

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 1

**CLEAN DEVELOPMENT MECHANISM  
SMALL-SCALE PROGRAM ACTIVITY DESIGN DOCUMENT FORM (CDM-SSC-CPA-DD)  
Version 01**

**CONTENTS**

- A. General description of CDM programme activity (CPA)
- B. Eligibility of CPA and Estimation of Emission Reductions
- C. Environmental Analysis
- D. Stakeholder comments

**Annexes**

Annex 1: Contact information on entity/individual responsible for the CPA

Annex 2: Information regarding public funding

Annex 3: Baseline information

Annex 4: Monitoring plan

**NOTE:**

- (i) This form is for submission of CPAs that apply a small scale approved methodology using the provision of the proposed small scale CDM PoA.
- (ii) The coordinating/managing entity shall prepare a CDM Small Scale Programme Activity Design Document (CDM-SSC-CPA-DD)<sup>1,2</sup> that is specified to the proposed PoA by using the provisions stated in the SSC PoA DD. At the time of requesting registration the SSC PoA DD must be accompanied by a CDM-SSC CPA-DD form that has been specified for the proposed SSC PoA, as well as by one completed CDM-SSC CPA-DD (using a real case). After the first CPA, every CPA that is added over time to the SSC PoA must submit a completed CDM-SSC CPA-DD.

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<sup>1</sup> The latest version of the template form CDM-CPA-DD is available on the UNFCCC CDM web site in the reference/document section.

<sup>2</sup> At the time of requesting validation/registration, the coordinating managing entity is required to submit a completed CDM-POA-DD, the PoA specific CDM-CPA-DD, as well as one of such CDM-CPA-DD completed (using a real case).

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 2

**SECTION A. General description of small scale CDM programme activity (CPA)**

A.1. Title of the small-scale CPA:

**XX** Rural Efficient Biomass Cooking Stoves Project-CPA No. **XX(XX)**

Version **XX**

Data: **XX/XX/XXXX**

**A.2. Description of the small-scale CPA:**

The small-scale CPA (SSC-CPA) involves the installation of **XX**, one kind of efficient biomass cooking stoves. **XX** stoves will be installed in the CPA and result in GHGs emission reductions of **XX** tCO<sub>2</sub>e from thermal energy saving **XX** GWh annually.

The current cooking practice of target household in **XX** is the use of the “**XX**” cooking stoves (see figure 1), popularly known as traditional stoves. The combustion of the non-renewable fraction of woody biomass of cooking fuel generates a variety of gases including Carbon Dioxide (CO<sub>2</sub>), one of the Greenhouse Gases (GHG) covered under the Kyoto Protocol (KP). The replacement of traditional stoves by Tibet stoves improves heat transfer, hence reducing the total amount of fuel required for cooking and reducing the amount of GHG emitted into the atmosphere.

**XX**  
Figure 1 “**XX**” cooking stove

Emission Reductions (ERs) are calculated following the methodology AMS.II.G version 04 on the basis of the mass of non-renewable woody biomass saved by the Tibet stoves.

The proposed SSC-CPA is a voluntary initiative taken by the coordinating/managing entity (“CME”) of the PoA, Sichuan Wuhai Environmental Protection & Bioengineering Co., Ltd. (hereafter referred to as “Wuhai Company”), and implemented on a voluntary basis by Sichuan Rural Energy Office (SREO).

The SSC-CPA will have maximum energy savings of less than or equal to 180 GWhr/year, thus meeting the small-scale eligibility criteria. It will be developed and implemented by SREO which have signed a contractual agreement with the CME to participate in the PoA. This agreement guides the transfer of the emission reduction rights to the CME.

***Contribution of the proposed SSC-CPA to sustainable development***

Environmental benefits:

- *Air quality:* Children and mothers will be exposed to fewer air pollutants through reduced emission of not only CO<sub>2</sub>, but also carbon monoxide and particulate matter. Air pollution from cooking with solid fuel is a key risk factor for childhood pneumonia as well as many other respiratory diseases and cancer.
- *Biodiversity:* will be improved as the programme reduces pressure on remaining forest reserves in **XX** County.

Social and Economic benefits:

- *Employment:* The programme will give rise to employment opportunities for new efficient cooking

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 3

- stove technicians, assistants, office staff and other related jobs in XX County.
- *Livelihood of the poor:* The circumstances of poor families will be improved since the Tibet stoves reduce time of collecting fuel. Reduction in wood consumption implies relief from drudgery and more opportunity for productive activity, arising from less time spent collecting fuel.
  - *Access to energy services:* The XX require less fuel, which in many areas can be a scarce resource; also, users have found Tibet stoves more convenient, shortening the cooking time.
  - *Human and institutional capacity:* is raised through business development component of the project. The CPA as part of its large-scale promotion and advertising has facilitated capacity development among the employed staff through trainings and workshops.

**A.3. Entity/individual responsible for the small-scale CPA:**

The entity responsible for the proposed SSC-CPA is XX, under the coordination of Wuhai Company, the coordinating/managing entity of the POA.

**A.4. Technical description of the small-scale CPA:**

XX high efficient stoves produced by the domestic manufacturer XX are installed in CPA NO. XX. The main technical parameters of the stove installed are listed in Table 1 below:

Table 1 main technical parameters of stove installed

|                       |    |
|-----------------------|----|
| Name                  | XX |
| Type                  | XX |
| Intensity of fire(kW) | XX |
| Heat efficiency (%)   | XX |
| Lifetime(years)       | XX |

The structure of stoves is shown in Figure 2 below:

XX

Figure 2 structure of stoves

**A.4.1. Identification of the small-scale CPA:**

**A.4.1.1. Host Party:**

People's Republic of China

**A.4.1.2. Geographic reference or other means of identification allowing the unique identification of the small-scale CPA (maximum one page):**

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 4

The XX households included in CPA NO. XX are part of the program. The limit of CPA NO. XX is Yuexi County, which covers the geographical coordinates of XX° XX' N~XX° XX' N and XX° XX' E~XX° XX' E.

The villages covered in the CPA are as follows:

XX  
XX  
XX

The contact information of SREO responsible for CPA NO. XX:

Contact person Yumin Song

Telephone 86 28 85534729

Email [str575885@sina.com](mailto:str575885@sina.com)

Address NO.5, Nijiaqiao Road, Chengdu City, Sichuan Province, China

Zip code 610041

The following figure shows the location of the CPA.

XX

Figure3: The geographic boundary of the CPA

**A.4.2. Duration of the small-scale CPA:**

**A.4.2.1. Starting date of the small-scale CPA:**

XX, 20XX

**A.4.2.2. Expected operational lifetime of the small-scale CPA:**

10 years

**A.4.3. Choice of the crediting period and related information:**

**Fixed Crediting period**

**A.4.3.1. Starting date of the crediting period:**

XX, 20XX

**A.4.3.2. Length of the crediting period, first crediting period if the choice is renewable CP:**

10 years.

**A.4.4. Estimated amount of emission reductions over the chosen crediting period:**

XX tCO<sub>2e</sub> for a XX year crediting period.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 5

Table 2 Estimation of annual emission reductions of the CPA

| Year   | Estimation of annual emission reductions in tonnes of CO <sub>2</sub> e |
|--|---|
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| 20XX   | XX  |
| Total estimated reductions (tonnes of CO <sub>2</sub> e)             | XX  |
| Total number of crediting years                                      | 10  |
| Annual average of the estimated reductions over the crediting period | XX  |

**A.4.5. Public funding of the CPA:**

The SSC-CPA has not involved any public funding from other countries.

**A.4.6. Information to confirm that the proposed small-scale CPA is not a de-bundled component**

The CPA included under this PoA will be exempt from the de-bundling check as all types of the efficient cooking devices represent energy savings far less than 1% of the small scale threshold defined by the methodology AMS II.G. This is based on the clarification from EB 54, Annex 13, *Guidance for determining the occurrence of debundling under a Program of Activities (PoA)*: “ 10. If each of the independent subsystems/measures (e.g. biogas digester, solar home system) included in the CPA of a PoA is no greater than 1% of the small scale thresholds defined by the methodology applied (i.e. 15 KW installed capacity or 0.6 GWh energy savings or 0.6 ktCO<sub>2</sub>e annual emission reductions), then that CPA of PoA is exempted from performing de-bundling check i.e. considered as not being a de-bundled component of a large scale activity.”<sup>3</sup>

The small scale threshold, as defined by AMS II.G, is for a maximum thermal energy saving of 180 GWhr/year. The calculation in the table below shows that one XX stove don't exceed 1% of the SSC threshold, and that therefore the program is exempted from the de-bundling check.

Table 3 De-bundling exemption

| Parameter                | Unit       | Value |
|--------------------------|------------|-------|
| Biomass saved each stone | tones/year | XX    |

<sup>3</sup> EB 54 Report, Annex 13. Guidelines on assessment of debundling for SSC project activities (version 03), page 3

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 6

|                                 |            |       |
|---------------------------------|------------|-------|
| NCV biomass                     | TJ/tonne   | 0.015 |
| Energy conversion units         | TJ/GWh     | 3.6   |
| SSC Type II limit               | GWh/year   | 180   |
| Energy saved by each stove      | GWh/year   | XX    |
| Percentage of the Type II limit | Percentage | XX %  |

**A.4.7. Confirmation that small-scale CPA is neither registered as an individual CDM project activity or is part of another Registered PoA:**

In order to avoid double counting and to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA, the Sichuan Rural Energy Office (SERO) who is the superior administrator of the local rural energy office, in accordance with the eligibility criteria stipulated in section A.4.2.2 of the PoA-DD, has confirmed with a written statement that:

1. The CPA and all efficient stoves to be installed under the CPA have not been and will not be registered as a single CDM project activity nor as a CPA under another PoA.
2. The SREO and its local rural energy office of XX County are aware that the CPA will be subscribed to the only one PoA.

**SECTION B. Eligibility of small-scale CPA and Estimation of emissions reductions**

**B.1. Title and reference of the Registered PoA to which small-scale CPA is added:**

Sichuan Province Rural Efficient Biomass Cooking Stoves Programme Project  
Version 5.1  
Date 18/12/2012

**B.2. Justification of the why the small-scale CPA is eligible to be included in the Registered PoA :**

The SSC-CPA meets all the eligibility criteria for inclusion as outlined in Section A.4.2.2. of the SSC-PoA. This is demonstrated below:

|          |  |
|----------|--|
| <i>a</i> | <b>The SSC-CPA shall be located within the geographical boundary set in the PoA (Sichuan Province, China).</b>   |
|          | The geographical boundary of the proposed SSC-CPA is XX County included in Sichuan Province.   |
| <i>b</i> | <b>The SSC-CPA shall be clearly identified through unique identification of biomass fired cook stoves with serial number to avoid double counting of emission reductions. It shall be ensured that the CPA is not registered as another CDM project activity or included in another registered PoA.</b>  |
|          | According to the evidence from SREO, the CPA and all efficient stoves to be installed under the CPA have not been and will not be registered as a single CDM project activity nor as a CPA under another PoA. When each stove is distributed, a unique identification number together with the ID number will be recorded by project database that will ensure double counting of emission reduction is avoided. |
| <i>c</i> | <b>The SSC-CPA shall involve the installation of high efficient biomass fired cook stove or energy efficiency improvement of existing traditional stoves.</b>  |
|          | The high efficient biomass fired cook stoves XX stoves are installed in the CPA.   |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 7

|          |   |
|----------|---|
| <i>d</i> | <b>Start date of the SSC-CPA shall be determined as signed date of biomass fired cook stove purchase contract or stove core purchase contract. CPA start date shall be after the PoA Validation start date.</b>   |
|          | According to the sale contract of stoves, the start date of CPA is <b>XX 20 XX</b> , which is after the PoA validation start date April 3 <sup>rd</sup> 2012.   |
| <i>e</i> | <b>The SSC-CPA shall comply with applicability of the valid version of AMS-II.G: Energy Efficiency Measures in Thermal Applications of Non-renewable Biomass:</b> <ul style="list-style-type: none"> <li><b>The SSC-CPA comprises appliances involving the efficiency improvements in the thermal application of non-renewable biomass.</b></li> <li><b>For SSC-CPA, project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.</b></li> </ul> |
|          | High efficient stoves are installed in the CPA as the specification of stove manufacture and the household participating in the CPA have been using non-renewable biomass since 31 December 1989 according the evidence from <b>XX</b> . So the CPA follows the requirements of the valid version of AMS-II.G: <i>Energy Efficiency Measures in Thermal Applications of Non-renewable Biomass</i> .   |
| <i>f</i> | <b>If the size of each biomass fired cook stove is no greater than 5% of thermal energy savings of 180 GWh per year (9 GWh per year), the SSC-CPA is considered to be additional automatically.</b>   |
|          | According to the analysis of Section A.4.6, the energy saved of one <b>XX</b> stove is <b>XX</b> GWh/year, which is only <b>XX</b> % of the threshold 180 GWh/year. So the CPA is additional automatically.   |
| <i>g</i> | <b>For each SSC-CPA, local stakeholder consultations will be conducted;</b><br><b>Environmental impact analysis is carried out at the PoA level.</b>  |
|          | <p>A stakeholder consultation has been conducted by distribution of questionnaires from <b>XX / XX /20 XX</b> to <b>XX / XX /20 XX</b> and the questionnaires can be provided.</p> <p>The approval from Sichuan Environment Protection Department exempt from an environmental impact assessment at PoA level was issued on 20/03/2012. CPA No. <b>XX</b> is covered by the approval of province level in accordance with the law.</p>  |
| <i>h</i> | <b>No funding from Annex I parties is provided for the SSC-CPA.</b>   |
|          | The CPA don't involve the funding from Annex I parties, as can be proved by documentary evidence provided by SREO.  |
| <i>i</i> | <b>Target group of each SSC-CPA will be rural households using low efficiency stoves, and SREO is in charge of direct distribution and installation.</b>  |
|          | The " <b>XX</b> " stove is used by the households in the CPA and the <b>XX</b> are distributed directly by SREO charging for administration for the government subsidy.   |
| <i>j</i> | <b>Sampling plan of the SSC-CPA shall follow requirements specified in "Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities", "Guidelines for Sampling and Surveys for CDM Project Activities and Programme of Activities" and methodology AMS. II.G.</b>  |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking Stoves Programme Project**



**CDM – Executive Board**

page 8

|          |  |
|----------|--|
|          | A sampling will be conducted for project monitoring against the sampling requirements specified in the valid version of “ <i>Guidelines for Sampling and Surveys for CDM Project Activities and Programme of Activities</i> ”, “ <i>Guidelines for Sampling and Surveys for CDM Project Activities and Programme of Activities</i> ” and methodology AMS. II.G.  |
| <i>k</i> | <b>The SSC-CPA meets small-scale threshold criteria (thermal energy saving of 180 GWh per year) and remains within those thresholds throughout the crediting period of CPA.</b>  |
|          | According the analysis of Section A.4.6, the energy saved of one XX stove is XX GWh/year. So the energy saved of XX stoves installed in CPA No. XX is XX GWh/year ( $XX \times XX = XX$ GWh/year), which is less than 180 GWh/year.  |
| <i>l</i> | <b>Debundling check shall be carried out for the SSC-CPA as per “Guidelines on Assessment of Debundling for SSC Project Activities”:</b> <ul style="list-style-type: none"> <li><i>If each of the independent measures (biomass fired cook stove) included in the CPA of a PoA is no larger than 1% of the small scale thresholds defined by the methodology AMS II.G, which is 1.8 GWh per year, then that CPA of PoA is exempted from performing de-bundling check.</i></li> </ul> |
|          | According the analysis of Section A.4.6, the energy saved of one Tibet stove is XX GWh/year, which is only XX % of the threshold 180 GWh/year. So the CPA satisfies the de-bundling rules for PoA.   |

**B.3. Assessment and demonstration of additionality of the small-scale CPA , as per eligibility criteria listed in the Registered PoA:**

As per *Guidelines on the Demonstration of Additionality of Small-Scale Project Activities*,

Documentation of barriers is not required for the positive list of technologies and project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM thresholds (e.g. thermal energy saving of 180 GWh/year).

The positive list comprises of:

(c) Project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds;

The user of efficient stoves in each CPA will be households and each unit of each CPA will be no larger than 5% of the small-scale CDM thresholds.

According to the analysis of Section A.4.6, the energy saved of one XX stove is XX GWh/year, which is only XX % of the threshold 180 GWh/year. So the CPA is additional automatically.

**B.4. Description of the sources and gases included in the project boundary and proof that the small-scale CPA is located within the geographical boundary of the registered PoA.**

The project boundary is the geographical area where the XX stoves are installed and in use and this is restricted to the geographical boundary of Sichuan Province. The table below illustrates the GHG emissions sources included:

**Emissions sources included in or excluded from the project boundary**

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 9

| Source           |  | Gas              | Included | Justification/Explanation   |
|------------------|--|------------------|----------|---|
| Baseline         | Combustion of non-renewable biomass for cooking and heat | CO <sub>2</sub>  | Yes      | Major source of emissions   |
|                  |  | CH <sub>4</sub>  | No       | Minor source of emissions and limited data available. Exclusion is conservative assumption. |
|                  |  | N <sub>2</sub> O | No       | Minor source of emissions and limited data available. Exclusion is conservative assumption. |
| Project activity | Combustion of non-renewable biomass for cooking and heat | CO <sub>2</sub>  | Yes      | Major source of emissions   |
|                  |  | CH <sub>4</sub>  | No       | Minor source of emissions and limited data available.                                       |
|                  |  | N <sub>2</sub> O | No       | Minor source of emissions and limited data available  |

**B.5. Emission reductions:**

**B.5.1. Data and parameters that are available at validation:**

|   |   |
|---|---|
| <b>Data / Parameter:</b>  | $B_{\text{average use}}$  |
| Data unit:  | Tonnes per year (tonnes/year)   |
| Description:  | Annual average biomass consumption per appliance                        |
| Source of data used:  | Historical data   |
| Value applied:  | XX  |
| Justification of the choice of data or description of measurement methods and procedures actually applied : | The data derives from the historical data of XX County Forestry Bureau. |
| Any comment:  | -   |

|   |   |
|---|---|
| <b>Data / Parameter:</b>  | $\eta_{\text{old}}$   |
| Data unit:  | Fraction  |
| Description:  | Efficiency of the system being replaced, use 0.10 (i.e. 10%) as default value |
| Source of data used:  | AMS-II. G version 04  |
| Value applied:  | 0.1   |
| Justification of the choice of data or description of measurement methods and procedures actually applied : | The default value taken from the methodology AMS-II.G version 04.             |
| Any comment:  | -   |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 10

|   |   |
|---|---|
| <b>Data / Parameter:</b>  | <b>NCV<sub>biomass</sub></b>  |
| Data unit:  | TJ /tonne   |
| Description:  | Net calorific value of the non-renewable woody biomass that is substituted. |
| Source of data used:  | AMS-II. G version 04, page 2  |
| Value applied:  | 0.015   |
| Justification of the choice of data or description of measurement methods and procedures actually applied : | Default value as prescribed by methodology applied                          |
| Any comment:  | -   |

|   |  |
|---|--|
| <b>Data / Parameter:</b>  | <b>EF<sub>projected_fossilfuel</sub></b>   |
| Data unit:  | tCO <sub>2</sub> /TJ   |
| Description:  | Emission factor for the substitution of non-renewable biomass by similar consumers |
| Source of data used:  | AMS-II. G version 04, page 2   |
| Value applied:  | 81.6   |
| Justification of the choice of data or description of measurement methods and procedures actually applied : | Default value as prescribed by methodology applied                                 |
| Any comment:  | -  |

|   |  |
|---|--|
| <b>Data / Parameter:</b>  | <b>LAF</b>   |
| Data unit:  | Fraction   |
| Description:  | Net to gross Adjustment Factor                     |
| Source of data used:  | AMS-II. G version 04                               |
| Value applied:  | 0.95   |
| Justification of the choice of data or description of measurement methods and procedures actually applied : | Default value as prescribed by methodology applied |
| Any comment:  | -  |

**B.5.2. Ex-ante calculation of emission reductions:**

According to the AMS II.G, the emission reductions per CPA that can be claimed using the following equation:

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 11

$$ER_y = B_{y,savings} * f_{NRB,y} * NCV_{biomass} * EF_{projected\_fossilfuel} \quad (1)$$

Where:

|                              |   |
|------------------------------|---|
| $ER_y$                       | Emission reductions during the year y in tCO <sub>2</sub> e   |
| $B_{y,savings}$              | Quantity of woody biomass that is saved in tonnes   |
| $f_{NRB,y}$                  | Fraction of woody biomass saved by the project activity in year y that can be established as non-renewable biomass using survey methods or government data or default country specific fraction of non-renewable woody biomass ( $f_{NRB}$ ) values available on the CDM website. |
| $NCV_{biomass}$              | Net calorific value of the non-renewable woody biomass that is substituted (IPCC default for wood fuel, 0.015 TJ/tonne)   |
| $EF_{projected\_fossilfuel}$ | Emission factor for the substitution of non-renewable woody biomass by similar consumers. Use a value of 81.6 tCO <sub>2</sub> /TJ <sup>4</sup>   |

Two parameters can be determined at PoA level, including  $NCV_{biomass}$  and  $EF_{project\_fossilfuel}$ . Default values from methodology AMS II.G. are used, which are 0.015 TJ/tonne for  $NCV_{biomass}$  and 81.6 tCO<sub>2</sub>/TJ for  $EF_{project\_fossilfuel}$ .

Two parameters can be determined at PoA level, including  $NCV_{biomass}$  and  $EF_{project\_fossilfuel}$ . Default values from methodology AMS II.G. are used, which are 0.015 TJ/tonne for  $NCV_{biomass}$  and 81.6 tCO<sub>2</sub>/TJ for  $EF_{project\_fossilfuel}$ .

Parameters  $B_{y,savings}$  and  $f_{NRB,y}$  shall be determined at CPA level. The estimation approach is provided below:

**1)  $B_{y,savings}$  is estimated using option 2 of paragraph 6 in AMS-II.G version 04.**

Option 2:

$$B_{y,savings} = B_{old} \cdot \left(1 - \frac{\eta_{old}}{\eta_{new}}\right) \quad (2)$$

Where:

|              |   |
|--------------|---|
| $B_{old}$    | Quantity of woody biomass used in the absence of the project activity in tonnes   |
| $\eta_{old}$ | A default value of 0.10 is used, since the replaced system is a three stone fire, or a conventional system with no improved combustion air supply or flue gas ventilation system, i.e. without a grate or a chimney |

<sup>4</sup> This value represents the emission factor of the substitution fuels likely to be used by similar users, on a weighted average basis. It is assumed that the mix of present and future fuels used would consist of a solid fossil fuel (lowest in the ladder of fuel choices), a liquid fossil fuel (represents a progression over solid fuel in the ladder of fuel use choices) and a gaseous fuel (represents a progression over liquid fuel in the ladder of fuel use choices). Thus a 50% weight is assigned to coal as the alternative solid fossil fuel (96 tCO<sub>2</sub>/TJ) and a 25% weight is assigned to both liquid and gaseous fuels (71.5 tCO<sub>2</sub>/TJ for Kerosene and 63.0 tCO<sub>2</sub>/TJ for Liquefied Petroleum Gas (LPG)).

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 12

|              |   |
|--------------|---|
| $\eta_{new}$ | Efficiency of the system being deployed as part of the project activity (fraction), as determined using the Water Boiling Test (WBT) protocol. Use weighted average values if more than one type of system is being introduced by the project activity. |
|--------------|---|

$B_{old}$  is determined using option (a) of paragraph 7 in AMS-II.G version 04.

Option (a): Calculated as the product of the number of systems multiplied by the estimated average annual consumption of woody biomass per appliance (tonnes/year). This can be derived from historical data or a survey of local usage. Thus,  $B_{old}$  is calculated as below:

$$B_{old} = B_{average\_use} \times N \times (P_y - E_y) \quad (3)$$

Where:

|                    |   |
|--------------------|---|
| $B_{average\_use}$ | Average annual consumption of woody biomass per appliance in absence of the project activity (tonnes/year)      |
| $P_y$              | Proportion of high efficient stoves in operation during year y (determined by monitoring result).               |
| $E_y$              | Proportion of baseline traditional stoves continues to be used in households (determined by monitoring result). |
| $N$                | Number of efficient stoves employed   |

$B_{average\_use}$  will be derived from historical data.

$P_y$  and  $E_y$  will be determined by the sample survey as per the sample plan in the CPA-DD.

$N$  will be determined by the actual installation record.

$P_y$  is assumed as 100%,  $E_y$  is assumed as 0%.  $P_y$  and  $E_y$  will be determined by the monitoring results during verification. Thereby:

$$B_{old} = B_{average\_use} \times N \times (P_y - E_y) = B_{average\_use} \times N \times (100\% - 0\%) = B_{average\_use} \times N$$

$\eta_{old}$ , determined at PoA level, is the default value of 0.10 for the replaced system is a **XX** according to the AMS II.G.

According to the Test Report of **XX** stoves which is one kind of efficient cooking stoves of PoA supplied by manufacturer,  $\eta_{new}$  of **XX** stoves is **XX**, which will be determined by the monitoring results during verification.

Substituting in the values of  $B_{old}$ ,  $\eta_{old}$  and  $\eta_{new}$ , thereby:

$$B_{y,savings} = B_{old} \cdot \left(1 - \frac{\eta_{old}}{\eta_{new}}\right)$$

$f_{NRB,y}$  is the fraction of woody biomass saved by the project activity in year y that can be established as Non-Renewable Biomass (NRB). This is calculated with the following equation:

$$f_{NRB,y} = \frac{NRB}{NRB + DRB}$$

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 13

Where,

*DRB* Demonstrably Renewable Biomass, tonnes;

*NRB* Non-Renewable Biomass, tonnes.

Non-Renewable Biomass is the quantity of woody biomass used in the absence of the project activity ( $B_y$ ) minus the *DRB* component, and can be calculated using the following equation:

$$NRB = B_y - DRB$$

Calculating  $B_y$

$B_y$  can be calculated by multiplying the amount of fuel wood used per household per year by the total number of households in XX County. The statistics of XX County indicates that:

The total fuel wood use of one household in XX County is approximately XX - XX tonnes /year, to calculate  $B_y$ , the conservative value XX was used.

The total households of XX County are about XX - XX.

Using the above figures, the total fuel wood consumption for Yuexi County is XX - XX tonnes/year. That is:

$$XX \leq B_y \leq XX$$

Calculating *DRB*:

According to AMS-II. G, the woody biomass can be defined as “renewable” for the following condition is satisfied:

- I. The woody biomass is originating from land areas that are forests where:
  - (a) The land area remains a forest;
  - (b) Sustainable management practices are undertaken on these land areas to ensure, in particular, that the level of carbon stocks on these land areas does not systematically decrease over time (carbon stocks may temporarily decrease due to harvesting); and
  - (c) Any national or regional forestry and nature conservation regulations are complied with.

As per the documents from XX County Forestry Bureau, the woody biomass from the land areas where the land areas without carbon stock systematically decreasing over time remains a forest under sustainable management practices on the basis of the national *Forestry Protection Law* is estimated at XX tonnes /year calculated according to the statistics of forestry resource for the whole of XX County.

That is:

$$DRB = XX$$

Calculating *NRB*:

Non-renewable woody biomass is supported by the following indicators:

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 14

1. Trend showing increase in time spent or distance travelled by users (or fuel-wood suppliers) for gathering fuel wood or alternatively trend showing increase in transportation distances for the fuel wood transported into the project area.
2. Trends in the type of cooking fuel collected by users, suggesting scarcity of woody biomass.

**Supporting indicator 1**

A trend showing an increase in the time spent and distance traveled by users for gathering fuel wood was demonstrated on the basis of a sample of XX households distributed throughout XX County. The questionnaires answered by the households are shown in Table 4:

Table 4 questionnaire about time and distance spent for gathering fuel wood

|   |
|---|
| How about the perception of time and distance spent for gathering fuel wood during the last 10 years? |
| 1 MUCH faster and/or nearer   |
| 2 faster and/or nearer  |
| 3 no change in time and/or distance   |
| 4 later and/or farther  |
| 5 MUCH later and/or farther   |

Ninety-one percent of respondents (XX out of XX valid answers) noted moderate to severe increasing difficulty in access to fuel wood in terms of time spent and distance traveled during the last 10 years (answers 4 and 5).

**Supporting indicator 2**

A trend showing a decrease in the type of cooking fuel collected by users was demonstrated on the basis of a sample of XX households distributed throughout XX County. The questionnaires answered by the households are shown in Table 5:

Table 5 questionnaire about types of fuel wood collected

|  |
|--|
| How about the perception of cooking type collected during the last 10 years? |
| 1 more   |
| 2 no change  |
| 3 fewer  |

Ninety- percent of respondents (XX out of XX valid answers) noted that the type of cooking fuel collected become fewer during the last 10 years (answers 3).

The values of  $B_y$  and  $DRB$ , calculated above, were inserted into the equation ( $NRB = B_y - DRB$ ) to calculate the annual  $NRB$  for XX County.  $NRB$  ranges from XX-XX tonnes/year. That is:

$$XX \leq NRB \leq XX$$

Calculating  $f_{NRB,y}$ :

Using the above values in equation  $f_{NRB,y} = \frac{NRB}{NRB + DRB}$ , the calculated  $f_{NRB,y}$  ranges from XX to XX.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 15

That is:

$$XX \leq f_{NRB,y} \leq XX$$

The average value **XX** is chosen as  $f_{NRB,y}$ .

There is no local/national regulations resulting in the increasing trend of woody biomass scarcity.

### **Leakage Emissions**

Leakage related to the non-renewable woody biomass saved by the project is assessed by using option (c) of paragraph 22 in AMS.II.G.

Option (c):  $B_{old}$  is multiplied by a net to gross adjustment factor of 0.95 to account for leakages. No further survey is required.

All high efficient stoves employed in the CPA are newly produced, which can shown by the manufacturers. No equipment would be transferred from outside the boundary to the project activity. So leakage emissions associated with equipment transfer are not considered.

According to the analysis above, the emission reductions of the CPA is following:

#### **ER-Calculation for the first year of the CPA NO. **XX**:**

|   | Unit                   | value     |
|---|------------------------|-----------|
| Number of stoves operating  | N                      | <b>XX</b> |
| Average annual biomass consumption per stove  | tonnes/year            | <b>XX</b> |
| the quantity of woody biomass used in the absence of the project activity in tonnes ( $B_{old}$ ) | tonnes/year            | <b>XX</b> |
| Efficiency of the system being replaced( $\eta_{old}$ )   |                        | <b>XX</b> |
| Efficiency of the system being deployed( $\eta_{new}$ )   |                        | <b>XX</b> |
| Determination of the quantity of woody biomass that is saved in tonnes ( $B_{y,savings}$ )        | tonnes/year            | <b>XX</b> |
| Fraction of biomass saved (non-renewable) ( $f_{NRB,y}$ )   |                        | <b>XX</b> |
| Net calorific value o the non-renewable biomass ( $NCV_{biomass}$ )                               | TJ/tonnes              | <b>XX</b> |
| Emission factor of the substitution of non-renewable biomass ( $EF_{projected\_fossilfuel}$ )     | tCO <sub>2</sub> e /TJ | <b>XX</b> |
| Leakage adjustment factor ( $L_{adjustment\_factor}$ )  |                        | <b>XX</b> |
| Emission reductions during the year y ( $ER_y$ )  | tCO <sub>2</sub> e     | <b>XX</b> |

#### **B.5.3. Summary of the ex-ante estimation of emission reductions:**

| Year | Estimation of project activity emissions (tonnes of CO <sub>2</sub> e) | Estimation of baseline emissions (tonnes of CO <sub>2</sub> e) | Estimation of leakage (tonnes of CO <sub>2</sub> e) | Estimation of overall emission reductions (tonnes of CO <sub>2</sub> e) |
|------|--|--|---|---|
| 2013 | 0  | <b>XX</b>  | <b>XX</b>   | <b>XX</b>   |
| 2014 | 0  | <b>XX</b>  | <b>XX</b>   | <b>XX</b>   |
| 2015 | 0  | <b>XX</b>  | <b>XX</b>   | <b>XX</b>   |
| 2016 | 0  | <b>XX</b>  | <b>XX</b>   | <b>XX</b>   |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 16

|  |   |    |    |    |
|--|---|----|----|----|
| 2017   | 0 | XX | XX | XX |
| 2018   | 0 | XX | XX | XX |
| 2019   | 0 | XX | XX | XX |
| 2020   | 0 | XX | XX | XX |
| 2021   | 0 | XX | XX | XX |
| 2022   | 0 | XX | XX | XX |
| <b>Total</b><br>(tonnes of<br>CO <sub>2</sub> e) | 0 | XX | XX | XX |

**B.6. Application of the monitoring methodology and description of the monitoring plan:**

**B.6.1. Description of the monitoring plan:**

1. SREO keeps a record of the date and location of each XX stove installation made for each SSC CPA.
2. SREO places a stove serial number with a unique code in the stove as well as in its records, in addition to a record of the location of the stove.
3. SREO records are screened by the CME together with cross-checks on the installation records in order to confirm that the installation record is authentic and that no double-counting occurs.

**4. Monitoring system**

**Data collection procedures**

**(a) Data generation**

These ex-post parameters monitored are the following:

|   |  |
|---|--|
| <b>Data / Parameter:</b>  | <b>N</b>   |
| <b>Data unit:</b>   | Number   |
| <b>Description:</b>   | The total efficient stoves employed in the CPA   |
| <b>Source of data to be used:</b>   | Record of installation   |
| <b>Value of data applied for the purpose of calculating expected emission reductions in section B.5</b> | XX   |
| <b>Description of measurement methods and procedures to be applied:</b>                                 | The whole distribution of efficient cooking stoves or clay stoves retrofitted is recorded. In summary, the CPA operator will ensure that each SSC-CPA will maintain appropriate records due to the database documenting the following variables:<br>Date of delivery, Type of efficient cooking stoves and serial number or serial number of clay stoves retrofitted, Recipient's Name, address. |
| <b>QA/QC procedures to be applied:</b>  | The value of N in the CPA , depending on the stoves installed actually, will be measured once during the crediting period.<br>The CME supervises the activities of XX County Rural Energy Office, and  |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 17

|              |  |
|--------------|--|
|              | provides training, guidelines and templates to facilitate accurate testing and record keeping. |
| Any comment: | -  |

|  |  |
|--|--|
| <b>Data / Parameter:</b>   | $\eta_{new}$   |
| Data unit:   | Fraction   |
| Description:   | Efficiency of the system being deployed as part of the project activity  |
| Source of data to be used:   | As determined using the Water Boiling Test protocol  |
| Value of data applied for the purpose of calculating expected emission reductions in section B.5 | The efficiency of Tibet stoves.  |
| Description of measurement methods and procedures to be applied:                                 | Water Boiling Tests (WBTs) will be carried out for a sample of installed Tibet stoves in operation in line with the CPA Sampling Plan. |
| QA/QC procedures to be applied:  | QA/QC procedures are described in the CPA Sampling Plan.   |
| Any comment:   | -  |

|  |  |
|--|--|
| <b>Data / Parameter:</b>   | $P_v$  |
| Data unit:   | proportion   |
| Description:   | Proportion of efficient stoves in operation  |
| Source of data to be used:   | Survey method  |
| Value of data applied for the purpose of calculating expected emission reductions in section B.5 | 100%   |
| Description of measurement methods and procedures to be applied:                                 | The measurement method is household visit.   |
| QA/QC procedures to be applied:  | The sampling survey shall be conducted in accordance with the sampling plan described in the CPA-DD.<br>QA/QC procedures are described in the CPA Sampling Plan. |
| Any comment:   | -  |

|                          |   |
|--------------------------|---|
| <b>Data / Parameter:</b> | $E_v$   |
| Data unit:               | proportion  |
| Description:             | Proportion of baseline old stoves in households that are continued to be used |
| Source of data to be     | Survey method   |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 18

|  |  |
|--|--|
| used:  |  |
| Value of data applied for the purpose of calculating expected emission reductions in section B.5 | 0%   |
| Description of measurement methods and procedures to be applied:                                 | The measurement method is household visit.   |
| QA/QC procedures to be applied:  | The sampling survey shall be conducted in accordance with the sampling plan described in the PoA-DD.<br>QA/QC procedures are described in the CPA Sampling Plan. |
| Any comment:   | -  |

|  |  |
|--|--|
| <b>Data / Parameter:</b>   | <b>f<sub>NRB,Y</sub></b>   |
| Data unit:   | Fraction   |
| Description:   | Non-renewable biomass usage in Yuexi County, as a proportion of total biomass usage  |
| Source of data to be used:   | Independent report   |
| Value of data applied for the purpose of calculating expected emission reductions in section B.5 | XX   |
| Description of measurement methods and procedures to be applied:                                 | The fraction of non-renewable biomass will be determined as per AMS-II.G Version 04. |
| QA/QC procedures to be applied:  |  |
| Any comment:   | -  |

The parameters determined by a sampling study will be supplied by XX County Rural Energy Office conducting sample plans. Other parameter will be determined by the history data or report of third qualified organizations.

(b) Data aggregation, recording, calculation and reporting

The electronic data from XX County Rural Energy Office will be collected and structured and forwarded to the CME.

Together with the hard copies that will be collected by the SREO and forwarded to the CME, all data and documents will be archived by the CME. The CME will calculate the emission reduction as per the data collated, finish the monitoring reports and provide reports to the verifying DOE on demand.

All data and documents will be archived by the CME until at least two years after the CPA crediting period is finished.



**Organizational structure, roles and responsibilities of personnel**

The organizational structure, roles and responsibilities of personnel are shown in Figure 4.

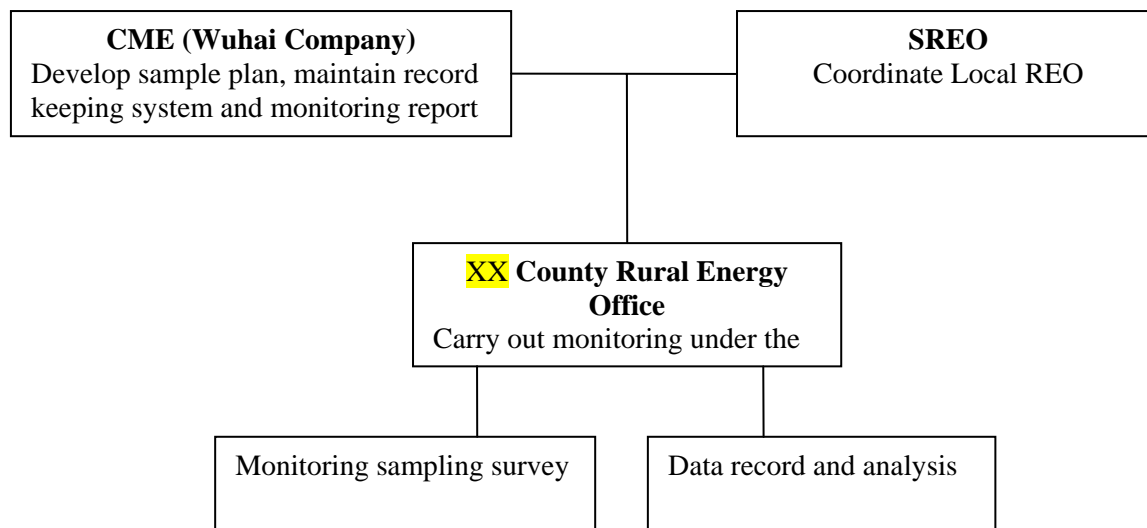


Figure 4          Structure, role and responsibilities for monitoring organization

The Sichuan Rural Energy Office will facilitate the CME to guide **XX** County Rural Energy Office for carrying out monitoring of the CPA. The data will be collected and recorded by **XX** County Rural Energy Office and forwarded to the CME to complete record keeping system and based on which the monitoring report for each CPA will be prepared.

**Emergency procedures for the monitoring system**

If the CME checked correctness and consistency between information on the purchase contracts and the corresponding stove database record, the CME will instruct its team to search for the error source. If the error source could be found, the information was corrected accordingly, if not, the database record was removed from the database and did not count for this monitoring period.

**5. QA/QC**

Besides the QA/QC procedures described in the sampling plan of CPA-DD, The QA/QC for recording, maintaining and archiving data shall be improved as part of this project activity. This is an on-going process which will be ensured through the management system in terms of the need for verification of the missions on an annual basis according to this CPA-DD and the CDM manual.

**6. Sampling Plan**

The CME will operate a monitoring plan during each verification period. As per AMS-II.G Version 04, monitoring will consist of checking the efficiency,  $\eta_{new}$ , of a representative sample of efficient stoves at least once every two years. The parameter  $\eta_{new}$  will be determined as per the specifications of WBT.

As per paragraph 16 of AMS-II.G Version 04, monitoring will also check a representative sample of appliances, parameter  $P_y$ , that are part of the project activity to ensure they are still in operation.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 20

As per paragraph 20 of AMS-II.G Version 04, monitoring will also check a representative sample of appliances, parameter  $E_y$ , representing the percentage of baseline old stoves that are continued to be used. The fuel wood consumption of baseline stoves in households shall be excluded from  $B_{old}$ .

Parameters determined through a representative sample will perform sampling as specified by the valid version of “*Guidelines for Sampling and Surveys for CDM Project Activities and Programme of Activities*”, “*Guidelines for Sampling and Surveys for CDM Project Activities and Programme of Activities*” and methodology AMS. II.G. The sampling plan for  $P_y$ ,  $E_y$  and  $\eta_{new}$  will be performed in the CPA and is the following:

**(a) Sampling Design:**

● **Objectives and Reliability Requirements:**

The objective is determining the parameter values as follows:

- The mean yearly value of  $\eta_{new}$  inspected annually during the crediting period with a 90/10 confidence /precision.
- The proportion yearly value of  $P_y$  inspected annually during the crediting period with a 90/10 confidence /precision.
- The proportion yearly value of  $E_y$  inspected annually during the crediting period with a 90/10 confidence /precision.

● **Target Population:**

The target population of the sampling is the total households in the CPA.

● **Sampling Method:**

Simple random sampling is selected as the sampling method for the CPA.

● **Sample Size:**

The sample size of  $P_y$  can be calculated by the following formulae:

$$n_{P, sample} \geq \frac{1.645^2 N \times p(1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.645^2 p(1-p)}$$

Where:

|                 |  |
|-----------------|--|
| $n_{P, sample}$ | Minimum sample size of $P_y$ by simple random sampling |
| $N$             | Total number of households in the specific CPA         |
| $p$             | expected proportion                                    |
| 1.645           | Represents the 90% confidence required                 |
| 0.1             | Represents the 10% relative precision                  |

Substituting in  $p$  0.5,  $N$  XX (depending on the number of stoves installed actually):

$$n_{P, sample} \geq \frac{1.645^2 \times XX \times 0.5 \times 0.5}{(XX-1) \times 0.1^2 \times 0.5^2 + 1.645^2 \times 0.5 \times 0.5} = XX$$

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 21

The sample size of  $E_y$  can be calculated by the following formulae:

$$n_{E, sample} \geq \frac{1.645^2 N \times p(1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.645^2 p(1-p)}$$

Where:

|                 |  |
|-----------------|--|
| $n_{E, sample}$ | Minimum sample size of $E_y$ by simple random sampling |
| $N$             | Total number of households in the CPA                  |
| $p$             | expected proportion                                    |
| 1.645           | Represents the 90% confidence required                 |
| 0.1             | Represents the 10% relative precision                  |

Substituting in  $p$  0.5,  $N$  XX:

$$n_{E, sample} \geq \frac{1.645^2 \times XX \times 0.5 \times 0.5}{(XX-1) \times 0.1^2 \times 0.5^2 + 1.645^2 \times 0.5 \times 0.5} = XX$$

The sample size of  $\eta_{new}$  can be calculated by the following formulae:

$$n_{\eta, sample} \geq \frac{1.645^2 \times NV}{(N-1) \times 0.1^2 + 1.645^2 V}$$

. Where:

$$V = \left( \frac{SD}{mean} \right)^2$$

|                    |   |
|--------------------|---|
| $n_{\eta, sample}$ | Minimum sample size of $\eta_{new}$ by simple random sampling |
| $N$                | Total number of households in the CPA                         |
| $Mean$             | Expected mean   |
| $SD$               | Expected standard deviation                                   |
| 1.645              | Represents the 90% confidence required                        |
| 0.1                | Represents the 10% relative precision                         |

Substituting in  $SD$  XX% ,  $Mean$  XX % (  $SD$  XX% and  $Mean$  XX % , determined by the history test data from producer, will be recalculated according to the test data on site during verification),  $N$  XX:

$$V = \left( \frac{SD}{mean} \right)^2 = \left( \frac{XX}{XX} \right)^2 = XX$$

$$n_{\eta, sample} \geq \frac{1.645^2 \times XX \times XX}{(XX-1) \times 0.1^2 + 1.645^2 \times XX} = XX$$

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 22

The sample size will be determined by the largest value **XX** among  $n_{P,sample}$ ,  $n_{I,sample}$  and  $n_{\eta,sample}$ . The expected response rate from the sampled households is 80%. Thus we would decide to sample **XX** /0.8= **XX** households.

● **Sampling Frame:**

The households with the number of equal to realistic sample size will be selected by random choice included in the CPA.

(b) Data:

● **Field Measurements:**

$\eta_{new}$ , determined using the WBT protocol, will be measured annually and the parameter of interest is not subject to seasonal fluctuations.

$P_y$  and  $E_y$ , determined through household visits, will be measured annually and the parameter of interest may be subject to seasonal fluctuations. So  $P_y$  and  $E_y$  will be measured in the season determined by preliminary tests when the values of  $P_y$  and  $E_y$  are more conservative.

● **QA/QC:**

- Training of field personnel will be conducted before sampling survey;
- Notice households to wait home before investigation;
- Considering that the expected response rate from the sampled households is 80%, the sample size is calculated minimum sample size divided by 80%.
- The measurement data of  $\eta_{new}$  out of the confidence interval will be excluded as outliers. Once an outlier appeared, WBT will be conducted again in the household where the outlier appeared and all the procedures of test will be checked carefully. If the stove has a low efficiency actually, it will not be taken into account as efficient stoves in operation.

● **Analysis:**

The data will be converged and the average value of each parameter will be calculated.

(c) Implementation:

● **Implementation Plan:**

- Sampling targets: Identify the households to be investigated during the surveys;
- Schedule for implementing: arrange the time and routine for surveys;
- Qualifications and experience of personnel: All investigators will be trained prior to the surveys.
- The local rural energy office with the assistance of experts and CME conducts data collection and the analyses.

**C.1. Please indicate the level at which environmental analysis as per requirements of the CDM modalities and procedures is undertaken. Justify the choice of level at which the environmental analysis is undertaken:**

X Please tick if this information is provided at the PoA level. In this case sections C.2. and C.3. need not be completed in this form.

This information is provided at the PoA level.

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 23

**C.2. Documentation on the analysis of the environmental impacts, including transboundary impacts:**

N/A

**C.3. Please state whether an environmental impact assessment is required for a typical CPA, included in the programme of activities (PoA), in accordance with the host Party laws/regulations:**

N/A

**SECTION D. Stakeholders' comments**

**D.1. Please indicate the level at which local stakeholder comments are invited. Justify the choice:**

The local stakeholder comments are invited at CPA level.

**D.2. Brief description how comments by local stakeholders have been invited and compiled:**

The consultation was also carried out by distributing questionnaires to potential impacted including nearby residents and governmental officials. And the main questions include:

1. Do you know the project?
2. Do you think the project can improve local economic development?
3. Do you think the project can improve local environment?
4. Do you think the project can improve household's living standard?
5. Do you think the project can improve household's hygiene level?
6. Do you think it is necessary to implement the project in local?
7. Your other comments and suggestions, if any?

From **XX** / **XX** /20 **XX** to **XX** / **XX** /20 **XX**, **XX** questionnaires were distributed in the target stakeholders of Yuexi County.

**D.3. Summary of the comments received:**

There were **XX** questionnaires received from the stakeholders, and the analysis of the feedbacks is shown in the following table.

Table 6 Questionnaire feedback of local stakeholder consultation

|  |  |
|--|--|
| Do you know the project?   | A lot: <b>XX</b> , and the percent is <b>XX</b> %<br>A little: <b>XX</b> , and the percent is <b>XX</b> %<br>Nothing: <b>XX</b> , and the percent is <b>XX</b> % |
| Do you think the project can improve local economic development? | Improve: <b>XX</b> , and the percent is <b>XX</b> %<br>No effect: <b>XX</b> , and the percent is <b>XX</b> %   |

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 24

|   |  |
|---|--|
|   | %<br>Worsen: XX, and the percent is XX<br>%  |
| Do you think the project can improve local environment?           | Improve: XX, and the percent is XX<br>%<br>No effect: XX, and the percent is XX<br>%<br>Worsen: XX, and the percent is XX<br>% |
| Do you think the project can improve household's living standard? | Improve: XX, and the percent is XX<br>%<br>No effect: XX, and the percent is XX<br>%<br>Worsen: XX, and the percent is XX<br>% |
| Do you think the project can improve household's hygiene level?   | Improve: XX, and the percent is XX<br>%<br>No effect: XX, and the percent is XX<br>%<br>Worsen: XX, and the percent is XX<br>% |
| Do you think it is necessary to implement the project in local?   | Yes: XX, and the percent is XX %<br>Indifferent: XX, and the percent is XX %<br>No: XX, and the percent is XX %                |

From the results above, a conclusion can be drawn that the households supported the implementation of CPA, and ensured their willingness to cooperate in the CPA management.

**D.4. Report on how due account was taken of any comments received:**

The visit to households has shown that all invited stakeholders are positive towards the implementation of the CDM CPA and do not have negative concerns about the CPA.

**SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01**



**NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project**



**CDM – Executive Board**

page 25

**Annex 1**

**CONTACT INFORMATION ON ENTITY/INDIVIDUAL RESPONSIBLE FOR THE SMALL-  
SCALE CPA**

|                  |                             |
|------------------|-----------------------------|
| Organization:    | Sichuan Rural Energy Office |
| Street/P.O.Box:  | NO.5, Nijiaqiao Road        |
| Building:        |                             |
| City:            | Chengdu                     |
| State/Region:    | Sichuan Province            |
| Postfix/ZIP:     | 610041                      |
| Country:         | P.R.China                   |
| Telephone:       | 86 28 85534729              |
| FAX:             | 86 28 85570775              |
| E-Mail:          | str575885@sina.com          |
| URL:             |                             |
| Represented by:  | Yumin Song                  |
| Title:           | Section Chief               |
| Salutation:      | Mr.                         |
| Last Name:       | Song                        |
| Middle Name:     |                             |
| First Name:      | Yumin                       |
| Department:      |                             |
| Mobile:          | 86 13808192288              |
| Direct FAX:      | 86 28 85570775              |
| Direct tel:      | 86 28 85534729              |
| Personal E-Mail: | str575885@sina.com          |

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 26

**Annex 2**

**INFORMATION REGARDING PUBLIC FUNDING**

As per the eligibility criteria of this CPA, there is no public funding from Annex I countries.

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 27

**Annex 3**

**BASELINE INFORMATION**

As per AMS II.G, it is assumed that in the absence of the project activity, the baseline scenario would be the use of fossil fuels for meeting similar thermal energy needs.

SMALL-SCALE CDM PROGRAMME ACTIVITY DESIGN DOCUMENT FORM  
(CDM-SSC-CPA-DD) - Version 01



NAME /TITLE OF THE PoA: Sichuan Province Rural Efficient Biomass Cooking  
Stoves Programme Project



CDM – Executive Board

page 28

**Annex 4**

**MONITORING INFORMATION**

The monitoring plan is described above.

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