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# VERIFICATION / CERTIFICATION REPORT

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(UNFCCC REGISTRATION REF. No. 0139)

BIOGAS SUPPORT PROGRAM-NEPAL  
(BSP-NEPAL) ACTIVITY-2 IN NEPAL

VERIFICATION PERIOD:  
1 AUGUST 2005- 31 JULY 2006

REPORT No. 2006-9007

REVISION No. 01

DET NORSKE VERITAS



## VERIFICATION / CERTIFICATION REPORT

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Client: The World Bank	Client ref.: Ms Sushila Maharjan

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### Summary:

Det Norske Veritas Certification AS (DNV) has been contracted by World Bank to carry out verification and certification of emission reductions reported for the “Biogas Support Program-Nepal (BSP-Nepal) Activity 2” in Nepal, for the period 1 August 2005 – 31 July 2006.

The GHG emission reductions during the verification period 1 August 2005- 31 July 2006 are calculated on the basis of the approved monitoring methodology (AMS I C, version 06) and the monitoring plan contained in the registered Project Design Document.

In our opinion, the “Biogas Support Program-Nepal (BSP-Nepal) Activity 2” project’s reported GHG emission reductions for the period from 1 August 2005 to 31 July 2006 as reported in the CDM Monitoring Report dated 28 February 2008 are fairly stated.

The GHG emission reductions were calculated correctly on the basis of the approved Monitoring Methodology (AMS-I.C, version 06), the monitoring plan and the project design document. As a consequence, Det Norske Veritas Certification AS is able to certify that the emission reductions from the project during the period 1 August 2005 to 31 July 2006, amount to 47 714 tonnes of CO<sub>2</sub> equivalent.

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<i><b>Table of Content</b></i>	<i><b>Page</b></i>
1 INTRODUCTION .....	1
1.1 Objective	1
1.2 Scope	1
1.3 Description of the Project Activity	1
2 METHODOLOGY .....	2
2.1 Review of Documentation	2
2.2 Site Visit	3
2.3 Audit Programme	3
3 VERIFICATION FINDINGS .....	3
3.1 Assessment	4
3.1.1 Factors used for project emission reduction calculations	4
3.1.2 Monitored data for project emissions within the project boundary	5
3.3.3 Monitored data for project emissions outside the project boundary.	5
3.3.4 Remaining Issues, CARs, FARs from Previous Validation or Verification	6
3.2 Project Implementation	10
3.3 Completeness of Monitoring	10
3.4 Accuracy of Emission Reduction Calculations	10
3.5 Quality of Evidence to Determine Emission Reductions	10
3.6 Management System and Quality Assurance	10
4 CERTIFICATION STATEMENT .....	11
5 REFERENCES .....	13

***Abbreviations***

AEPC	Alternative Energy Promotion Centre
BSP	Biogas Support Program
BSP-Nepal	Biogas Sector Partnership – Nepal
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CER	Certified Emission Reduction(s)
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CH <sub>4</sub>	Methane
DNV	Det Norske Veritas
DNA	Designated National Authority
DOE	Designated Operational Entity
FAR	Forward Action Request
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
NG	Natural Gas
N <sub>2</sub> O	Nitrous oxide
NGO	Non-governmental Organisation
ODA	Official Development Assistance
PDD	Project Design Document
UNFCCC	United Nations Framework Convention for Climate Change
GWP	Global Warming Potential



## 1 INTRODUCTION

Det Norske Veritas Certification AS (DNV) has been contracted by The World Bank to carry out verification and certification of emission reductions reported for the “Biogas Support Program-Nepal (BSP-Nepal) Activity 2” (hereafter called the project) for the period 1 August 2005 – 31 July 2006. This report contains the findings from this verification assignment.

### 1.1 Objective

Verification is the periodic independent review and *ex post* determination by the Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of a registered CDM project activity during a defined verification period.

Certification is the written assurance by a DOE that, during a specific period in time, a project activity achieved the emission reductions as verified.

### 1.2 Scope

The verification scope is:

- to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan,
- to evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement,
- to verify that the reported GHG emission data is sufficiently supported by evidence, i.e. monitoring records.

The verification shall ensure that reported emission reductions are complete and accurate in order to be certified.

The verification team has, based on the recommendations in the Validation and Verification Manual /4/, employed a risk-based approach, focusing on the identification of significant reporting risks.

### 1.3 Description of the Project Activity

Project Parties:	The Government of Nepal, the Government of the Netherlands.
Title of project activity:	Biogas Support Program-Nepal (BSP-Nepal) Activity 2
UNFCCC registration No:	0139
Project Participants:	Alternative Energy Promotion Centre, Nepal (AEPIC), Household Min Prasad Gautam, Household Madhu Prasad Simkhada and the Community Development Carbon Fund (CDCF).



Location of the project activity: The project activity (i.e. the individual bio digesters) is spread over and located in 55 districts (out of a total of 75 districts) of Nepal.

In the project activity, AEPC through the Biogas Support Program (BSP) has installed 9688 biogas digesters (of capacities 4 m<sup>3</sup>, 6 m<sup>3</sup>, 8 m<sup>3</sup> and 10 m<sup>3</sup>) in 9688 individual household covering locations of terai (elevation of 100 to 500 meters above sea level (masl)), hills (elevation of 500 to 3000 masl) and mountains (elevations above 3000 masl) in 55 districts (out of the 75 districts) in Nepal. The project activity was implemented between 16 June 2004 and 06 April 2005.

Prior to the implementation of the project activity, the source of thermal energy in the households was non renewable biomass (wood) and kerosene. The implementation of the project activity has resulted in reduction of the consumption of non-renewable biomass by approximately 10 kg/day in individual household where the digesters have been installed. The consumption of kerosene has also reduced.

The emission reductions reported for the project activity for the period from 1 August 2005 – 31 July 2006 equate to 47 714 tonnes of CO<sub>2</sub> equivalent.

## 2 METHODOLOGY.

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project. As the CDM Executive Board has not yet formally endorsed the application of any materiality principle for verification of emission reductions from CDM projects - implying that emphasis should be on the significant contributors to emission reductions. In line with the monitoring plan in the PDD and validation report a statistically significant sample at 95% confidence level interval was planned. DNV has for this assignment decided to check all factors and issues with the same emphasis. The team had during its preparations identified the key reporting risks and used the assessment to determine to which extent the project operator's control systems were adequate for mitigation of these key reporting risks.

### Duration of verification

Preparations: 25 November 2006.

On-site verification: 27 November 2006 to 1 December 2006.

Reporting: 26 December 2006 - 17 October 2007

### 2.1 Review of Documentation

The basis for the verification has been the initial monitoring report from the project proponent for the period 1 August 2005 – 31 July 2006, dated 31 October 2006, the revised monitoring report dated 28 February 2008, the registered PDD and the approved baseline and monitoring methodology applicable to the project, i.e. AMS\_I.C Version 6. The project operator has in addition supplied the verification team with other documents, such as the biogas user's manual book, biogas user's survey 2005/06 necessary for verification of the required emission factors.



## 2.2 Site Visit

Detailed verification of all data contained in the monitoring report was performed during a site visit at BSP and selected project sites from 27 November to 1 December 2006. During the site visit, the following personnel were interviewed or assisted the verification team:

<u>Name</u>	<u>Organization</u>	<u>Position</u>
Mr. Saroj Rai	BSP-Nepal	Executive Director.
Mr. Khagendra Nath Khanal	BSP-Nepal	Assistant Director
Mr. Saroj Kumar Shreshta	BSP-Nepal	Officer, Quality Control
Dr. Govind Raj Pokharel	AEPC	Executive Director
Mr. Ram Prasad Dhital	AEPC	RESS Coordinator

## 2.3 Audit Programme

The site visit had the following programme:

November 27, 2006	Opening Meeting, Review of Records and Site Planning
November 28 2006	Digesters verification in Kavre district (hills).
November 29 2006	Digesters verification in Lalitpur district (hills).
November 30 2006	Digesters verification in Chitwan district (terai).
December 1 2006	Digesters verification in Rupandehi district (terai).
December 2 2006	Final Review and close out Meeting

## 3 VERIFICATION FINDINGS

Findings established during the verification may be that:

- i) the verification is not able to obtain sufficient evidence for the reported emission reductions or part of the reported emission reductions. In this case these emission reductions shall not be verified and certified;
- ii) the verification has identified material misstatements in the reported emission reductions. Emission reductions with material misstatements shall be discounted based on the verifier's ex-post determination of the achieved emission reductions.

A forward action request (FAR) may be issued, where:

- the actual project monitoring and reporting practices requires attention and /or adjustment for the next consecutive verification period, or
- an adjustment of the implementation of the monitoring plan is recommended.

In the context of FARs, risks may be identified, which may endanger the delivery of CERs in the future, i.e. by deviations from good reporting or management procedures. As a consequence, such aspects should receive a special focus during the next verification.



### 3.1 Assessment

The data presented in the monitoring report were assessed in detail by a review of detailed project documentation and interviews with personnel at Biogas Sector Partnership – Nepal (BSP-Nepal), which implements the Biogas Support Program (BSP). Since the project involved the installation of 9688 digesters spread over 55 districts, DNV had prior to the verification visit planned for physical onsite verification of 100 digesters in the hill and terai regions. However, due to the inaccessible terrain and remote location of the digesters it proved difficult to cover the planned physical inspection of 100 digesters within the given timeframe. During the period of 5 days, 51 digesters were visually inspected to check the existence and working of the digesters and the owners interviewed to get first hand information. The visit to these digesters also clearly indicated that the digesters were working as envisaged, were fairly well maintained and that the minimum saving in firewood was in the order of around 10 kg/day. Only one of the assessed units was non operational temporarily due to the death of the livestock providing dung in the past. It was also observed during the verification process that there was not much of difference in the generation capacities between 4 m<sup>3</sup> and 6 m<sup>3</sup> digester and that the gas generation was more dependent on the quality and quantity of animal dung fed into the digester and other practices like connection of toilet wastewater etc. Hence, the sample size of 51 digesters of the total no of installations was itself considered adequate to draw conclusions based on a statistical significance at a 95% confidence level. Considering the above, the DNV verification team is of the opinion that further coverage of digesters as per the original plan (of 100) was not necessary. The coverage of various plants is summarised as below:

Region	Terai	Terai	Terai	Hill	Hill	Hill
Size	4m <sup>3</sup>	6m <sup>3</sup>	8m <sup>3</sup>	4m <sup>3</sup>	6m <sup>3</sup>	8m <sup>3</sup>
Number	2	34	6	3	6	-

#### 3.1.1 Factors used for project emission reduction calculations

In line with the monitoring plan of AMS-I.C, the monitoring of the emission reduction is based on annual surveys without metering of the actual energy generation of the digester as the emission reduction per system is less than 5 t CO<sub>2</sub>e. If the emission reduction factor is greater than 5 t CO<sub>2</sub>e per household this is capped at 4.99 t CO<sub>2</sub>e. This is in line with the validation report which states the reasonability of this method due to a) the high cost of monitoring/metering the energy generation of all or a part of the digesters and b) the conservativeness of capping the emission reduction factor at 4.99 t CO<sub>2</sub>e/digester and its likeliness to compensate for potentially higher uncertainty which might result from monitoring emissions reductions based on annual surveys instead of metering the energy generation of a sample of digesters.

Since the emission reduction are capped at 4.99 t CO<sub>2</sub>e per year per digester, the project applies the option 8 c of AMS-I.C for monitoring the emission reductions, as a) recording annually the number of systems operating and b) estimating the annual operating hours of an average system.

The emission reductions in the project are calculated using the data of number of bio-digesters installed, the performance ratio of the digesters (which is the number of digesters





performing/total number of digesters installed) and the emission reduction factor for a biogas plant. All the factors are calculated ex-post using the following data/information from the following sources.

- 1) Registration/sales documents of the digesters.
- 2) Performance monitoring based on statistically significant samples of all the installed digesters, to estimate the non-operational digesters.
- 3) Consumption of kerosene oil and firewood before and after the project implementation.

### 3.1.2 Monitored data for project emissions within the project boundary

The data that is to be monitored as per the monitoring plan is as follows.

**Number of digesters installed:** Since the project activity is completed, this data is available from the registration / sales documents that are forwarded by the companies (entities who construct and provide maintenance service for the project activities) to BSP.

**Performance ratio:** This is a key parameter for the emission reduction calculations and is the ratio of the number of digesters working to the number of digesters installed. This parameter is calculated from the after sales survey (ASS 1 and 2) feed back received by BSP from the individual companies and also from the biogas users survey (BUS) conducted by an independent agency for BSP. The performance ratio arrived at for the monitoring period is 98.7% and was verified.

**Emission reduction factor** for bio digester (capacity and region wise). This parameter is also calculated from the data collected (quantity of firewood and kerosene consumption before and after the implementation of the project), from the ASS and BUS surveys.

The ex-ante constant emission factors used in the calculation of the emission reduction factor are as follows.

CO <sub>2</sub> emission from fuel wood combustion	1.83 t CO <sub>2</sub> /tonne <sub>fuelwood</sub>
CO <sub>2</sub> emission from combustion of kerosene	2.41 kg CO <sub>2</sub> /liter kerosene
CH <sub>4</sub> emission from fuel wood combustion	0.083 t CO <sub>2</sub> e/tonne <sub>fuel wood</sub>

The weighted average emission factor arrived at for the project activity, for the monitoring period is 8.9975 t CO<sub>2</sub>e/plant/year. This has been capped at 4.99 t CO<sub>2</sub>e/plant/year as stated in para 2.1.1 and is thus deemed to be conservative.

### 3.3.3 Monitored data for project emissions outside the project boundary.

The project activity does not have any project emissions outside the project boundary. Methane leakage emissions from the biogas digester and incomplete combustion are accounted for in the calculation of the emission reduction factor for individual digester.



### 3.3.4 Remaining Issues, CARs, FARs from Previous Validation or Verification

FAR/CAR	Description of finding	Response	Conclusion
CAR1	In the registered PDD and validation report, the limiting generation capacity of 15MW is based on consideration of 1 stove per installation and appropriate power outputs for different plant capacities. During the field visits it was observed that quite a number of households have 2 stoves which are operated together and is also confirmed by the third party biogas survey which indicate that 39% of the households have 2 stoves. It is to be clarified as to how the existing tracking of only the number of installed and operational biogas digesters would ensure that the limiting generation capacity of 15MW is not exceeded.	The EB 33 has accepted the request for deviation. Hence the justification that the existing monitoring plan of tracking only the number of operating digesters would be adequate and the tracking of increased number of stoves in households (to check against generation capacity) is not required as the actual ER depends on the amount of biogas produced.	The justification provided is acceptable in view of the EBs decision on the deviation requested by DNV on 11 April 2007.
CAR2	The monitoring plan of the registered PDD mentions a 5% sampling plan. Since the data provided in the monitoring report also includes coverage of non CDM plants, it has to be clarified whether the 5% sampling coverage criteria would be met considering only the plants included in the CDM project.	<p>All plants constructed from November 2003 are part CDM and even the plants constructed after the registered 19,396 plants are planned to be registered with CDM.</p> <p>The BSP's regular monitoring actually covers min. 15% because the same plants are sampled once as new plants and twice as old plants for after-sales service, each time with min. 5% sample size.</p> <p>The calculation after 3<sup>rd</sup> crediting period will be based on the annual users' survey, which will be able to cover the same 5% sampling group monitored in the first year. Thus, it can be concluded that the 5% sampling coverage</p>	<p>Accepted based on the arguments provided which justify that the 5% sampling plan for CDM projects alone is satisfied for this monitoring period.</p> <p>Sufficient care should be exercised in the user survey to ensure a) 5% sampling and b) the quality of the survey to be in line with the ISO surveys during the subsequent verification periods.</p>



		criteria of the CDM plants would be met.	
CAR3	The basis for the determination of the performance ratio of 97.8% as mentioned in the monitoring report needs clarification. As per the monitoring plan of the registered PDD the performance ratio is to be determined from the internal ISO verification surveys, while the value used has been sourced from the annual biogas users survey (BUS) conducted by an independent agency.	The sampling procedure for the Annual Users' Survey is also done by the Oracle computer programme as in the case of the ISO certified monitoring of BSP. In terms of randomness and other details procedures of monitoring in the field, it is justified that the quality of the Annual User's Survey will be the same as the regular monitoring of the ISO, given that the same sampling procedure done by the Oracle computer programme is applied in both case of the ISO certified monitoring and the Annual Users' Survey.	The argument that the value is conservative is accepted. The justification on the quality of the Annual user's survey is also accepted.
CAR4	The emission reduction figures reported in the monitoring report for terai (4 m <sup>3</sup> ) digesters are higher than the corresponding figures taken at the time of validation. The supporting data and calculations used for the determination are to be provided	As per the monitoring plan, the data for ER calculation for the first 3 years is supposed to be done based on BSP's regular monitoring data. The figure of ER calculation for terai (4 m <sup>3</sup> ) is coming higher than the calculation at the time of validation, simply because the firewood saving has been reported higher in the BSP monitoring report, compared to what was assumed in the earlier calculation at the time of validation. (The validation report was based on the Users' Survey 2002, which gave an average ER 3.03 tons CO <sub>2</sub> eqv. BSP monitoring report gave a	The explanations provided are accepted.



		higher fuel wood saving which resulted in 7.2 tons CO2 eqv. The difference is coming from two different survey methodologies that resulted in different quantities of fuel wood saving.)	
CAR5	The monitoring report has only considered the digesters in the hill and terai region. The digesters in the remote hills have not been indicated in the emission reduction calculation. The emission reduction calculations are also on the lower side and needs clarification.	<p>The reason that the plants from remote hill districts are included in the hill district category for ER calculation is that there are just few plants (less than 0.50%). This is very much in line with what is mentioned on page 8 of the validation report and the PDD as well, which mention that the emission reduction factor for both hill and mountain are the same and these documents also show combined calculation for hill and mountain. This is done for a practical purpose.</p> <p>The reason why the ER calculation is coming lower is because of the use of data of the regular BSP monitoring report, as mentioned to clarify CAR 4 above .</p>	Accepted.
CAR6	During the field visits it was found that there were some users of only LPG prior to use of biogas. It has to be clarified as to why LPG usage has not been considered as part of the baseline.	Use of LPG is limited to urban and some peri-urban areas. It may have been omitted in the baseline report because it is not a general case or the trend is rather new. The Annual Users' Survey 2002, which was the basis for the baseline, did not have any data for use of LPG before switching to biogas. The Annual Users' Survey	Accepted.



		2006 reveals that only 1.9% of biogas users used LPG before use of biogas.	
CAR 7	The monitoring report indicates that the reporting period is from 1 August 2005 to 19 October 2006. However, the verification revealed that emission reductions were reported for the period 1 August 2005 to 31 July 2006. A revised monitoring report shall be submitted in which the reporting period is correctly stated.	The reporting period is revised to "1 August 2005 to 31 July 2006" accordingly.	
CAR-8	The uploaded monitoring report cover page indicates the monitoring period as 1 August 2005 to 19 October 2006, where as the CERs are calculated for the period 1 <sup>st</sup> August 2005 to 31 July 2006. This is the period indicated on the UNFCCC project page also. This needs to be corrected.	This is provided.	Accepted.
FAR1	The monitoring plan mentions the use of ISO quality survey for the first 3 years and the biogas survey later on as the basis for determination of reduced quantity of firewood/kerosene. It has to be clarified as to what sampling methodologies would be adopted as part of biogas survey and whether it would be consistent on the lines of the ISO monitoring procedures.	<p>The annual users survey used after the first 3 years will be robust, given that the sampling procedure for the Annual Users' Survey is also done by the Oracle computer programme as in the case of the ISO certified monitoring of BSP. Thus the same quality of the survey and procedures will be followed in the annual users survey and it is justified that the quality of the Annual User's Survey will be the same as the ISO regular monitoring of the ISO.</p> <p>The PDD's monitoring plan has accepted this and the Validation Report on page 9, under the Monitoring Plan as well validated it with 2 bullet points concerned with</p>	Accepted based on the fact that the ISO survey has been used for this monitoring period. However, it has to be ensured that similar quality assurance procedures as adopted in ISO surveys would be adopted as part of the Annual Users Survey. These would be checked in subsequent verifications after the three year period, when this changeover would occur in line with the methodology.



		cost and conservative figure in calculation.	
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### 3.2 Project Implementation

The project of installing 9688 bio-digesters was done from June 2004 to April 2005 and has been in operation since then.

### 3.3 Completeness of Monitoring

The monitoring of the project is complete and in accordance with the approved monitoring methodology AMS-I.C, version 06, and the monitoring plan contained in the registered PDD.

### 3.4 Accuracy of Emission Reduction Calculations

For all factors where uncertainty occurs, the project operator has reported conservative values.

### 3.5 Quality of Evidence to Determine Emission Reductions

All necessary data from the BUS survey, ASS survey, registration of sales and the regular quality control & monitoring, are entered and archived in the oracle based database in the offices of BSP-Nepal. All the data are also available in hardcopies and were evidenced during the verification process.

### 3.6 Management System and Quality Assurance

BSP-Nepal is certified for ISO 9000 management systems and has applied them to the project activity. The procedures of the quality control of the project activity have also been linked to the existing ISO 9001 quality management systems.



## 4 CERTIFICATION STATEMENT

### **Introduction**

*Det Norske Veritas Certification AS (DNV) has been engaged by the World Bank to verify the greenhouse gas (GHG) emission reductions reported for the “Biogas Support Program-Nepal (BSP-Nepal) Activity 2” in Nepal for the period from 1 August 2005 – 31 July 2006, reported to be 47 714 tonnes of CO<sub>2</sub> equivalent.*

*The project has applied the approved baseline and monitoring methodologies AMS-I.C, version 06, and emission reductions are reported in the revised monitoring report dated 28 February 2008.*

### **Responsibilities of the “Biogas Support Program of -Nepal (BSP-Nepal) Activity 2” Project management - BSP-Nepal and DNV**

*The management of the “Biogas Support Program-Nepal (BSP-Nepal) Activity 2” project is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions on the basis set out within the monitoring report (dated 28 February 2008). The development and maintenance of records and reporting procedures are in accordance with the approved monitoring methodology AMS-I.C, version 06, and the monitoring plan contained in the registered PDD, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.*

*It is DNV’s responsibility to express an independent verification statement on the GHG emission reductions reported for the project for the period from 1 August 2005 – 31 July 2006 based on the verified emissions for the same period and the project’s compliance with the approved baseline and monitoring methodology AMS-I.C, version 06, and the monitoring plan contained in the registered PDD.*

### **Basis of GHG verification opinion**

*Our verification approach was based on the requirements as defined under the Kyoto Protocol, the CDM modalities and procedures, as well as those defined by the CDM Executive Board and by the baseline and monitoring methodology AMS-I.C version 06.*

*Our verification approach draws on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. Our examination includes assessment of evidence relevant to the amounts and disclosures in relation to the project’s GHG emission reductions reported for the period from 1 August 2005 – 31 July 2006.*

*We planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that the reported amount of GHG emission reductions for the period from 1 August 2005 – 31 July 2006 are fairly stated.*

*We conducted our verification on the basis of the monitoring methodology AMS-I.C, version 06, and the monitoring plan contained in the registered PDD of the project. The verification included:*

- *Collection of evidence supporting the reported data.*





- *checking whether the provisions of the monitoring methodology AMS-I.C, version 06, and the monitoring plan in the PDD were consistently and appropriately applied.*

***Certification Statement***

*In our opinion, the GHG emission reductions stated in the revised monitoring report of 28 February 2008 for the “Biogas Support Program of -Nepal (BSP-Nepal) Activity 2” project in Nepal for the period from 1 August 2005 – 31 July 2006, are fairly stated. No correction has been made by DNV as we have not detected any mistake in the monitored and reported numbers.*

*The GHG emission reductions were calculated correctly on the basis of the approved monitoring methodology (AMS-I.C) and the monitoring plan contained in the registered PDD of 14 November 2005. Hence, Det Norske Veritas Certification AS is able to certify that the reported emission reductions from the project during the period 1 August 2005 – 31 July 2006 amount to 47 714 tonnes of CO<sub>2</sub> equivalent.*

Chennai, 14 April 2008

Ramesh Ramachandran  
Project Manager

Oslo, 14 April 2008

Lehmann Michael  
Technical Director





## 5 REFERENCES

*Documents provided by the project participants that relate directly to the project:*

- /1/ Emission Reduction Monitoring Report for “Biogas Support Program- Nepal (BSP-Nepal) Activity 2 ” for the period 1 August 04 to 31 July 2006 dated 31 October 2006 and revised version dated 28 February 2008.
- /2/ Project Design Document for “Biogas Support Program-Nepal (BSP-Nepal) Activity 2,” 19 November 2005.

*Background documents related to the design and/or methodologies employed in the design or other reference documents:*

- /3/ CDM Executive Board: Approved Monitoring methodology AMS-IC, version 06, September 2005
- /4/ International Emission Trading Association (IETA) & the World Bank’s Prototype Carbon Fund (PCF): Validation and Verification Manual. <http://www.vvmanual.info>.
- /5/ Biogas Users Manual Booklets
- /6/ Biogas Users Survey 2005/2006

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