,j,p,i,t} = \sum_{l}^{L} V_{TREE,l,j,p,i,t} \times D_j \times BEF_{2,j} \times (1 + R_j) \quad \textbf{(E.1)}$$

where:

$B_{TREE,j,p,i,t}$ Biomass of trees of species *j* in sample plot *p* of stratum *i* at a given point

[5]Data drawn and calculated from PDD table D-2

of time in year *t*; t d.m.

$V_{TREE,l,j,p,i,t}$ Stem volume of trees *l* of species *j* in sample plot *p* of stratum *i* at a given point of time in year *t*, estimated by using the measured DBH and height as entry data into a volume equation; m^3

D_j Basic wood density of tree species *j* (listed in Section D.1); t d.m. m^{-3}

$BEF_{2,j}$ Biomass expansion factor for conversion of stem biomass to above-ground tree biomass, for tree species *j* (listed in Section D.1); dimensionless

R_j Root-shoot ratio for tree species *j* (listed in Section D.1); dimensionless

l *1, 2, 3, …* trees *l* of species *j* in sample plot *p*

j *1, 2, 3, …* tree species in plot *p*

p *1, 2, 3, …* sample plots in stratum *i*

i *1, 2, 3, …* tree biomass estimation strata within the project boundary

t *1, 2, 3, …* years counted from the start of the A/R CDM project activity

(3) Tree biomass in sample plot *p* of stratum *i* was estimated as follows (Equation (2) in Appendix 1 Methods of plot biomass measurement in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$B_{TREE,p,i,t} = \sum_j B_{TREE,j,p,i,t} \quad \textbf{(E.2)}$$

where:

$B_{TREE,p,i,t}$ Tree biomass in sample plot *p* in stratum *i* at a given point of time in year *t*; t d. m.

$B_{TREE,j,p,i,t}$ Biomass of trees of species *j* in sample plot *p* of stratum *i* at a given point of time in year *t*; t d.m.

j *1, 2, 3, …* species in plot *p*

p *1, 2, 3, …* sample plots in stratum *i*

i *1, 2, 3, …* strata used for tree biomass estimation within the project boundary

t *1, 2, 3, …* years counted from the start of the A/R CDM project activity

(4) Tree biomass per hectare in plot *p* in stratum *i* was estimated as follow (Equation (1) in Appendix 1 Methods of plot biomass measurement in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$b_{TREE,p,i,t} = \frac{B_{TREE,p,i,t}}{A_{p,i}} \quad \textbf{(E.3)}$$

where:

$b_{TREE,p,i,t}$ Tree biomass per hectare in sample plot *p* in stratum *i* at a given point of time in year *t*; t d.m. ha^{-1}

$B_{TREE,p,i,t}$ Tree biomass in sample plot *p*in stratum *i* at a given point of time in year *t*; t d.m.

$A_{p,i}$ Area of sample plot *p* in stratum *i*; ha

p *1, 2, 3*, … sample plots in stratum *i*

i *1, 2, 3,* … tree biomass estimation strata within the project boundary

t *1, 2, 3, …* years counted from the start of the A/R CDM project activity

(5) Mean tree biomass per hectare in stratum *i* and the variance of tree biomass per hectare in the stratum were estimated as follows (Equation (16) and (17) in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$b_{TREE,i,t} = \frac{\sum_{p=1}^{n_i} b_{TREE,p,i,t}}{n_i} \quad \textbf{(E.4)}$$

$$s_i^2 = \frac{n_i * \sum_{p=1}^{n_i} b_{TREE,p,i,t}^2 - \left(\sum_{p=1}^{n_i} b_{TREE,p,i,t} \right)^2}{n_i * (n_i - 1)} \quad \textbf{(E.5)}$$

where:

$b_{TREE,i,t}$ Mean tree biomass per hectare in stratum *i* at a given point of time in year *t*; t d. m. ha^{-1}

$b_{TREE,p,i,t}$ Tree biomass per hectare in sample plot *p* in stratum *i* at a given point of time in year *t*; t d.m. ha^{-1}

n_i Number of sample plots in stratum *i*

s_i^2 Variance of tree biomass per hectare in stratum *i* at a given point of time in year *t*; $(t\ d.m.\ ha^{-1})^2$

(6) Mean tree biomass per hectare within the project boundary and its variance were estimated as follows (Equation (14) in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$b_{TREE,t} = \sum_{i=1}^{M} w_i * b_{TREE,i,t} \quad \textbf{(E.6)}$$

$$s_{b_{TREE}}^2 = \sum_{i=1}^{M} w_i^2 * \frac{s_i^2}{n_i} \quad \textbf{(E.7)}$$

where:

$b_{TREE,t}$ Mean tree biomass per hectare within the project boundary at a given point of time in year *t*; t d. m. ha^{-1}

w_i Ratio of the area of stratum *i* to the sum of areas of biomass estimation strata; dimensionless

$b_{TREE,i,t}$ Mean tree biomass per hectare in stratum *i* at a given point of time in year *t*; t d. m. ha^{-1}

$s_{b_{TREE}}^2$ Variance of mean tree biomass per hectare within the project boundary at a given point of time in year *t*; $(t\ d.\ m.\ ha^{-1})^2$

s_i^2 Variance of tree biomass per hectare in stratum *i* at a given point of time in year *t*; (t d. m. ha^{-1})^2

n_i Number of sample plots in stratum *i*

M Number of tree biomass estimation strata within the project boundary

(7) uncertainty of the mean tree biomass per hectare within the project boundary was estimated as (Equation (15) in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$U_C = \frac{t_{VAL} \times S_{b_{TREE}}}{b_{TREE}} \quad \textbf{(E.8)}$$

where:

U_C Margin of error of the mean tree biomass per hectare within the project boundary; t d. m. ha^{-1}

t_{VAL} Two-sided Student's *t*-value for: (i) Degrees of freedom equal to *n* – *M*, where *n* is total number of sample plots within the project boundary, and *M* is the total number of tree biomass estimation strata; and (ii) The confidence level required by the methodology applying this tool (e.g. 90% or 95%); dimensionless.

E.g. Two-sided Student's *t*-value for a probability value of 10% (which implies a 90% confidence level) and 140degrees of freedom can be obtained in Excel spreadsheet as "=TINV(0.10,155)" which returns a value of 1.65474.

$s_{b_{TREE}}$ Square root of the variance of mean tree biomass per hectare within project boundary at a given point of time in year *t* (i.e. the standard error of the mean); t d. m. ha^{-1}

(8) Total tree biomass within the project boundary at a given point of time in year *t* was estimated as follows (Equation (13) in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$B_{TREE,t} = A * b_{TREE,t} \quad \textbf{(E.9)}$$

where:

$B_{TREE,t}$ Total tree biomass within the project boundary at a given point of time in year *t*; t d. m.

A Sum of areas of the biomass estimation strata within the project boundary; ha

$b_{TREE,t}$ Mean tree biomass per hectare within the project boundary at a given point of time in year *t*; t d. m. ha^{-1}

(9) Carbon stock in tree biomass within the project boundary at a given point of time in year *t* was estimated as follows (Equation (12) in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities"(Version 04.2):

$$C_{TREE,t} = \frac{44}{12} * B_{TREE,t} * CF_{TREE} \quad \textbf{(E.10)}$$

where:

$C_{TREE,t}$ Carbon stock in tree biomass within the project boundary at a given point of time in year *t*; t CO_2e

$B_{TREE,t}$ Total tree biomass within the project boundary at a given point of time in year *t*; t d. m.

CF_{TREE} Carbon fraction of tree biomass; t C t d.m.$^{-1}$

A default value of 0.50 is used unless transparent and verifiable information can be provided to justify a different value

Table E-2 carbon stock in project trees

Strata	mean tree biomass $b_{TREE,i,t}$ (t d.m./ha)	Strata area (ha)	Variance of tree biomass (t d. m. ha^{-1})^2	Carbon stock in tree biomass and the margin of error
S−1	67.31	125.4	1432.9	$b_{TREE,t}$ =57.3745 t d.m.ha^{-1} $B_{TREE,t}$ =177,860.9 t d.m. $C_{TREE,t}$ =326,078.2 tCO$_2$e $s_{b_{TREE}}$ =2.9651 t d.m.ha^{-1} t_{VAL} =1.6604 U_C=8.58%
S−2	137.12	636.1	2204.2	
S−3	0.00	97.1	0.0	
S−4	38.66	174.7	372.0	
S−5	78.91	340.5	698.8	
S−6	0.00	213.8	0.0	
S−7	11.97	155.0	116.8	
S−8	32.75	137.6	93.0	
S−9	48.38	256.1	373.0	
S−10	0.00	182.7	0.0	
S−11	58.22	112.6	2412.6	
S−12	77.59	89.2	445.9	
S−13	0.00	13.2	0.0	
S−14	30.70	189.1	983.0	
S−15	0.00	100.8	0.0	
S−16	23.96	82.6	261.4	
S−17	47.96	17.1	3187.3	
S−18	0.00	12.5	0.0	
S−19	74.82	86.5	2239.2	
S−20	0.00	26.4	0.0	
S−21	24.86	51.0	893.7	
TOTAL		**3100.0**	**15713.8**	

2. ***Carbon stock changes in living biomass of trees in the project***

Change in carbon stock in tree biomass within the project boundary in year *t* is calculated as follows (Equation (11) in methodological tool "Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" (Version 04.2):

$$\Delta C_{TREE,t} = \frac{C_{TREE,t_2} - C_{TREE,t_1}}{T} \times 1\ year \quad \textbf{(E.11)}$$

where:

$\Delta C_{TREE,t}$ change in carbon stock in trees within the project boundary in year *t*; t CO$_2$e[1]

C_{TREE,t_2} Carbon stock in tree biomass within the project boundary at a point of time in year t_2; t CO$_2$e

C_{TREE,t_1}	Carbon stock in tree biomass within the project boundary at a point of time in year t_1; t CO_2e
T	Time elapsed between two successive estimations (T=$t_2 - t_1$); yr

Carbon stock in biomass of planted trees for 3,100.0 ha within the project boundary on June 09th 2018 for the second monitoring and verification was 326,078.2 tCO_2e. $C_{TREE,t1}$ in Equation (E.11) was assigned the value of carbon stock in the tree biomass at the start of the A/R CDM project activity, which is estimated as 25.8 tCO2 based on the registered PDD Annex 3. Therefore, change in carbon stock in tree biomass within the project boundary since the start of the project is:

$$\Delta C_{TREE,t} = \mathbf{(326,078.2 - 25.8) / 12.191781= 26,743.6t\ CO_2e/yr}$$

3. ***Carbon stock changes in biomass of pre-project shrubs***

In the first verification, 6,962.0 t CO_2e carbon stock in pre-project shrubs on 3008.8 ha of lands was assumed to be died out. The recalculated carbon stock in pre-project shrubs for the second monitoring are 7,337.6 tCO_2e (table E-3 below). The carbon stock change in biomass of pre-project shrubs (carbon stock that was died out) since the start of the project is:

$$\Delta C_{SHRUB,t} = (0.0 - 7{,}337.6) / \mathbf{12.191781} = -601.8\ tCO_2e/yr$$

Table E-3 carbon stock in pre-project shrubs

Baseline strata	Mean shrub biomass (t d.m.ha^{-1})[6]	Area (ha)	biomass (t d.m.)	Carbon stock (tCO_2)
I	1.837	560.5	1029.7	1887.8
II	3.791	77.2	292.7	536.5
III	2.182	959.1	2092.3	3835.9
IV	0.316	464.6	146.9	269.3
V	0.604	267.0	161.4	295.9
VI	0.360	724.3	260.5	477.6
VII	0.400	47.3	18.9	34.7
	1.837	**3100.0**	**4002.3**	**7337.6**

4. ***Project emissions***

There has been no biomass burning during site preparation and no forest fire during the verification period. The nitrogen fertilizer was applied in eucalyptus plantation, however relevant nitrogen oxide emissions may be neglected based on the guidance provided in para 35, EB 42 meeting report regarding accounting of GHG emissions in A/R CDM project activities, and the guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities (Version 01.0). Therefore, the project GHG emissions were set as zero.

5. ***Actual net GHG removals by sinks***

(1) **The actual net GHG removals by sinks were calculated as**:

[6] Data from table E-3 of the 1st monitoring report.

$$\Delta C_{ACTUAL} = \Delta C_P - GHG_E \quad \textbf{(E.12)}$$

where:

ΔC_{ACTUAL}	Actual net GHG removals by sinks; t CO_2e
ΔC_P	Sum of the changes the carbon stock in the selected carbon pools within the project boundary; t CO_2e
GHG_E	Increase in non-CO_2 GHG emissions within the project boundary as a result of the implementation of the A/R CDM project activity; t CO_2e

(2) **The verifiable changes in the carbon stock in the selected carbon pools within the project boundary are estimated using the following equation:**

$$\Delta C_P = \sum_{t=1}^{t^*} \Delta C_t \quad \textbf{(E.13)}$$

where:

ΔC_P	Sum of the changes in carbon stock in all selected carbon pools, since the start of the project; t CO_2e
ΔC_t	Change in carbon stock in all selected carbon pools, in year *t*; t CO_2e
t	*1, 2, 3, … t** years elapsed since the start of the A/R project activity; yr

Change in carbon stock in all selected carbon pools, in year *t*, is calculated as:

$$\Delta C_t = \Delta C_{TREE,t} + \Delta C_{SHRUB,t} \quad \textbf{(E.14)}$$

= 26,743.6 - 601.8=26,141.8 tCO_2e/yr

ΔC_P = 26,141.8 ◊ **12.191781 = 318,714.8** tCO_2e

where:

ΔC_t	Change in carbon stock in all selected carbon pools in the project scenario, in year *t*; t CO_2e
$\Delta C_{TREE,t}$	Change in carbon stock in tree biomass in project, in year *t*; t CO_2e
$\Delta C_{SHRUB,t}$	Change in carbon stock in shrub biomass in project, in year; t CO_2e
t	*1, 2, 3, … t** years elapsed since the start of the A/R CDM project activity

E.3. Calculation of leakage emissions

>> The potential leakage due to the implementation of the registered A/R CDM project activity is GHG emissions due to fossil fuel combustion from vehicles using for transporting seedling, labors, fertilizer, harvest products, etc., to and/or from project sites. However based on the guidance provided in para 35, EB 42 meeting report regarding accounting of GHG emissions in A/R CDM project activities, and the guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities (Version 01.0) (Annex 26, EB63), such emissions by sources were set as zero.

E.4. Calculation of emission reductions or net anthropogenic removals

The net anthropogenic GHG removals by sinks shall be calculated as follows (equation (3) in applied methodology:

$$\Delta C_{AR-CDM,t} = \Delta C_{ACTUAL,t} - \Delta C_{BSL,t} - LK_t \quad \textbf{(E.15)}$$

Where:

$\Delta C_{AR-CDM,t}$ = Net anthropogenic GHG removals by sinks, in year *t*; t CO_2-e

$\Delta C_{ACTUAL,t}$ = Actual net GHG removals by sinks, in year *t*; t CO_2-e

$\Delta C_{BSL,t}$ = Baseline net GHG removals by sinks, in year *t*; t CO_2-e

LK_t = GHG emissions due to leakage, in year *t*; t CO_2-e

The tCER is estimated as the sum of the net anthropogenic GHG removals by sinks from the start of the project to the end of the second monitoring period[7].

	Baseline GHG emissions or baseline net GHG removals (t CO_2e)	Project GHG emissions or actual net GHG removals (t CO_2e)	Leakage GHG emissions (t CO_2e)	GHG emission reductions or net anthropogenic GHG removals (t CO_2e)		
				Before 01/01/2013	From 01/01/2013	Total amount
Total	151.3	318,714.8	0		318,563	318,563

E.5. Comparison of emission reductions or net anthropogenic removals achieved with estimates in the registered PDD

Amount achieved during this monitoring period (t CO_2e)	Amount estimated ex ante (t CO_2e)
318,563	540,202

E.6. Remarks on increase in achieved emission reductions

>> The actual value of the net anthropogenic GHG removals by sinks is smaller than ex ante estimate in the registered CDM-PDD because of the reduction of actually planted area, delayed planting schedule and slow growth of species planted, as outlined below

1. Reduction of planted area

The actual planted area is 3100.0 ha compared to the project area in the registered CDM-PDD (4,000 ha), amounted to 77.5% of planned area. Main causes for the reduction are (also summarized in table E-4 below):

- ***Poor site conditions that prevented planting on 469.8 ha*:** The high altitude, steep slopes, strong winds and rocky soils lacking adequate soil depth made site conditions of 469.8 ha unsuitable for reforestation. Even repeated replanting was not able to result in desired survival of planted seedlings. Considering the geography of the region, the poor site conditions could not be fully assessed at the project design stage. As a result of detailed assessment of site

[7] Per the paragraph 42 of the Annex to the modalities and procedures of afforestation and reforestation project activities under the CDM (Decision 19/CP.9), tCERs expire at the end of the commitment period subsequent to the commitment period for which they are issued; and per the CDM Executive Board meeting 89 paragraph 49(b); CDM Project Standard, paragraph 265(c) (ii); and the Validation and Verification Standard (VVS), paragraph 383, for tCERs, for any issuance, the DOE shall confirm that all net anthropogenic GHG removals achieved since the start of the project activity are allocated to the commitment period in which the monitoring period ends.

conditions during project implementation, the sites with poor site conditions were excluded from the project area.

- ***Contract with households could not be implemented on 131.1 ha*:** The contracts with farmers could not be implemented as the farmers' demands with regard to revenue sharing arrangements and permission to use access roads were outside the scope of the contract requiring additional investment. As a consequence, Xinghuan Forestry Development Co., Ltd was unable to comply with the requests from farmers and reforestation activity could not be implemented on 131.1 ha of lands proposed for reforestation.
- ***Land tenure conflicts on 74.4 ha of lands*:** From legal point of view, the land ownership is clear. However, as project lands are barren without revenue generation, the farmer households did not care about the tenure of the lands at the time of tenure settlement. During project preparation stage, farmers didn't foresee the legal disputes with regard to land tenure. With the implementation of the project, some farmers in the vicinity of the project lands claimed land tenure right on lands legally owned by other farmers. As a result of the disputes pertaining to land tenure, farmers that legally own the lands and the forestry companies that are implementing the project did not want to take the risk of planting trees on disputable lands.
- ***Exclusion of area from the project*:** some area was excluded from the project for the following reasons.
    - A parcel of 84.6 ha that was excluded from the project as it was proposed to be regenerated through natural regeneration.
    - Strips of lands within 5-10 m from crop lands and the washed gully covering 78.5 ha: was not planted for the purpose of protecting crop lands.
    - Land use changes occurred on 61.6 ha (37.5 ha in the 1st monitoring period and 24.1 ha in the second monitoring period) due to use of these lands for other purposes.

Table E-4 Summary table on area excluded from the designed project lands

No	Reason for exclusion	Area (ha)
a	Poor site condition	469.8
b	Failure in implementation of contract	131.1
c	Land tenure disputes	74.4
d	Human-assist natural regeneration	84.6
e	Leave for cropland protection	78.5
f	Land use changes	61.6
	Total	**900.0**

2. Delayed planting schedule

The actual planting progress was much slower than planned schedule (see table B.1 above for detail) due mainly to slow process for addressing land tenure conflict, unavailability of sufficient seedlings, poor site condition, and extreme climate event (snow storm in early 2008 and drought in 2009-2018). Many lands have been repeated planted due to low survival rate resulted from poor site conditions and extreme drought, and due to damage by snow storm and drought.

3. Lower growth rate

The growth rate of eucalyptus and part of Masson pine is comparable to what has estimated in PDD. However, oak, schima and maple grew much slower than expected, and 165.3 ha of pine planted in Huanjiang in 2008 had slow growth due to high elevation with strong winds.

Annex I Project lands

Towns/ Townships	Village	Compart-ment	sub-Compart-ment	area (ha)	species (2nd MR)	year planted	Stratum ID	species (1st MR)	Year Changed	Plot ID	Baseline ID	Comments
Cangwu County												
Dapo	Dayan	5	1	7.1	Masson pine	2013	S-5		2013		III-3	new included
Dapo	Dayan	5	1.7	0.6	Eucalyptus	2017	S-3		2017		III-3	new included
Dapo	Dayan	5	3	6.2	Masson pine	2013	S-5		2013		III-3	new included
Dapo	Dayan	5	4	6.8	Masson pine	2013	S-5		2013		III-3	new included
Dapo	Dayan	5	10	1	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted
Dapo	Dayan	5	15	1.3	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted
Dapo	Dayan	5	17.1	2.6	Masson pine	2013	S-4		2013		III-3	new included
Dapo	Dayan	5	17.2	0.4	Masson pine	2013	S-5		2013		III-3	new included
Dapo	Dayan	5	17.3	0.5	Chinese fir	2014	S-11		2014		III-3	new included
Dapo	Shengzhou	1	3.2	0.3	Masson pine	2008	S-4	Masson pine			III-3	
Dapo	Shengzhou	1	3.3	0.2	Eucalyptus	2009	S-2	Eucalyptus	2013		III-4	sprout after harvest
Dapo	Shengzhou	1	4	12.2	Eucalyptus	2007	S-2	Eucalyptus	2013		III-2	sprout after harvest
Dapo	Shengzhou	1	12	2.3	Masson pine	2009	S-5	Masson pine			III-4	
Dapo	Shengzhou	1	12.01	1.2	Schima	2009	S-14	Schima			III-4	
Dapo	Shengzhou	1	12.02	1.7	Masson pine	2009	S-5	Masson pine			III-4	
Dapo	Shengzhou	1	12.1	0.6	Eucalyptus	2009	S-2	Eucalyptus	2015		III-4	sprout after harvest
Dapo	Shengzhou	1	13.1	7.4	Eucalyptus	2013	S-2		2013		III-3	new included
Dapo	Shengzhou	1	13.10	0.5	Masson pine	2008	S-5	Masson pine			III-3	
Dapo	Shengzhou	1	16.11	0.5	Schima	2009	S-15	Schima	2016		III-4	replanted after drought
Dapo	Shengzhou	1	16.12	1.5	Masson pine	2007	S-5	Masson pine	2016		III-2	replanted after drought

Dapo	Shengzhou	1	16.13	0.1	Schima	2009	S-14	Schima			III-4	
Dapo	Shengzhou	1	17.1	1.2	Masson pine	2007	S-5	Masson pine			III-2	
Dapo	Shengzhou	1	17.2	1.6	Eucalyptus	2007	S-2	Eucalyptus	2015		III-2	sprout after harvest
Dapo	Shengzhou	1	16.10.1	4.8	Masson pine	2007	S-5	Masson pine		C-58	III-2	
Dapo	Shengzhou	1	16.10.2	3.6	Masson pine	2007	S-6	Masson pine	2016	C-43	III-2	replanted after drought
Dapo	Shengzhou	1	3.10.1	1.9	Masson pine	2007	S-5	Masson pine			III-2	
Dapo	Shengzhou	1	3.10.3	1.1	Eucalyptus	2007	S-1	Masson pine	2017		III-2	failed in initial planting and replanted with Eucalyptus
Dapo	Shengzhou	1	3.11.1	1.5	Schima	2009	S-14	Schima			III-4	
Dapo	Shengzhou	1	3.11.2	0.3	Eucalyptus	2009	S-1	Schima	2017		III-4	failed in initial planting and replanted with Eucalyptus
Dapo	Xinlong	2	20.1	2.6	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted after drought
Dapo	Xinlong	2	20.11	0.1	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	2	26.1	1.8	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted after drought
Dapo	Xinlong	2	26.11	0.5	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	3	3.2	4.6	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted after drought
Dapo	Xinlong	3	3.21	2.3	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	3	7.01	0.5	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	3	7.02	0.4	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	3	8	5.7	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted after drought
Dapo	Xinlong	3	8.01	3.3	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	3	9.1	6.1	Masson pine	2008	S-6	Masson pine	2015	C-44	III-3	replanted after drought
Dapo	Xinlong	3	9.11	1.5	Masson pine	2010	S-6	Masson pine	2015		III-5	replanted after drought
Dapo	Xinlong	3	7.00.1	2.5	Masson pine	2008	S-6	Masson pine	2015		III-3	replanted after drought
Dapo	Xinlong	3	7.00.2	0.9	Eucalyptus	2008	S-1	Masson pine	2015		III-3	failed in initial planting and replanted with Eucalyptus

Dapo	Xinlong	6	14.1	0.4	Eucalyptus	2009	S-3	Eucalyptus	2018		III-4	replanted after drought
Dapo	Xinlong	6	15.1	0.7	Masson pine	2007	S-5	Masson pine			III-2	
Dapo	Xinlong	6	15.11	0.6	Schima	2009	S-15	Schima			III-4	
Dapo	Xinlong	6	15.2	1.9	Masson pine	2009	S-4	Masson pine			III-4	
Dapo	Xinlong	6	15.21	1.6	Schima	2009	S-14	Schima			III-4	
Dapo	Xinlong	6	14.00.1	9	Masson pine	2007	S-5	Masson pine	2018		III-2	replanted after drought
Dapo	Xinlong	6	14.00.2	5.1	Masson pine	2007	S-5	Masson pine			III-2	
Dapo	Xinlong	6	15.2.1	2.4	Masson pine	2013	S-4		2013		III-2	new included
Dapo	Xinlong	8	8	5.2	Masson pine	2009	S-6	Masson pine	2015		III-4	replanted after drought
Dapo	Xinlong	8	8.01	2.1	Schima	2009	S-15	Schima	2015		III-4	replanted after drought
Dapo	Xinlong	8	9.01	0.9	Schima	2009	S-15	Schima	2015		III-4	replanted after drought
Dapo	Xinlong	8	10	1.4	Masson pine	2009	S-6	Masson pine	2015		III-4	replanted after drought
Dapo	Xinlong	8	10.01	0.8	Schima	2009	S-15	Schima	2015		III-4	replanted after drought
Dapo	Xinlong	8	20	7.2	Masson pine	2009	S-6	Masson pine	2015	C-45	III-4	replanted after drought
Dapo	Xinlong	8	20.01	1.7	Schima	2009	S-15	Schima	2015	C-46	III-4	replanted after drought
Dapo	Xinlong	8	20.02	1	Schima	2009	S-14	Schima			III-4	
Dapo	Xinlong	8	9.00.1	4.2	Masson pine	2009	S-6	Masson pine	2015		III-4	replanted after drought
Dapo	Xinlong	8	9.00.2	0.8	Masson pine	2009	S-6	Masson pine	2015		III-4	replanted after drought
Longxu	Daen	9	3.1	1.9	Masson pine	2011	S-4	Masson pine			III-2	
Longxu	Daen	9	4.1	4.8	Masson pine	2011	S-6	Masson pine	2018		III-2	replanted after drought
Longxu	Daen	9	12.1	1.4	Masson pine	2011	S-6	Masson pine	2014		III-2	replanted after drought
Longxu	Daen	9	12.11	0.7	Schima	2011	S-15	Schima	2014		III-5	replanted after drought
Longxu	Daen	9	12.12	0.2	Schima	2011	S-15	Schima	2014		III-5	replanted after drought
Longxu	Daen	9	12.13	0.3	Schima	2011	S-15	Schima	2014		III-5	replanted after drought

Longxu	Daen	9	12.14	0.6	Masson pine	2011	S-6	Masson pine	2014		III-2	replanted after drought
Longxu	Daen	9	12.2	7.6	Masson pine	2011	S-6	Masson pine	2014		III-2	replanted after drought
Longxu	Daen	9	12.21	2.2	Schima	2011	S-15	Schima	2014		III-4	replanted after drought
Longxu	Daen	9	12.3	1.9	Masson pine	2011	S-6	Masson pine	2014		III-2	replanted after drought
Longxu	Daen	9	12.31	0.5	Schima	2011	S-15	Schima	2014		III-4	replanted after drought
Longxu	Daen	9	21.1	8.2	Masson pine	2011	S-6	Masson pine	2014	C-21	III-2	replanted after drought
Longxu	Daen	9	21.11	2.5	Schima	2011	S-15	Schima	2014	C-18	III-4	replanted after drought
Longxu	Daen	9	21.12	1	Schima	2011	S-15	Schima	2014		III-4	replanted after drought
Longxu	Daen	9	21.2	0.2	Schima	2011	S-15	Schima	2014		III-5	replanted after drought
Longxu	Enyi	5	1.1	1.1	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	2	2.9	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	3	0.4	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	3.1	0.7	Masson pine	2008	S-6	Masson pine	2018		III-3	replanted after drought
Longxu	Enyi	5	3.11	0.3	Oak	2008	S-18	Oak	2018		III-3	replanted after drought
Longxu	Enyi	5	3.12	0.1	Oak	2008	S-18	Oak	2018		III-3	replanted after drought
Longxu	Enyi	5	4	2.1	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	4.01	0.2	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	4.02	0.4	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	5	1.7	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	5.01	0.7	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	6	1.5	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	7	2.8	Eucalyptus	2009	S-2	Eucalyptus	2013	C-14	III-4	sprout after harvest
Longxu	Enyi	5	9	1.8	Eucalyptus	2009	S-2	Eucalyptus			III-4	
Longxu	Enyi	5	10.01	0.7	Oak	2008	S-17	Oak			III-3	

Longxu	Enyi	5	10.02	0.7	Oak	2008	S-18	Oak			III-3	
Longxu	Enyi	5	10.1	0.6	Eucalyptus	2009	S-2	Eucalyptus			III-4	
Longxu	Enyi	5	11	0.8	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	11.01	0.9	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	11.02	0.2	Oak	2009	S-17	Oak			III-4	
Longxu	Enyi	5	12	1.1	Masson pine	2008	S-6	Masson pine	2018		III-3	replanted after drought
Longxu	Enyi	5	12.01	0.1	Oak	2008	S-18	Oak	2018		III-3	replanted after drought
Longxu	Enyi	5	12.02	0.5	Oak	2008	S-18	Oak	2018		III-3	replanted after drought
Longxu	Enyi	5	13	0.4	Masson pine	2008	S-6	Masson pine	2018		III-3	replanted after drought
Longxu	Enyi	5	13.01	0.4	Oak	2008	S-18	Oak	2018	C-53	III-3	replanted after drought
Longxu	Enyi	5	14	1.7	Masson pine	2008	S-6	Masson pine	2018		III-3	replanted after drought
Longxu	Enyi	5	14.01	0.1	Oak	2008	S-18	Oak	2018		III-3	replanted after drought
Longxu	Enyi	5	14.02	1.1	Oak	2008	S-18	Oak	2018		III-3	replanted after drought
Longxu	Enyi	5	16.01	0.6	Oak	2008	S-18	Oak		C-15	III-3	
Longxu	Enyi	5	16.02	0.5	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	16.03	0.2	Oak	2009	S-17	Oak			III-4	
Longxu	Enyi	5	17	0.1	Masson pine	2008	S-4	Masson pine			III-3	
Longxu	Enyi	5	17.01	0.2	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	18	0.9	Masson pine	2008	S-4	Masson pine			III-3	
Longxu	Enyi	5	18.01	1	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	18.1	0.3	Eucalyptus	2009	S-2	Eucalyptus			III-4	
Longxu	Enyi	5	10.00.1	1.4	Masson pine	2008	S-5	Masson pine			III-3	
Longxu	Enyi	5	10.00.2	3.1	Masson pine	2008	S-6	Masson pine			III-3	
Longxu	Enyi	5	15.00.2	0.9	Masson pine	2008	S-4	Masson pine			III-3	

Longxu	Enyi	5	15.01.2	0.5	Oak	2008	S-17	Oak			III-3	
Longxu	Enyi	5	16.00.2	1.4	Masson pine	2008	S-4	Masson pine			III-3	
Satou	Cantian	1	1.1	21	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	1	1.11	8.7	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	1.12	1.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	1.13	2.5	Schima	2006	S-14	Schima		C-4	I-1	
Satou	Cantian	1	1.14	1.7	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	2.1	11.5	Masson pine	2006	S-5	Masson pine		C-3	I-1	
Satou	Cantian	1	2.11	0.4	Schima	2006	S-15	Schima		C-1	I-1	
Satou	Cantian	1	2.12	0.4	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	2.13	2.8	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	2.14	4.4	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	3.1	1.1	Chinese fir	2013	S-11		2013		I-1	new included
Satou	Cantian	1	3.10	5.2	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	1	3.11	3.6	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	5.1	3.2	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	1	5.11	1	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	5.12	0.6	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	6	0.7	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	1	6.01	0.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	7.12	0.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	11	24.2	Masson pine	2006	S-5	Masson pine		C-2	I-1	
Satou	Cantian	1	11.01	12.4	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	11.02	1.7	Schima	2006	S-14	Schima			I-1	

Satou	Cantian	1	11.03	1.8	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	12	4.5	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	1	12.01	3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	7.10.1	2	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	1	7.10.2	1.1	Masson pine	2006	S-6	Masson pine	2017		I-1	replanted
Satou	Cantian	1	7.11.1	2.9	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	1	7.11.2	0.5	Schima	2006	S-15	Schima	2017		I-1	replanted
Satou	Cantian	2	1.1	6.2	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	2	1.11	3.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	2	2	1.4	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	2	2.01	1.9	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	20	1.1	2.5	Masson pine	2006	S-4	Masson pine			I-1	
Satou	Cantian	20	1.11	1	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	20	4.1	0.6	Masson pine	2006	S-4	Masson pine			I-1	
Satou	Cantian	20	4.11	0.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	21	1.1	10.7	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	21	1.11	5.4	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	21	1.12	0.4	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	21	1.2	0.3	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	21	1.21	0.5	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	21	3.1	5.9	Masson pine	2006	S-4	Masson pine			II-1	
Satou	Cantian	21	3.11	1	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	21	3.12	2.6	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	22	3.1	7.6	Masson pine	2006	S-5	Masson pine			I-1	

Satou	Cantian	22	3.11	0.8	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	22	3.12	0.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	22	3.13	3.3	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	22	4.1	4.5	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	22	4.11	3.4	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	22	5.1	4.9	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	22	5.11	3.8	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	22	5.2	0.3	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	22	6.1	2.2	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	22	6.11	1.1	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	22	6.12	0.4	Schima	2006	S-15	Schima		C-50	I-1	
Satou	Cantian	28	1	9	Masson pine	2008	S-5	Masson pine			I-3	
Satou	Cantian	28	1.01	4.5	Schima	2008	S-14	Schima			I-3	
Satou	Cantian	28	2	5.4	Masson pine	2008	S-5	Masson pine		C-62	I-3	
Satou	Cantian	28	2.01	1	Schima	2008	S-14	Schima			I-3	
Satou	Cantian	28	2.02	0.9	Schima	2008	S-14	Schima			I-3	
Satou	Cantian	28	2.03	1.3	Schima	2008	S-14	Schima			I-3	
Satou	Cantian	28	3	10	Masson pine	2008	S-5	Masson pine			I-3	
Satou	Cantian	28	3.01	4.7	Schima	2008	S-14	Schima		C-8	I-3	
Satou	Cantian	28	4	1	Masson pine	2008	S-5	Masson pine			I-3	
Satou	Cantian	28	4.01	0.7	Schima	2008	S-14	Schima			I-3	
Satou	Cantian	29	1	10.4	Masson pine	2006	S-5	Masson pine		C-57	II-1	
Satou	Cantian	29	1.01	2.5	Masson pine	2006	S-6	Masson pine	2016		II-1	replanted
Satou	Cantian	29	1.02	2.7	Schima	2006	S-14	Schima			II-1	

Satou	Cantian	29	1.03	0.2	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	29	4	17.4	Masson pine	2006	S-5	Masson pine		C-9, C-61	II-1	
Satou	Cantian	29	4.01	4.9	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	29	4.02	0.5	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	29	4.03	0.3	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	29	5	20.6	Masson pine	2006	S-5	Masson pine			II-1	
Satou	Cantian	29	5.01	4.3	Schima	2006	S-14	Schima		C-10	II-1	
Satou	Cantian	29	5.02	3.9	Schima	2006	S-14	Schima			II-1	
Satou	Cantian	29	7	13.8	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Cantian	29	7.01	5.5	Schima	2006	S-14	Schima			I-1	
Satou	Cantian	29	7.02	3	Schima	2006	S-14	Schima			I-1	
Satou	Shentang	6	2	10.3	Masson pine	2008	S-6	Masson pine		C-11	I-3	
Satou	Shentang	6	2.01	6.6	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	6	3	6.4	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	6	3.01	4.4	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	6	3.1	1.8	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	6	3.11	1.7	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	6	4	2.4	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	6	4.01	2.1	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	6	5	9.4	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	6	5.01	6.3	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	7	2	3.1	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	7	2.01	3.3	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	7	4	10.4	Masson pine	2008	S-6	Masson pine			I-3	

Satou	Shentang	7	4.01	7.6	Schima	2009	S-15	Schima		C-12	I-4	
Satou	Shentang	7	5	9.2	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	7	5.01	7	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	2	12	Masson pine	2008	S-6	Masson pine		C-13	I-3	
Satou	Shentang	15	2.01	7.4	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	2.02	1.3	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	3.1	0.6	Chinese fir	2013	S-11		2013		I-4	new included
Satou	Shentang	15	3.11	0.9	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	4	0.9	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	15	4.01	1.4	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	10	0.9	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	15	10.01	0.8	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	11	4.8	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	15	11.01	2.2	Schima	2009	S-15	Schima			I-4	
Satou	Shentang	15	11.1	1.4	Chinese fir	2013	S-11		2013		I-3	new included
Satou	Shentang	15	3.00.1	0.9	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shentang	15	3.00.2	0.3	Masson pine	2008	S-6	Masson pine			I-3	
Satou	Shichuan	3	10	0.5	Chinese fir	2007	S-13	Masson pine	2017		I-2	replanted with Chinese fir
Satou	Shichuan	3	10.01	0.2	Chinese fir	2007	S-13	Masson pine	2017		I-2	replanted with Chinese fir
Satou	Shichuan	3	10.02	1	Chinese fir	2009	S-13	Schima	2017		I-4	replanted with Chinese fir
Satou	Shichuan	3	10.1	4.7	Chinese fir	2014	S-11		2014		I-2	new included
Satou	Shichuan	3	10.2	0.4	Chinese fir	2012	S-11		2012		I-2	new included
Satou	Shichuan	3	10.3	0.5	Chinese fir	2012	S-11		2012		I-2	new included
Satou	Shichuan	3	10.4	2.5	Chinese fir	2012	S-11		2012		I-2	new included

Satou	Shichuan	3	13	12.4	Masson pine	2007	S-4	Masson pine			I-2	
Satou	Shichuan	3	13.01	4.3	Schima	2009	S-14	Schima			I-4	
Satou	Shichuan	3	13.02	0.5	Chinese fir	2009	S-13	Schima	2017		I-4	replanted with Chinese fir
Satou	Shichuan	6	10.2	3.7	Masson pine	2009	S-6	Masson pine			I-4	
Satou	Shichuan	6	10.21	2.4	Schima	2009	S-15	Schima			I-4	
Satou	Shichuan	6	10.22	0.5	Schima	2009	S-15	Schima			I-4	
Satou	Shichuan	6	11	3.2	Masson pine	2009	S-6	Masson pine			I-4	
Satou	Shichuan	6	11.01	0.1	Schima	2009	S-15	Schima			I-4	
Satou	Shichuan	6	11.02	2.6	Schima	2009	S-15	Schima			I-4	
Satou	Shichuan	7	12.1	2.1	Chinese fir	2012	S-11		2012		I-2	new included
Satou	Shichuan	7	12.2	0.7	Chinese fir	2018	S-13		2018		I-2	new included
Satou	Shichuan	7	12.3	0.3	Chinese fir	2018	S-13		2018		I-2	new included
Satou	Shichuan	7	12.4	1.9	Chinese fir	2012	S-11		2012		I-2	new included
Satou	Shichuan	7	12.5	1.8	Chinese fir	2012	S-11		2012		I-2	new included
Satou	Shichuan	7	14	0.7	Masson pine	2007	S-5	Masson pine			I-2	
Satou	Shichuan	7	14.01	0.9	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	7	15.12	5.3	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	7	15.1.1	3.1	Chinese fir	2015	S-11		2015		I-2	new included
Satou	Shichuan	7	15.10.1	10.1	Masson pine	2007	S-5	Masson pine			I-2	
Satou	Shichuan	7	15.10.2	1.9	Chinese fir	2007	S-13	Masson pine	2017	C-56	I-2	replanted with Chinese fir
Satou	Shichuan	7	15.11.1	1.6	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	7	15.11.2	0.9	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	8	4	3.5	Masson pine	2006	S-5	Masson pine			I-1	
Satou	Shichuan	8	4.01	1.1	Schima	2006	S-14	Schima			I-1	

Satou	Shichuan	11	1	1.3	Masson pine	2007	S-4	Masson pine			I-2	
Satou	Shichuan	11	1.01	0.2	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	1.02	0.1	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	2	1.2	Masson pine	2007	S-4	Masson pine			I-2	
Satou	Shichuan	11	2.01	0.1	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	2.02	0.2	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	3	3.9	Masson pine	2007	S-4	Masson pine		C-54	I-2	
Satou	Shichuan	11	3.01	0.2	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	3.02	0.1	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	3.03	1.1	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	3.1	12.1	Masson pine	2007	S-4	Masson pine		C-5	I-2	
Satou	Shichuan	11	3.11	1.4	Masson pine	2007	S-4	Masson pine			I-2	
Satou	Shichuan	11	3.12	3.5	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	3.13	3.6	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	4.1	9	Masson pine	2007	S-4	Masson pine			I-2	
Satou	Shichuan	11	4.11	3.8	Schima	2009	S-14	Schima			I-4	
Satou	Shichuan	11	8.11	0.5	Schima	2007	S-15	Schima			I-2	
Satou	Shichuan	11	8.12	2.4	Schima	2007	S-14	Schima			I-2	
Satou	Shichuan	11	9.1	2.3	Schima	2009	S-14	Schima			I-4	
Satou	Shichuan	11	8.10.1	17.5	Masson pine	2007	S-4	Masson pine			I-2	
Satou	Shichuan	11	8.10.2	1.5	Chinese fir	2007	S-13	Masson pine	2017		I-2	replanted with Chinese fir
Satou	Shichuan	17	12	3.9	Masson pine	2006	S-4	Masson pine			I-1	
Satou	Shichuan	17	12.01	2.4	Schima	2006	S-14	Schima			I-1	
Satou	Shichuan	21	9.1	4.6	Masson pine	2006	S-5	Masson pine			I-1	

Satou	Shichuan	21	9.11	1.2	Schima	2006	S-14	Schima			I-1	
Satou	Shichuan	21	9.12	0.5	Schima	2006	S-14	Schima			I-1	
Satou	Shichuan	21	9.13	0.3	Schima	2006	S-14	Schima			I-1	
Satou	Shichuan	21	9.2	15.7	Masson pine	2006	S-4	Masson pine		C-6	I-1	
Satou	Shichuan	21	9.24	3.6	Schima	2006	S-14	Schima			I-1	
Satou	Shichuan	21	9.21	1.7	Schima	2006	S-15	Schima		C-7	I-1	
Satou	Shichuan	21	9.22	3.8	Schima	2006	S-14	Schima			I-1	
Satou	Shichuan	21	9.23	0.9	Schima	2006	S-14	Schima			I-1	
Xindi	Dachun	1	1.1	10.7	Masson pine	2011	S-4	Masson pine	2014		III-3	replanted after drought
Xindi	Dachun	1	1.11	2.2	Masson pine	2011	S-4	Schima	2014		III-5	replanted with Masson pine after drought
Xindi	Dachun	1	1.12	0.4	Schima	2011	S-15	Schima	2014		III-3	replanted after drought
Xindi	Dachun	1	1.21	2.1	Schima	2011	S-15	Schima	2014		III-3	replanted after drought
Xindi	Dachun	1	1.22	1.1	Oak	2008	S-18	Oak	2014		III-3	replanted after drought
Xindi	Dachun	1	2.11	3.7	Schima	2011	S-15	Schima	2014		III-5	replanted after drought
Xindi	Dachun	1	2.12	5.8	Masson pine	2008	S-6	Masson pine	2014		III-3	replanted after drought
Xindi	Dachun	1	2.13	0.1	Schima	2008	S-15	Schima	2014		III-3	replanted after drought
Xindi	Dachun	1	2.14	1.2	Schima	2008	S-15	Schima	2014		III-3	replanted after drought
Xindi	Dachun	1	3	2.1	Masson pine	2011	S-4	Masson pine	2014		III-3	replanted after drought
Xindi	Dachun	1	3.01	1.4	Masson pine	2011	S-4	Schima	2014		III-3	replanted with Masson pine after drought
Xindi	Dachun	1	3.02	0.5	Masson pine	2011	S-6	Schima	2014	C-26	III-3	replanted with Mason pine after drought
Xindi	Dachun	1	5.1	0.3	Masson pine	2008	S-6	Masson pine	2014		III-3	replanted after drought
Xindi	Dachun	1	5.11	0.6	Schima	2008	S-15	Schima	2014		III-3	replanted after drought
Xindi	Dachun	1	6.1	3.1	Masson pine	2008	S-6	Masson pine	2014		III-3	replanted after drought

Xindi	Dachun	1	6.11	3.3	Schima	2008	S-15	Schima	2014	C-32	III-3	replanted after drought
Xindi	Dachun	1	1.20.1	2.4	Masson pine	2011	S-6	Masson pine	2014		III-3	replanted after drought
Xindi	Dachun	1	1.20.2	5.9	Schima	2011	S-14	Masson pine	2014	C-29	III-3	replanted after drought
Xindi	Dachun	1	2.10.1	0.8	Masson pine	2011	S-6	Masson pine	2014		III-3	replanted after drought
Xindi	Dachun	1	2.10.2	3.3	Masson pine	2011	S-4	Masson pine	2014		III-3	replanted after drought
Xindi	Datong	1	1.1	7.5	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	1	1.2	15.9	Masson pine	2007	S-5	Masson pine		C-16	III-2	
Xindi	Datong	1	1.21	6.2	Schima	2007	S-14	Schima			III-2	
Xindi	Datong	1	1.3	0.6	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	1	2	45.7	Eucalyptus	2006	S-2	Eucalyptus		C-20	III-1	
Xindi	Datong	1	4.1	11	Eucalyptus	2006	S-1	Eucalyptus	2013	C-24	III-1	sprout after harvest
Xindi	Datong	1	4.2	11.7	Masson pine	2007	S-4	Masson pine			III-2	
Xindi	Datong	1	4.21	5.1	Schima	2007	S-14	Schima			III-2	
Xindi	Datong	1	5.1	5.7	Eucalyptus	2006	S-3	Eucalyptus	2018	C-30	III-1	sprout after harvest
Xindi	Datong	1	6.1	20.5	Eucalyptus	2006	S-3	Eucalyptus	2018		III-1	sprout after harvest
Xindi	Datong	1	6.2	3.3	Eucalyptus	2006	S-3	Eucalyptus	2018		III-1	sprout after harvest
Xindi	Datong	2	1	13.9	Eucalyptus	2006	S-2	Eucalyptus	2013	C-17	III-1	sprout after harvest
Xindi	Datong	2	2	18.8	Eucalyptus	2006	S-2	Eucalyptus	2013	C-19, C-22	III-1	sprout after harvest
Xindi	Datong	2	3	13.8	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	2	4	6.8	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	2	4.1	2.9	Eucalyptus	2013	S-2		2013		III-1	new included
Xindi	Datong	2	5	4.1	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	2	5.1	2.3	Eucalyptus	2013	S-2		2013		III-1	new included
Xindi	Datong	2	5.2	0.4	Eucalyptus	2013	S-2		2013		III-1	new included

Xindi	Datong	2	7	24.9	Eucalyptus	2006	S-2	Eucalyptus	2013	C-25	III-1	sprout after harvest
Xindi	Datong	2	8.1	19.1	Eucalyptus	2006	S-2	Eucalyptus	2013	C-23, C-27	III-1	sprout after harvest
Xindi	Datong	3	1	21.2	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	3	1.1	1	Eucalyptus	2013	S-2		2013		III-1	new included
Xindi	Datong	3	5	6.4	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Datong	3	7	6.4	Masson pine	2008	S-6	Masson pine	2014	C-31	III-3	replanted after drought
Xindi	Datong	3	7.01	3.2	Schima	2009	S-15	Schima	2014		III-4	replanted after drought
Xindi	Datong	4	1.1	13.1	Eucalyptus	2006	S-2	Eucalyptus	2013	C-28	III-1	sprout after harvest
Xindi	Datong	4	2.1	5.1	Eucalyptus	2006	S-3	Eucalyptus	2018		III-1	sprout after harvest
Xindi	Datong	4	2.2	1.9	Eucalyptus	2006	S-3	Eucalyptus	2018		III-1	sprout after harvest
Xindi	Datong	4	3.1	2.7	Eucalyptus	2006	S-3	Eucalyptus	2018		III-1	sprout after harvest
Xindi	Datong	4	5.1	3.2	Eucalyptus	2006	S-3	Eucalyptus	2018		III-1	sprout after harvest
Xindi	Dianchun	1	3.1	7.7	Eucalyptus	2006	S-2	Eucalyptus	2013	C-35	III-1	sprout after harvest
Xindi	Dianchun	1	5	6.5	Eucalyptus	2006	S-2	Eucalyptus	2013	C-36	III-1	sprout after harvest
Xindi	Dianchun	1	6.1	14.6	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	7	8.9	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	8	6.1	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	9	10.2	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	10	3.5	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	4.10.3	2.7	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	4.10.4	0.5	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	4.10.5	0.4	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	4.10.6	5.9	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	1	4.10.7	39.9	Eucalyptus	2006	S-2	Eucalyptus	2013	C-37,C-	III-1	sprout after harvest

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Xindi	Dianchun	2	1	8.1	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	2	2	6	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	2	3	5.3	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	2	8.1	5.3	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	2	8.2	6.3	Eucalyptus	2006	S-2	Eucalyptus			III-1	
Xindi	Dianchun	3	2.1	10.4	Masson pine	2007	S-5	Masson pine			III-2	
Xindi	Dianchun	3	2.11	8.4	Schima	2009	S-15	Schima			III-4	
Xindi	Dianchun	3	2.3	6.5	Eucalyptus	2006	S-1	Eucalyptus	2013	C-42	III-1	sprout after harvest
Xindi	Dianchun	3	3.1	4.9	Masson pine	2007	S-5	Masson pine			III-2	
Xindi	Dianchun	3	3.11	3.4	Schima	2009	S-14	Schima			III-4	
Xindi	Dianchun	3	4.1	1.1	Masson pine	2007	S-5	Masson pine			III-2	
Xindi	Dianchun	3	4.2	16.3	Eucalyptus	2007	S-2	Eucalyptus	2013		III-2	sprout after harvest
Xindi	Dianchun	3	4.3	1.4	Masson pine	2007	S-5	Masson pine			III-2	
Xindi	Dianchun	3	4.4	0.7	Masson pine	2007	S-5	Masson pine			III-2	
Xindi	Dianchun	3	4.41	0.2	Schima	2009	S-14	Schima			III-4	
Xindi	Dianchun	3	6	6.9	Eucalyptus	2006	S-1	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	3	1.00.2	6.8	Eucalyptus	2006	S-2	Eucalyptus	2013		III-1	sprout after harvest
Xindi	Dianchun	3	1.00.3	26.3	Eucalyptus	2006	S-2	Eucalyptus	2013	C-40	III-1	sprout after harvest
Xindi	Dianchun	3	1.00.4	11.7	Eucalyptus	2006	S-1	Eucalyptus	2013	C-41	III-1	sprout after harvest
Xindi	Dianchun	3	2.20.1	1	Masson pine	2007	S-4	Masson pine			III-2	
Xindi	Dianchun	3	2.20.3	0.7	Masson pine	2007	S-5	Masson pine			III-2	
Xindi	Dianchun	3	2.21.1	1	Schima	2009	S-14	Schima			III-4	
Xindi	Dianchun	3	2.21.3	0.6	Schima	2009	S-14	Schima			III-4	

Xindi	Dianchun	3	3.1.1	1.4	Eucalyptus	2013	S-2		2013		III-2	new included
Xindi	Dianchun	4	1.1	3.3	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dianchun	4	1.11	1	Masson pine	2010	S-4	Masson pine			III-5	
Xindi	Dianchun	4	1.12	1.2	Masson pine	2010	S-4	Masson pine			III-5	
Xindi	Dianchun	4	1.2	1.9	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dianchun	4	1.21	1.4	Masson pine	2010	S-4	Masson pine			III-5	
Xindi	Dianchun	4	7.11	1.1	Masson pine	2010	S-4	Masson pine		C-55	III-5	
Xindi	Dianchun	4	7.2	0.7	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dianchun	4	7.21	0.3	Masson pine	2010	S-4	Masson pine			III-5	
Xindi	Dianchun	4	7.10.1	2.1	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dianchun	4	7.10.3	1.7	Masson pine	2008	S-5	Masson pine			III-3	
Xindi	Dongxin	1	18.1	3.4	Masson pine	2008	S-5	Masson pine			III-3	
Xindi	Dongxin	1	19	2.3	Masson pine	2008	S-5	Masson pine			III-3	
Xindi	Dongxin	1	18.11.2	0.9	Oak	2008	S-17	Oak		C-59	III-3	
Xindi	Dongxin	1	19.01.2	1	Oak	2008	S-17	Oak			III-3	
Xindi	Dongxin	2	4	7.8	Masson pine	2008	S-5	Masson pine		C-60	III-3	
Xindi	Dongxin	2	4.02	0.9	Oak	2008	S-17	Oak			III-3	
Xindi	Dongxin	2	5	1.6	Masson pine	2008	S-5	Masson pine			III-3	
Xindi	Dongxin	2	5.01	0.6	Oak	2008	S-17	Oak			III-3	
Xindi	Dongxin	2	6.1	2.4	Masson pine	2008	S-5	Masson pine			III-3	
Xindi	Dongxin	2	6.11	0.6	Oak	2008	S-17	Oak			III-3	
Xindi	Dongxin	2	6.12	8	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dongxin	2	6.2	4	Eucalyptus	2008	S-2	Eucalyptus	2013		III-3	sprout after harvest
Xindi	Dongxin	2	7.1	1.9	Masson pine	2008	S-4	Masson pine			III-3	

Xindi	Dongxin	2	7.2	0.4	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dongxin	2	8.2	2.3	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dongxin	2	8.21	0.5	Oak	2008	S-17	Oak			III-3	
Xindi	Dongxin	2	9.1	2.8	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dongxin	2	4.01.1	0.6	Oak	2008	S-17	Oak			III-3	
Xindi	Dongxin	2	8.10.2	0.5	Masson pine	2008	S-4	Masson pine			III-3	
Xindi	Dongxin	3	6.1.2	0.7	Eucalyptus	2013	S-2		2013		III-3	new included
Xindi	Dongxin	3	7.1.1	3	Eucalyptus	2013	S-2		2013		III-3	new included
Xindi	Dongxin	3	7.1.2	2.9	Masson pine	2013	S-4		2013		III-3	new included
Xindi	Dongxin	3	8.1.1	0.5	Eucalyptus	2013	S-2		2013		III-3	new included
Xindi	Dongxin	3	8.1.2	0.8	Masson pine	2013	S-4		2013		III-3	new included
Xindi	Dongxin	3	8.1.3	2.1	Masson pine	2013	S-4		2013		III-3	new included
Xindi	Dongxin	3	8.10.3	10.5	Eucalyptus	2008	S-2	Masson pine	2012		III-3	replanted with Eucalyptus
Xindi	Dongxin	3	8.10.4	7.8	Masson pine	2008	S-4	Masson pine		C-34	III-3	
Xindi	Dongxin	5	8.1	8.2	Masson pine	2008	S-5	Masson pine			III-3	
Xindi	Dongxin	5	8.11	5.4	Oak	2008	S-18	Oak		C-51	III-3	
Xindi	Xunchun	4	2	8.6	Masson pine	2011	S-6	Masson pine	2015		III-2	replanted after drought
Xindi	Xunchun	4	2.01	1.5	Schima	2011	S-15	Schima	2015		III-4	replanted after drought
Xindi	Xunchun	4	2.02	3	Oak	2011	S-17	Schima	2012	C-52	III-4	replanted with Oak
Xindi	Xunchun	4	5.01	3	Oak	2011	S-17	Schima	2012	C-47	III-4	replanted with Oak
Xindi	Xunchun	4	6	1.5	Masson pine	2007	S-6	Masson pine	2015		III-2	replanted after drought
Xindi	Xunchun	4	6.01	0.5	Oak	2009	S-17	Oak			III-4	
Xindi	Xunchun	4	5.00.1	12.3	Masson pine	2011	S-6	Masson pine	2015		III-2	replanted after drought
Xindi	Xunchun	4	5.02.1	2.1	Oak	2009	S-18	Oak	2015	C-49	III-4	sprout after harvest

Xindi	Xunchun	5	1	1.9	Eucalyptus	2007	S-1	Masson pine	2015		III-2	replanted after drought
Xindi	Xunchun	5	1.1	0.7	Masson pine	2007	S-6	Masson pine	2015		III-2	replanted after drought
Huanjiang County												
Chuanshan	Hedun	1	12.1	5.8	Eucalyptus	2014	S-1		2014		IV-6	new included
Chuanshan	Hedun	1	12.2	1.4	Eucalyptus	2014	S-1		2014		IV-6	new included
Chuanshan	Hedun	1	12.1.1	13.6	Masson pine	2011	S-7	Masson pine		H-56	IV-6	
Chuanshan	Hedun	1	12.1.2	0.8	Masson pine	2011	S-7	Masson pine			IV-6	
Chuanshan	Hedun	1	12.1.3	4.9	Eucalyptus	2011	S-1	Masson pine	2015		IV-6	failed in initial planting and replanted with Eucalyptus
Chuanshan	Hedun	1	12.1.4	0.2	Masson pine	2011	S-7	Masson pine			IV-6	
Chuanshan	Hedun	1	3.1	0.7	Eucalyptus	2013	S-1		2013		IV-6	new included
Chuanshan	Hedun	1	3.2	0.5	Masson pine	2013	S-7		2013		IV-6	new included
Chuanshan	Hedun	2	8.1	0.4	Eucalyptus	2013	S-1		2013		IV-6	new included
Chuanshan	Hedun	2	8.2	0.5	Masson pine	2013	S-7		2013		IV-6	new included
Chuanshan	Hedun	6	3.5	30.4	Eucalyptus	2010	S-2	Eucalyptus		H-45	IV-5	
Chuanshan	Hedun	6	3.1	0.3	Eucalyptus	2010	S-3	Eucalyptus	2017	H-46	IV-5	sprout after harvest
Chuanshan	Hedun	6	3.2	4.8	Eucalyptus	2010	S-2	Eucalyptus			IV-5	
Chuanshan	Hedun	6	3.6	16.8	Eucalyptus	2010	S-2	Eucalyptus		H-49	IV-5	
Chuanshan	Hedun	6	3.3	2.2	Chinese fir	2010	S-13	Eucalyptus	2016		IV-5	replanted with Chinese fir after harvest
Chuanshan	Hedun	6	3.4	5.2	Eucalyptus	2010	S-2	Eucalyptus			IV-5	
Chuanshan	Hedun	12	7.1.1	19.1	Liquidambar	2006	S-16	Liquidambar		H-41, H-42	IV-1	
Chuanshan	Hedun	12	7.1.2	13.7	Liquidambar+ Masson pine	2006	S-19	Liquidambar+ Masson pine		H-43	IV-1	
Chuanshan	Hedun	12	7.2	0.8	Liquidambar+ Masson pine	2006	S-19	Liquidambar+ Masson pine			IV-1	
Chuanshan	Hedun	18	10.1.1	2.9	Eucalyptus	2006	S-2	Eucalyptus			IV-1	

Chuanshan	Hedun	18	10.1.2	2	Eucalyptus	2006	S-2	Eucalyptus			IV-1	
Chuanshan	Hedun	18	10.1.3	6.6	Eucalyptus	2006	S-2	Eucalyptus			IV-1	
Chuanshan	Leyi	5	4.1.1	0.6	Liquidambar+ Masson pine	2006	S-19	Liquidambar+ Masson pine			VII-1	
Chuanshan	Leyi	5	4.1.2	0.3	Liquidambar+ Masson pine	2006	S-19	Eucalyptus	2012		VII-1	failed initial and replanted with Masson pine and Liquidambar
Chuanshan	Leyi	5	4.1.3	10.6	Liquidambar+ Masson pine	2006	S-19	Liquidambar+ Masson pine		H-50, H-51	VII-1	
Chuanshan	Leyi	5	4.1.4	15.1	Masson pine	2008	S-9	Masson pine		H-52	VII-3	
Chuanshan	Leyi	5	4.1.5	6.3	Masson pine	2008	S-8	Masson pine		H-55	VII-3	
Chuanshan	Leyi	5	4.1.6	1.5	Liquidambar	2008	S-16	Liquidambar			VII-3	
Chuanshan	Leyi	6	4.1.1	3	Liquidambar	2008	S-16	Liquidambar			VII-3	
Chuanshan	Leyi	6	4.1.2	9.9	Masson pine	2008	S-9	Masson pine			VII-3	
Longyan	Chaoge	21	6.1	25.5	Masson pine	2008	S-7	Masson pine			V-3	
Longyan	Chaoge	21	6.2	16.1	Masson pine	2008	S-10	Masson pine		H-14	V-3	
Longyan	Chaoge	23	12.0.1	39.7	Masson pine	2008	S-8	Masson pine		H-13	V-3	
Longyan	Chaoge	23	12.0.2	7.2	Liquidambar+ Masson pine	2008	S-19	Liquidambar+ Masson pine			V-3	
Longyan	Chaoge	23	13	18.6	Masson pine	2008	S-7	Masson pine		H-12	V-3	
Longyan	Chaoge	24	22.1	11.4	Masson pine	2008	S-9	Masson pine			V-3	
Longyan	Chaoge	24	22.2	6.5	Masson pine	2008	S-9	Masson pine			V-3	
Longyan	Chaoge	24	22.3	21	Chinese fir	2014	S-11		2014		V-3	new included
Longyan	Chaoge	28	25.1.1	0.4	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Chaoge	28	25.1.2	23.2	Masson pine	2008	S-8	Masson pine		H-62	VI-3	
Longyan	Chaoge	28	25.1.3	0.1	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Chaoge	28	25.1.4	3.4	Chinese fir	2008	S-12	Chinese fir			VI-3	

Longyan	Chaoge	29	27.1.1	1.5	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Chaoge	29	27.1.2	11.9	Chinese fir+Masson pine	2008	S-21	Chinese fir+Masson pine			VI-3	
Longyan	Chaoge	29	27.2.1	9.1	Chinese fir	2008	S-12	Chinese fir		H-19	V-3	
Longyan	Chaoge	29	27.2.2	2	Masson pine	2008	S-7	Masson pine			V-3	
Longyan	Chaoge	30	15.1	18.1	Masson pine	2008	S-7	Masson pine			V-3	
Longyan	Chaoge	30	15.2.1	8.4	Masson pine	2008	S-7	Masson pine			V-3	
Longyan	Chaoge	30	15.2.2	16	Chinese fir	2008	S-12	Chinese fir		H-18	V-3	
Longyan	Chaoge	30	15.2.3	11.5	Chinese fir	2008	S-12	Chinese fir			V-3	
Longyan	Chaoge	30	15.2.4	0.8	Chinese fir	2008	S-11	Chinese fir			V-3	
Longyan	Chenghuang	11	3.2.1	27.8	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Chenghuang	11	3.2.2	7.1	Liquidambar	2008	S-16	Liquidambar		H-11	VI-3	
Longyan	Dake	5	7.1.1	3.2	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Dake	5	7.1.2	14.2	Chinese fir+Masson pine	2008	S-21	Chinese fir+Masson pine		H-20	VI-3	
Longyan	Dake	6	8.1	6.8	Masson pine	2008	S-8	Masson pine			VI-3	
Longyan	Dake	6	8.2	24.9	Chinese fir+Masson pine	2008	S-21	Chinese fir+Masson pine		H-23, H-25	VI-3	
Longyan	Dake	7	6.1.1	16.4	Masson pine	2011	S-10	Masson pine		H-21	VI-6	
Longyan	Dake	7	6.1.2	2.6	Masson pine	2008	S-7	Masson pine		H-22	VI-3	
Longyan	Dake	7	6.1.3	7	Masson pine	2011	S-7	Masson pine			VI-6	
Longyan	Dake	7	6.1.4	0.5	Masson pine	2008	S-8	Masson pine			VI-3	
Longyan	Dake	7	6.1.5	7.8	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Dake	7	6.2.1	2.4	Masson pine	2009	S-9	Masson pine			VI-4	

Longyan	Dake	7	6.2.10	1.4	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Dake	7	6.2.2	1.5	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	7	6.2.3	12.9	Masson pine	2009	S-9	Masson pine		H-24	VI-4	
Longyan	Dake	7	6.2.4	0.3	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	7	6.2.5	4.8	Masson pine	2011	S-7	Masson pine			VI-6	
Longyan	Dake	7	6.2.6	0.3	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	7	6.2.7	0.5	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	7	6.2.8	0.7	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Dake	7	6.2.9	1.9	Masson pine	2011	S-7	Masson pine			VI-6	
Longyan	Dake	8	8.1.1	5.2	Masson pine	2009	S-8	Masson pine			VI-4	
Longyan	Dake	8	8.1.7	15.5	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Dake	8	8.1.2	4.3	Chinese fir	2008	S-12	Chinese fir		H-26	VI-3	
Longyan	Dake	8	8.1.3	7.5	Masson pine	2009	S-9	Masson pine			VI-4	
Longyan	Dake	8	8.1.4	12.8	Chinese fir	2011	S-11	Chinese fir		H-27, H-29	VI-3	
Longyan	Dake	8	8.1.5	1.3	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	8	8.1.6	1.4	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	8	8.2.1	7	Masson pine	2009	S-8	Masson pine			VI-4	
Longyan	Dake	8	8.2.2	2.6	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Dake	8	8.2.3	1.3	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	8	8.2.8	1.3	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Dake	8	8.2.4	9.3	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Dake	8	8.2.5	10.5	Chinese fir	2008	S-11	Chinese fir			VI-3	
Longyan	Dake	8	8.2.6	3.3	Chinese fir	2011	S-11	Chinese fir			VI-6	
Longyan	Dake	18	6.1.1	3	Chinese fir	2007	S-11	Chinese fir		H-30	VI-2	

Longyan	Dake	18	6.1.2	4.4	Chinese fir	2011	S-13	Masson pine	2017	H-32,H-60	VI-6	failed initial and replanted with Chinese fir
Longyan	Dake	18	6.1.6	3.7	Chinese fir	2007	S-11	Chinese fir			VI-2	
Longyan	Dake	18	6.1.7	5.4	Chinese fir	2007	S-11	Chinese fir			VI-2	
Longyan	Dake	18	6.1.3	2.3	Chinese fir	2007	S-12	Chinese fir		H-35	VI-2	
Longyan	Dake	18	6.1.4	1.3	Liquidambar	2007	S-16	Liquidambar			VI-2	
Longyan	Dake	18	6.1.5	2.1	Masson pine	2007	S-10	Masson pine			VI-2	
Longyan	Huangzhong	8	13.1	6.6	Chinese fir	2007	S-12	Chinese fir			VI-2	
Longyan	Huangzhong	10	18.1.1	6.9	Masson pine	2008	S-7	Masson pine			VI-3	
Longyan	Huangzhong	10	18.1.2	12.1	Liquidambar+ Masson pine	2008	S-19	Liquidambar+ Masson pine		H-7	VI-3	
Longyan	Huangzhong	10	25.1	3.6	Chinese fir	2013	S-11		2013		V-3	new included
Longyan	Huangzhong	10	25.1.1	2.6	Chinese fir	2008	S-12	Chinese fir			V-3	
Longyan	Huangzhong	10	25.1.2	24.5	Liquidambar+ Masson pine	2008	S-19	Liquidambar+ Masson pine		H-8	V-3	
Longyan	Huangzhong	10	25.1.3	0.8	Liquidambar	2008	S-16	Liquidambar			V-3	
Longyan	Huangzhong	11	9.1.1	10.8	Chinese fir	2006	S-12	Chinese fir		H-9	VI-1	
Longyan	Huangzhong	11	9.1.2	6	Chinese fir	2006	S-12	Chinese fir			VI-1	
Longyan	Huangzhong	15	1.1	10.4	Masson pine	2007	S-9	Masson pine			VI-2	
Longyan	Huangzhong	16	11.1.1	25.8	Masson pine	2008	S-8	Masson pine		H-54	VI-3	
Longyan	Huangzhong	16	11.1.2	1.1	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Huangzhong	16	11.1.3	1.1	Chinese fir	2008	S-12	Chinese fir			VI-3	
Longyan	Huangzhong	16	11.1.4	2.8	Masson pine	2008	S-8	Masson pine			VI-3	
Longyan	Huangzhong	16	11.2.4	2.1	Chinese fir	2015	S-11		2015		V-3	new included
Longyan	Huangzhong	16	11.2.3	6.2	Chinese fir	2013	S-11		2013		V-3	new included
Longyan	Huangzhong	16	11.2.1	13	Masson pine	2008	S-9	Masson pine		H-10	V-3	

Longyan	Huangzhong	16	11.2.2	2.3	Liquidambar	2008	S-16	Liquidambar			V-3	
Longyan	Jiuwei	1	2.1.1	20.3	Masson pine	2008	S-9	Masson pine		H-15	VI-3	
Longyan	Jiuwei	1	2.1.2	0.2	Masson pine	2008	S-8	Masson pine			VI-3	
Longyan	Jiuwei	1	2.1.3	8.2	Masson pine	2008	S-8	Masson pine			VI-3	
Longyan	Jiuwei	1	5.1.1	27.8	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Jiuwei	1	5.1.2	11.1	Masson pine	2011	S-7	Masson pine			VI-6	
Longyan	Jiuwei	1	5.1.3	1.6	Masson pine	2008	S-9	Masson pine			VI-3	
Longyan	Longyan	1	2.1	5	Liquidambar	2007	S-16	Liquidambar			VI-2	
Longyan	Longyan	2	8.1.1	15.7	Masson pine	2007	S-9	Masson pine			VI-2	
Longyan	Longyan	2	8.1.2	5.5	Liquidambar	2007	S-16	Liquidambar		H-33	VI-2	
Minglun	Baixiang	9	4.1	7.3	Masson pine	2010	S-10	Masson pine	2015		IV-5	replanted after drought
Minglun	Baixiang	9	4.2.1	11.5	Eucalyptus	2008	S-2	Eucalyptus		H-47	IV-3	
Minglun	Baixiang	9	4.2.2	6.1	Eucalyptus	2010	S-3	Eucalyptus	2018		IV-5	sprout after harvest
Minglun	Baixiang	9	4.3	1.8	Eucalyptus	2010	S-3	Eucalyptus	2018		IV-5	sprout after harvest
Minglun	Cuishan	1	2.1.1	9.9	Masson pine	2008	S-9	Masson pine			VI-3	
Minglun	Cuishan	1	2.1.2	4.9	Liquidambar	2008	S-16	Liquidambar			VI-3	
Minglun	Cuishan	1	2.2.1	3.3	Masson pine	2008	S-8	Masson pine			IV-3	
Minglun	Cuishan	1	2.2.2	6.5	Liquidambar	2008	S-16	Liquidambar			IV-3	
Minglun	Cuishan	1	2.2.3	19	Masson pine	2008	S-9	Masson pine		H-61	IV-3	
Minglun	Cuishan	1	2.4	6.5	Eucalyptus	2008	S-1	Eucalyptus	2015		VI-3	replanted after drought
Minglun	Cuishan	1	2.5.1	7.3	Masson pine	2008	S-8	Masson pine			VI-3	
Minglun	Cuishan	1	2.5.2	2.8	Liquidambar	2008	S-16	Liquidambar			VI-3	
Minglun	Cuishan	1	2.5.3	5.9	Masson pine	2008	S-9	Masson pine			VI-3	
Minglun	Cuishan	1	2.6	3.4	Liquidambar+ Masson pine	2008	S-19	Liquidambar	2012	H-16	IV-3	gap filling with Masson pine

Minglun	Cuishan	1	2.8.1	8.4	Masson pine	2008	S-9	Masson pine			IV-3	
Minglun	Cuishan	1	2.8.2	5.3	Liquidambar	2008	S-16	Liquidambar			IV-3	
Minglun	Cuishan	2	2.1.1	5	Liquidambar	2008	S-16	Liquidambar			VI-3	
Minglun	Cuishan	2	2.1.2	6.6	Masson pine	2008	S-9	Masson pine		H-17	VI-3	
Minglun	Cuishan	3	2.0.1	13.5	Masson pine	2011	S-7	Masson pine			VI-4	
Minglun	Cuishan	3	2.0.2	1.1	Masson pine	2009	S-7	Masson pine		H-59	VI-4	
Minglun	Cuishan	4	5.1	3.9	Eucalyptus	2008	S-1	Eucalyptus	2015		VI-3	replanted after drought
Minglun	Cuishan	5	7.1.1	0.5	Eucalyptus	2008	S-2	Eucalyptus			IV-3	
Minglun	Cuishan	5	7.1.2	4.9	Eucalyptus	2008	S-2	Eucalyptus		H-28	IV-3	
Minglun	Cuishan	5	7.2	30.3	Eucalyptus	2008	S-1	Eucalyptus		H-31	IV-3	
Minglun	Minglun	23	13.1	39.5	Eucalyptus	2010	S-3	Eucalyptus	2018	H-44	IV-5	sprout after harvest
Minglun	Minglun	23	13.2.1	13.7	Masson pine	2010	S-10	Masson pine	2015	H-48	IV-5	replanted after drought
Minglun	Minglun	23	13.2.2	6	Eucalyptus	2010	S-3	Eucalyptus	2018		IV-5	sprout after harvest
Xunle	Beishan	9	6.1.1	12.1	Eucalyptus	2008	S-2	Eucalyptus	2012		IV-3	sprout after harvest
Xunle	Beishan	9	6.1.2	11.3	Eucalyptus	2008	S-2	Eucalyptus	2012		IV-3	sprout after harvest
Xunle	Beishan	11	14.1.1	24.2	Eucalyptus	2008	S-1	Eucalyptus	2015	H-38	IV-3	sprout after harvest
Xunle	Beishan	11	14.1.2	7	Eucalyptus	2011	S-1	Eucalyptus	2015		IV-6	sprout after harvest
Xunle	Beishan	20	10.1	17.9	Masson pine	2011	S-7	Masson pine		H-39	IV-6	
Xunle	Beishan	20	10.2.1	2.5	Eucalyptus	2006	S-2	Eucalyptus	2012		IV-1	sprout after harvest
Xunle	Beishan	20	10.2.2	12.6	Eucalyptus	2006	S-2	Eucalyptus	2012		IV-1	sprout after harvest
Xunle	Beishan	20	10.3.1	13.1	Eucalyptus	2008	S-2	Eucalyptus	2012	H-37	IV-3	sprout after harvest
Xunle	Beishan	20	10.3.2	0.3	Eucalyptus	2008	S-2	Eucalyptus	2012		IV-3	sprout after harvest
Xunle	Beishan	23	16.1	1.5	Eucalyptus	2006	S-2	Eucalyptus	2013	H-40	IV-1	sprout after harvest
Xunle	Beishan	31	19.1	5.4	Eucalyptus	2006	S-2	Eucalyptus	2013		IV-1	sprout after harvest

Xunle	Beishan	31	6.1	3.7	Eucalyptus	2008	S-2	Eucalyptus	2013		IV-3	sprout after harvest
Xunle	Beishan	31	6.2	2.5	Eucalyptus	2008	S-2	Eucalyptus			IV-3	
Xunle	Shangang	11	4.1	0.8	Masson pine	2008	S-10	Masson pine			VI-3	
Xunle	Shangang	24	3.1	9.9	Masson pine	2008	S-10	Masson pine			VI-3	
Xunle	Shangang	25	4.1	20.7	Masson pine	2008	S-10	Masson pine			VI-3	
Xunle	Shangang	25	4.2	41.4	Masson pine	2008	S-10	Masson pine		H-1	VI-3	
Xunle	Shangang	25	4.3.1	23.3	Masson pine	2008	S-10	Masson pine		H-2	VI-3	
Xunle	Shangang	25	4.3.2	3.4	Masson pine	2008	S-10	Liquidambar	2017	H-3	VI-3	failed in initial planting and replanted with Masson pine
Xunle	Shangang	25	5	5.4	Liquidambar+ Masson pine	2008	S-20	Liquidambar+ Masson pine		H-4	VI-3	
Xunle	Shangang	26	7.1.1	17.1	Masson pine	2008	S-10	Masson pine		H-5	VI-3	
Xunle	Shangang	26	7.1.2	9	Liquidambar	2008	S-16	Liquidambar			VI-3	
Xunle	Shangang	26	7.2.1	10.1	Masson pine	2008	S-10	Masson pine			VI-3	
Xunle	Shangang	26	7.2.2	3.5	Liquidambar	2008	S-16	Liquidambar			VI-3	
Xunle	Shangang	26	7.2.3	1	Chinese fir	2008	S-12	Chinese fir			VI-3	
Xunle	Shangang	26	7.2.4	0.4	Masson pine	2008	S-10	Masson pine			VI-3	
Xunle	Shangang	26	7.2.5	7.5	Liquidambar+ Masson pine	2008	S-19	Liquidambar+ Masson pine			VI-3	
Xunle	Shangang	26	7.3.1	21	Liquidambar+ Masson pine	2008	S-20	Liquidambar+ Masson pine		H-57, H-58	VI-3	
Xunle	Shangang	26	7.3.2	0.7	Chinese fir	2008	S-12	Chinese fir			VI-3	
Xunle	Shangang	27	6.1	5.1	Liquidambar+ Masson pine	2008	S-19	Liquidambar+ Masson pine			VI-3	
Xunle	Shangang	31	4.1	5.9	Chinese fir	2008	S-12	Chinese fir		H-6	VI-3	
Xunle	Shangang	31	5.1	0.7	Liquidambar+ Masson pine	2008	S-19	Liquidambar+ Masson pine			VI-3	
Xunle	Taiping	6	7.6.1	6.2	Eucalyptus	2008	S-2	Eucalyptus			IV-3	

Xunle	Taiping	6	7.6.4	11.3	Eucalyptus	2008	S-2	Eucalyptus			IV-3	
Xunle	Taiping	6	7.6.2	1.3	Masson pine	2008	S-8	Masson pine			IV-3	
Xunle	Taiping	6	7.6.3	8.1	Eucalyptus	2008	S-2	Eucalyptus		H-34	IV-3	
Xunle	Taiping	7	11.1	22.5	Eucalyptus	2008	S-2	Eucalyptus		H-36, H-53	IV-3	

Annex II Field record form template for sampling plot

County ___Township/town ____Village ___ Compartment ID____Subcompartment ID _____,
location ____ stratum ID____sample plot ID ___ planting time:
Geo-coordinate of sample plot: Longitude: Latitude
No. of landform map: _____Plantation species:

Serial No.	Species	Height (m)	DBH (cm)	Serial No.	Species	Height (m)	DBH (cm)	Serial No.	Species	Height (m)	DBH (cm)
1				51				101			
2				52				102			
3				53				103			
4				54				104			
5				55				105			
6				56				106			
7				57				107			
8				58				108			
9				59				109			
10				60				110			
11				61				111			
12				62				112			
13				63				113			
14				64				114			
15				65				115			
16				66				116			
17				67				117			
18				68				118			
19				69				119			
20				70				120			
21				71				121			
22				72				122			
23				73				123			
24				74				124			
25				75				125			
26				76				126			
27				77				127			
28				78				128			

29				79				129			
30				80				130			
31				81				131			
32				82				132			
33				83				133			
34				84				134			
35				85				135			
36				86				136			
37				87				137			
38				88				138			
39				89				139			
40				90				140			
41				91				141			
42				92				142			
43				93				143			
44				94				144			
45				95				145			
46				96				146			
47				97				147			
48				98				148			
49				99				149			
50				100				150			

Name of measurement: (signature)

Date of measurement:

- - - - -

Document information

Version	*Date*	*Description*
06.0	7 June 2017	Revision to: • Ensure consistency with version 01.0 of the "CDM project standard for project activities" (CDM-EB93-A04-STAN); • Make editorial improvements.
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from *F-CDM-MR* to *CDM-MR-FORM*; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB 70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01.0	28 May 2010	EB 54, Annex 34. Initial adoption.

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