



W+ Verification Report
Women's Time Savings from the Indonesia Domestic Biogas Programme
(IDBP)

August 2015



VERIFICATION REPORT

Women's Time Savings from Indonesia Domestic Biogas Programme (IDBP)

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Summary:

The intention of the audit process was to verify the outcomes derived from the implementation of the W+ method for time savings within the Indonesia Domestic Biogas Programme (IDBP).

The verification of this programme took place over three days and was conducted remotely from the UK and supported by site visits to Bonjeruk Village in Lombok Tengah District, HIVOS Offices in Lombok and HIVOS Offices in Jakarta. The project is the application of the W+ time domain method on 2 existing biogas programmes in villages on Lombok and East Java. The programme is enabling households to release time previously spent on wood collection, cooking and cleaning through the use of biogas rather than traditional wood fires. The scope of the verification has been limited to the W+ time domain but inevitably other impacts have been achieved which are noted later in the report. The monitoring period of the verification is October 2014 – April 2015 and a combination of methods have been adopted including:

Site visits to:

- Verify the presence of biogas units and their operation*
- Conduct focus groups with biogas users – (women from Bonjeruk Village – Lombok)*
- Interview HIVOS team members in Lombok supporting the implementation of the biogas units and their ongoing management*
- Interview HIVOS team members in Jakarta supporting the HIVOS Lombok team*

In addition the following documents were reviewed in order to complete the verification of the Time domain results for Women’s Time Savings from Indonesia Domestic Biogas Programme (IDBP):

- W+ Project Idea Note (PIN)*
- W+ Project Design Document (PDD)*
- Monitoring and Results Report: Women’s Time Savings from Indonesia Domestic Biogas Programme (IDBP)*
- The number of findings raised during verification (auditing)*
- Any uncertainties associated with the verification (auditing)*
- Summary of the verification (audit) conclusion*



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1. INTRODUCTION

1.1 Objective

- The purpose of the audit was to verify the findings of the Monitoring and Results Report for the (IDBP) operating in Lombok and East Java. All activity undertaken was to consider the programme and its impact upon communities as defined by the W+ time domain.

1.2 Scope and Criteria

- The scope of the audit was limited to the W+ time domain and considered the following indicators as evidence of successful implementation and time saving:
 - Is Increased discretionary time evident?
 - Is reduced drudgery evident?
 - Is there an Increased sharing of household work – men take on work that is normally considered that of women -- evident?
 - Is there an increased perception of well-being by women evident?

Additionally a Do No Harm indicator was sought to evidence that “no less than 97% of both men and women report that the project has not caused any unwelcome and non---remunerated increase of time spent on either productive or unproductive activities (on daily activities excluding leisure time) This also considered the risk of increased usage of child labour.

The project is focused on 2 existing biogas programmes in villages on Lombok and East Java. The programmes are intended to enable households to release time previously spent on wood collection, cooking and cleaning through the use of biogas rather than traditional wood fires.

The following table summarises the findings of this verification report

Time								
Desired Outcome	Much worse	Somewhat worse	Worse	Same	Somewhat Improved	Improved	Much improved	Total Score
Reduced drudgery (immediate outcome)				Undertakes on a daily basis activities considered to be strenuous.	Strenuous activities reduced by 20% as determined by beneficiaries.	Strenuous activities decreased by 40% or more as determined by beneficiaries.	Strenuous activities decreased by 60% or more as determined by beneficiaries	1



Increased discretionary time (Immediate outcome)				No time for herself during the day	Rarely has some leisure time for herself during the day	Frequently has some leisure time for herself during the day	Always has some leisure time for herself during the day	3
Increased sharing of – men take on work that is normally considered that of women (Intermediate outcome)				Men do not share any reproductive tasks (cooking, childcare, care for sick and elderly)	Men share small number of reproductive tasks (cooking, childcare, care for sick and elderly)	Men share moderate number of reproductive tasks (cooking, childcare, care for sick and elderly)	Men share reproductive work (childcare, cooking, care for sick and elderly)	1
Increased perception of well-being (intermediate outcome)				No sense of positive health and emotional wellbeing				

1.3 Level of Assurance

The stakeholder engagement process evidences the indicated descriptors outlined above. This is coupled with statistical analysis of numeric data gathered from stakeholder questionnaires tested to a 98% confidence level.

1.4 Project Monitoring & Evaluation Report Summary

HIVOS commissioned the WOCAN W+ team to apply the W+ Standard in collaboration with BIRU in two provinces of Indonesia: West Nusa Tenggara and East Java between October 2014 and April 2015.

Method and criteria used: the W+ Time method was based on the following anticipated results:

- Increased discretionary time for women
- Reduced drudgery
- Increased sharing of household work– men take on work that is normally considered that of women
- Increased perception of well-being among women

The following Do No Harm indicator (s) was applied:

- Not less than 97% of both women and men report that the project has not caused any unwelcome and non---remunerated increase of time spent or either productive on reproductive activities



The application of the W+ Time method in two project areas of West Nusa Tenggara and East Java show that there is a net time savings of 61 minutes or 1.1 hours a day for women biogas users. When applied to the total number of project beneficiaries that have installed biogas for two years and less, the total time savings generated over that period is 16,041,962 hours. To translate the amount of hours saved for the project beneficiaries into W+ units, the total is divided by eight, which is the average number of working hours in a day. The total number of W+ Time Units generated is **2,005,245**.

While social asymmetries associated with existing gender division of roles and responsibilities remain largely unchanged and unaffected by biogas interventions alone, the economic activities associated with bio slurry production hold huge potential for improving the social and economic position of women and men. Additional interventions to enhance income and asset potential as well as mechanisms to improve equitable access by women to biogas services such as trainings for maintenance and masonry would complement and contribute significantly to the Time benefits that have been generated by the installation of biogas

Time Saved in NTB and East Java

Provinces	Total	Total	Total Biogas	Average	Total time saved (<2 years)
	biogas installed	Biogas of less than 2 years	of greater than 2 years	total operation days (<2 years)	16,041,962 hours
East Java and NTB	9860	4452	5408	508.5	<u>2,005,245</u> Time units



2. VERIFICATION PROCESS

2.1 Method and Criteria

- This verification report is limited to the consideration of the W+ time domain. Monitoring data has been gathered from the field research and this data has been verified through the use of two approaches:
 - Examination of the data gathered and consideration of its accuracy
 - Site visits to verify:
 - The presence of the biogas units and their operation
 - The experience of the women and families using biogas units as reported by the women whose time has been saved

2.2 Document Review

- The following documents were reviewed in order to complete the verification of the Time Domain results for the Women's Time Savings from Indonesia Domestic Biogas Programme (IDBP):
 - i. Method document for the time domain
 - ii. W+ Project idea Note – Indonesia Domestic Biogas Programme
 - iii. W+ Project Design Document – Indonesia Domestic Biogas Programme
 - iv. Final Monitoring and Results report
 - v. Statistical analysis of the questionnaire data
- Each document was crosschecked against the others and with the findings from the site visits and interviews to ensure consistency and to test accuracy. This was done following the site visits and interviews and these adequately reinforced the findings presented.

2.3 Interviews

Site Visit – Lombok:

- A site visit took place on the 6th July 2015 at Bonjeruk Village, Lombok Tengah District. During this visit verification, the following activities were carried out that directly engaged stakeholders:
 - A focus group discussion was held with women from the village; all of whom have been biogas unit users for the last 2 years. The focus group discussion was intended to verify the findings presented in the Monitoring and Results report.
 - 14 women from the village attended the focus group discussion. The conversation was facilitated by Liz Allen and Abidah Billah Setyowati, both of whom are experienced



community facilitators. The focus group discussion was structured around a series of questions devised by the verifier in order to elicit responses that could prove/disprove the findings of the Monitoring Report. These questions, listed below, were arranged as higher level and supplementary questions to ensure flexibility for facilitators to gain the insights and reported experiences of the women:

- Do you feel you have more available time – **Higher level question**
- What are you doing with your time?
- What would you like to be doing if you had more time?

Supplementary Questions

- Who makes the decisions around how you spend money in your family?
 - What can you buy without consulting?
 - What are the consequences of buying without consulting?
 - Does your husband consult with you?
 - Do you believe that your family health and wellbeing is improved? – **Higher level question**
-
- Additional interviews were carried out with staff of two HIVOS teams, the first being the team in Lombok who are responsible for overseeing the implementation of the biogas project in Lombok and the second with the HIVOS team in Jakarta who oversee the management of the project across Indonesia. These meetings took place on the 6th and 7th July respectively.
 - The meetings provided an opportunity to interrogate the operational and managerial aspects of the project delivery; the key findings have been summarised here:

HIVOS – Lombok

- The fact that there is a small team overseeing operational issues for the Lombok and Bali projects means time and resources are tight. There are currently 2943 biogas unit users in Lombok and this is an ever-growing number.
- Local partnerships have been the key to success, to engage and convince families to use the biogas units.
- Continuous quality checks ensure safety and ongoing engagement meetings ensure ‘influential’ people such as village leaders are promoting the biogas unit as an effective alternative to traditional energy production.
- There is a strong sense of communal spirit with families supporting one another to afford and install the units. Maintenance is typically good although the movement of men out of the



community, as migrant workers means some units are not well maintained, putting pressure upon women to be confident and competent in their upkeep. This has not been easy as women can't always attend the training sessions, so the team has offered additional sessions and encouraged learning by watching and doing within the villages.

- Mapping the potential in each area is essential, knowing where there may be increased demand for units; this is especially true in differing communities such as those of cattle and dairy farmers. Learning is shared but is different for each community and so there is a need to tailor the messaging.
- The appetite to develop a credit union approach to the distribution of funds generated from the sale of W+ units is clearly demonstrated by the team; this is based upon good experiences elsewhere including Sulawesi and this learning could be transferred to the biogas projects.

HIVOS Jakarta:

- Managing projects across a dispersed area has not been problematic as central systems drive the activity of the provinces and each province reports back on progress, problems, and learning. Monthly partner meetings and 6 monthly stakeholder meetings ensure effective oversight by HIVOS to support this. All records are matched on a central database including data on:
 - Number of digesters installed
 - Financial ? value of the community contribution to the units
 - Name of the installing mason
 - Age of the equipment
 - Record of training attendance by users
- The team was keen to consider methods to distribute W+ generated funds either via a co-operative or a credit union. To date there was more enthusiasm for a credit union model in order to strengthen a wider economy -- whilst the direct benefit may go to the investing families, the opportunity to create a wider fund via the credit union to support additional enterprise development was clear.
- The team recognise that the low hanging fruit has now been exhausted and in order to keep getting new units out to families they have to look at other areas and commit time to more



engagement activity. The team is presently in 10 provinces and plans to engage 3 more districts over the next 3 years and to be in 17 districts by 2018, bringing in the equivalent of 13000 additional users.

- The team also know that they need new partners as some lending partners are maturing and will move on, so new investment is needed; building a strong supply chain is crucial and realised by the team.
- The team is keen to develop activity in other W+ domains but unsure how to go about this or how to prepare for measurement . This needs consideration by WOCAN, along with consideration of the verification process for multiple domains.

2.4 Site Inspections

A site visit took place on 6th July 2015 to inspect biogas units in Bonjeruk Village, Lombok Tengah District and to speak to women and families that have been using this form of technology, thus freeing up time previously used for fuel wood collection, cooking and other activities. During this visit installed biogas units were inspected; interviews took place with a women's group from the village as reported above.

Included in the appendix is photographic evidence of the units on site.

2.5 Resolution of Findings

- There were no corrective actions or clarifications required during the verification process.

2.6 Forward Action Requests

- The HIVOS team in Lombok reported that convincing Muslim families of the benefits of using biogas units was not easy. There were concerns around cleanliness and the use of dung near food production areas. This was countered by the creation of a demonstration unit in a village to show how the product works , with separate clean working areas. Additionally an Islamic public school in the area installed a unit and used human slurry to create methane, acting as an example and reassurance to parents and potential users.
- Also reported by the HIVOS team in Lombok was the difficulty in getting women to attend the training for the installation and use of the unit. On occasion, women sent their children if they could not attend. As a consequence the team has provided additional sessions and encouraged learning by watching and doing.



- Key learning around the different approaches for Dairy farmers and cattle farmers was raised as an issue as cattle farmers needed to be encouraged to retain at least one head of cattle in order to generate dung for the unit. As cattle farmers they clearly want to maximise income by selling all mature cattle but this issues has been tackled with each farmer and is essential if there is to be no break in biogas availability.
- This ensures that access to funds are not limited to co-operative members only, it also enables wider enterprise development across the village and ensures that the credit unions own sustainability is improved as there is potential for a greater number of investors and recipients.
- Also raised was the issue of integrating standards. The projects use several accreditation standards and there may be an opportunity to integrate these – however the distinct value of W+ as a gender specific standard could be compromised and this would likely be unacceptable for investors and the W+ team.
- Finally the issues of multiple domain verification were raised. This will require thought during verifier training to ensure that individuals are familiar with each domain and the process required to effectively verify impact/achievements in each domain area.



3. VALIDATION FINDINGS

3.1 W+ Project Eligibility

- The project meets the eligibility criteria for consideration under the W+ standard.

3.2 Method Deviations

- There were no deviations from the W+ Time Method.

3.3 Project Description Deviations

- There were no deviations from the project description.

3.4 Grouped Project(s)

- No new activities have been added to the project during the delivery period covered by this verification report.
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4. VERIFICATION FINDINGS

4.1 Project Implementation Status

- The project has been implemented and monitored, and the verification has been completed. There are no material discrepancies between the implementation and the project description or monitoring processes.

4.2 Accuracy of Calculations of Women's Empowerment Benefits

- As described in the Monitoring and Results Report, data has been checked; where manual transposition errors have been identified these have been satisfactorily resolved.

4.3 Quality of Evidence to Determine Women's Empowerment Benefits

The evidence used to determine the women's empowerment benefits are:

- The Monitoring and Results Report
- Statistical analysis of questionnaire from field research
- Interviews with stakeholders
- The quality of the information gathered in the Monitoring and Results Report is excellent and was obtained using professional enumerators. As such the information is comprehensive and reliable.
- Data from the questionnaires was entered into a statistical analysis programme; the findings of this programme have been tested for rigour and a sample of the physical questionnaires examined to test for transposition errors. The process of converting data from written to electronic formats is considered to be accurate and the information deduced from the data set is considered to be comprehensive and reliable.
- The information gathered from the focus group discussions and stakeholder interviews is considered to be excellent in its reliability and rigour as it is source data from the women using the biogas units. Experts facilitated the session, each of whom had considerable experience in ethnographic research techniques.
- Overall the quality and quantity of evidence is considered to be appropriate and comprehensive, ensuring the voice of the person served is heard and that the data set gained during monitoring activity reflects the findings from stakeholders.



5. W+ RESULTS

5.1 W+ Domains

Domain	Time
Outcome Indicators	Reduced drudgery (immediate outcome)
Situation	
Justification	<p>A focus group discussion took place during a site visit on the 06/07/15. The questions used to initiate a discussion with the women's group from the village explored their sense of drudgery and time saved.</p> <p>It was clear from responses that the women felt a reduced sense of drudgery in that time had been saved by using the biogas unit rather than gathering fuel wood and cleaning charred utensils, and this was seen to be a positive change by these women. However the time saved was then used for a variety of alternative activities some of which may be considered drudgery or tedious and hard labour including:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased time for growing/cultivating fruit and vegetables <input type="checkbox"/> Increased time for cooking <input type="checkbox"/> Increased time for childcare <input type="checkbox"/> Increased time for washing and cleaning <p>In addition the women explained that they had also used their increased available time for other activities that would not be considered drudgery including:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased time to create enterprises <input type="checkbox"/> Increased family time and increased conversation within the family Within the focus group, 2 women who had started their own enterprises felt that this was a useful, productive activity that also influenced the aspirations of their children. <p>As a consequence it is considered that this outcome has been evidenced and the circumstances of women has somewhat improved and is scored as 1.</p>
Evidence	<p>Baseline Report Monitoring Report</p> <p>Questionnaire for Users Questionnaire for Non Users</p> <p>Statistical analysis of questionnaire findings</p> <p>Interviews with stakeholders</p>



Outcome Indicators	Increased discretionary time (immediate outcome)
Situation	
Justification	<p>A focus group discussion took place during a site visit on the 06/07/15. The questions used to initiate a discussion with the women’s group from the village explored their sense of time saved from the introduction of the biogas unit and the creation of increased discretionary time.</p> <p>It was clear from responses that the women felt they had increased discretionary time and that this was used for a variety of household activities and leisure activities including:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased leisure time <input type="checkbox"/> Increased time to start enterprise activity <input type="checkbox"/> Increased family time and increased conversation within the family <p>When asked what else they would like to do if more time could be released from drudgery stakeholders reported:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Improved skills for installing and maintaining the biogas units <input type="checkbox"/> Increased recreation time
Evidence	<p>Baseline Report Monitoring report</p> <p>Questionnaire for Users and Non users</p> <p>Statistical analysis of questionnaire findings Interviews with stakeholders</p>

Outcome Indicators	Increased sharing – men take on work that is normally considered that of women (intermediate outcome)
Situation	



Justification	<p>A focus group discussion took place during a site visit on the 06/07/15. The questions used to initiate a discussion with the women’s group from the village explored their sense of shared activities, i.e. that men in the family took on part of the activities typically assumed to be the responsibility of women.</p> <p>The responses suggested mixed experience of this across the group with several women reporting that there was no change in the distribution of labour in their household, yet others reported that their husbands had become involved in cooking activity, as the process was simple and quick to use. The majority of the women also reported that the men in the village already had their own chores to do including working on farms, collecting animal fodder, etc and that this felt fair.</p>
Evidence	<p>Baseline Report Monitoring report</p> <p>Questionnaire for Users and Non---users Statistical analysis of questionnaire findings</p> <p>Interviews with stakeholders</p>

Outcome Indicators	Increased perception of family well-being (intermediate outcome)
Situation	
Justification	<p>A focus group discussion took place during a site visit on the 6/7/15. The questions used to initiate a discussion with the women’s group from the village explored their sense of improved family wellbeing.</p> <p>The women reported much less smoke in the living areas and improved respiratory health. Additionally they reported having more energy as it takes much less time and effort to clean the house and cooking utensils and prepare food.</p> <p>In relation to the biogas unit they felt there were fewer mosquitoes although there had been 1 reported case of Dengue Fever The mosquitoes were predominantly in one small area where some dung was disposed of.</p> <p>Additionally some of the women had been creating a bio slurry fertiliser to use on crops in their paddy fields and their gardens. They reported improved growth and a healthier organic growing area.</p>
Evidence	<p>Baseline Report Monitoring report</p> <p>Questionnaire for Users and Non---users Statistical analysis of questionnaire findings</p> <p>Interviews with stakeholders</p>
Other Learning	



5.2 Direct Payment Mechanism

- As yet no direct payments have been made to the communities, however as covered previously in the report the likely mechanism for direct payments has been debated and it is likely that a credit union will be formed in the community enabling the women to receive funds easily and potentially create a fund that can be re-invested in other enterprise development.
-



6. ANALYSIS OF W+ RESULTS

6.1 Current Performance

W+ Domain	Very Much Worse (-3)	Much Worse (-2)	Somewhat Worse (-1)	No Change (0)	Somewhat Better (+1)	Much Better (+2)	Very Much Better (+3)
Income/Assets	0	0	0	0	0	0	0
Time	0	0	0	0	1	1	1
Education/Knowledge	0	0	0	0	0	0	0
Leadership	0	0	0	0	0	0	0
Food Security	0	0	0	0	0	0	0
Health	0	0	0	0	0	0	0

- For the purposes of this verification only aspects of the time domain were considered and so a score of zero has been applied to other domain areas. That is not to say that the project has not had positive effects upon all other domains but merely that these have not been subject to verification.

6.2 Non--Permanence Risk Analysis

- At this stage there are no identified steps to address non--permanence risks. However the main risk as identified by the verifier is the failure of biogas units functionality, should they receive little or non maintenance.
- This risk is identified, as there have been concerns around the level of training received by some women in the community, as they have been unable to attend all the training sessions offered.
- The likelihood of this risk effecting permanence is low, as the sense of community spirit and shared responsibility is high . At present the HIVOS team report failure rates of only 2.5% across the whole Indonesia programme. In addition the HIVOS team has addressed this by taking mitigating action in the form of additional training and regular servicing of units.



7. VERIFICATION (AUDIT) CONCLUSION

W+ verification period: **1/10/2014 – 1/4/2015**

The project complies with the verification criteria for projects set out in the W+ Standard and has been implemented in accordance with the project description

Net women's empowerment benefits	Year/Month	Baseline	Project benefits
Increased discretionary time	Verification Period 1	16,041,962 hours	Improved crop productivity through the use of bio slurry fertiliser
Reduced feeling of drudgery		2,005,245 time units	Increased aspirations of children and young people in the village and enterprise development begins at micro level
Increased sharing of household work			Increased confidence of women
Increased perception of wellbeing by women			choosing to develop enterprise activity
N/A	Verification Period 2	N/A	
	Total	16,041,962 hours 2,005,245 time units	



APPENDIX 1: PHOTOGRAPHS FROM SITE VISIT





