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Period of shame

The effects of menstrual hygiene management on rural women and girls' quality of life in Savannakhet, Laos.

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Abstract

The purpose of this thesis was to investigate how rural women and girls' menstrual hygiene management (MHM) affects their life-quality and performance in everyday life. The thesis analysed the opportunities, abilities and motivation they had in performing MHM and how it affected their social and economical opportunities. From this, conclusions were drawn on how MHM affects their life-quality. A concurrent mixed methods approach was implemented where qualitative data was gathered through group interviews and quantitative data through closed questionnaires. The results were analysed through a combination of the FOAM-framework and Sen's capabilities approach.

The results showed that not all women had sufficient access to toilets, water, panties and sanitary pads. Together with an absence in social support and cultural norms that perceive menstruation as taboo, these factors had negative consequences on their life-quality. It restricted them in their access to a good health, education and income-generating activities. The effects are however subjective; not all women saw their practice as problematic. The results merely showed that not all women had access in exercising their capabilities, which could lead to a decreased level of life-quality. Individuals as well as societies could thus benefit in taking MHM into consideration in the development discourse.

Keywords: MHM, menstruation, women, girls, capabilities approach, FOAM-framework, life-quality, Laos, Savannakhet

Wordcount: 14999

List of abbreviations

FOAM	Focus on Opportunity, Ability and Motivation
GNP	Gross National Product
JMP	Joint Monitoring Programme
MHM	Menstrual Hygiene Management
PRDO	Department of Provincial Rural Development
RTI	Reproductive Tract Infection
SNV	Stichting Nederlandse Vrijwilligers
SPSS	Statistical Package for the Social Sciences
SODA	Social Development Alliance Association
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation
WSP	Water and Sanitation Program
UN	United Nations
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Fund
UTI	Urinary Tract Infection

Foreword and acknowledgements

The more I read up on women's role in water, sanitation and hygiene (WASH), the more I discovered that despite the strong connections menstrual hygiene management (MHM) had to WASH and development, it had received far too little attention in the development discourse. Having experienced difficulties with managing my own menstruation I started to wonder how this might look in developing countries where products such as clean water and menstrual pads are not readily available.

Being of Asian descent, I had a personal and specific interest in the development of this region. I therefore chose to do my research, fieldwork and internship together with SNV Netherlands Development Organisation in Laos who shared my interest in MHM. Except for this thesis, I have also used my fieldwork to compose a report and a project proposal for SNV. There are therefore some similarities between the works.

It has been a challenging journey both mentally and physically; a humbling journey I am glad that I have done and that I will never regret or forget. Not only have I grown wiser but my life has also been enriched with wonderful people along the way. My fieldwork would not have been made possible without the cooperation with SNV Development Organisation in Laos. A special thanks goes to Mrs Thea Bongertman and Mrs Phetmany Cheuasongkham who have guided me in my work in Laos and given me useful feedback along the way. I am furthermore grateful to all the people who have participated in the research; without your contributions, this thesis would not have been possible. I am grateful for the support I have received from Kristina Jönsson and all my classmates in composing this thesis and in steering me onto the right path in the most doubtful moments of writing.

Thank you, 'Khop Chai Lai Lai'.

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1. Introduction: Framing the shame

“Leaky, liquid, flowing menstruation - a uniquely female experience associated with sexuality - is constructed as a shameful form of pollution that must be contained. Menstruation, then, is constituted as a problem in need of a solution. “

Chris Bobel (2010:31)

According to Bobel (ibid.), women usually associate menstruation with something negative. In developing countries, this negativity is associated with the women’s lack of possibility to manage their menstruation in a safe, hygienic and dignified way (Unilever Domestos et. al. 2013). The conditions for women to maintain a good hygiene during their menses differ a lot globally. Due to the lack of economic means and knowledge about menstruation and thus allocation of money to buy pads¹, some women and girls do not have a sufficient access to sanitary products (Biran et al. 2012:59). Some women who do not have enough private space to change, wash and dry cloths that are used as pads, are forced to re-use half-damp and still semi-soiled materials (ibid., 58). Furthermore, those who cannot afford to buy sanitary pads resort to using materials such as old rags, leaves and toilet papers. In some instances where these things are not available, they may not use anything at all (Irura 2008:5).

It has been proven that a lack of menstrual hygiene by using unhygienic materials to absorb the blood increases the risk of contracting infections, which could in turn affect the woman’s reproductive health (ibid.). Poor menstrual hygiene management (MHM) has shown to be related to lower reproductive tract infections (RTIs) and urinary tract infections (UTIs). Untreated RTIs can in worst-case lead to adverse pregnancy outcomes and/or infertility (Biran et al. 2012:56). The ties between menstrual hygiene and reproductive health are therefore strong.

Having poor access to clean and functioning toilets in schools poses a challenge for girls in countries such as Sierra Leone, Bolivia and the Philippines from managing their menses in school (UNICEF 2013). The toilets may for example be locked or do not offer a satisfactory level of privacy (Biran et al. 2012:59). Considering that a girl will in average menstruate 13 times a year, 4 days per period, the girls are missing out on about 2 months of studies every

¹ Pads in this case refers to all kinds of pads with the main purpose to be used as an absorbent during menstruation; no matter what material it is made of and if it is re-usable/disposable etc.

² Right to human dignity, right to equality, bodily integrity, health and wellbeing.

year (52 days) (Irura 2008:5). Other reasons from abstaining going to school is related to the girls' fear of staining their clothes with blood, cramps and difficulties in concentrating due to pain and anxiety (Unilever Domestos, et al. 2013:18).

Although menstruation is a natural process that almost half of the world's population will experience, it is considered taboo in many countries; a shameful and private matter one should not share with anyone else (ibid., 17). It has gone so far that even mentioning the subject in some countries has become taboo. This has then resulted in many girls not knowing what menstruation is at the onset of their first period (menarche) (George 2013:6). There are also a lot of cultural beliefs and myths related to menstruation. These beliefs restrict the women's freedom of movement by for example limiting them from sleeping in their own home, bathe or cook. Together with a lack of knowledge about MHM, these practices can have serious health implications (House et al. 2012).

Despite the linkages researchers and policy makers have made between water, sanitation and hygiene during the last 50-60 years, they have failed to fully acknowledge the connections WASH has with MHM. MHM remains taboo among academics and professionals; even among engineers dealing with open defecation (Patkar 2011:1). As expressed by Laura Fingerson (Bobel 2010:30), “[i]t is odd that such an integral and routine event in women's lives, [...] has generally been ignored in social research.” Considering the ties MHM has in fulfilling the Millennium Development Goals (MDGs), it is surprising that MHM has received little attention among decision makers and policymakers. Poor MHM and its health outcomes create an obstacle for achieving universal goal 2 (primary education) and goal 5 where one of the targets is to improve the reproductive health for all by 2015. Even sustainability (goal 7) is included into the equation since the waste management of used menstrual pads and tampons have great environmental impacts (Tjon A Ten 2007). Ignoring MHM would ignore the women's right in living a safe and dignified life. It is underlined in the World Conference on Human Rights and in the United Nation's Platform for Action “*that the human rights of women throughout the life cycle are an inalienable integral and indivisible part of universal human rights.*” (Patkar 2001:1). It is a human right² for women to be able to manage their menstruation in a safe and dignified way (George 2013:5; Unilever Domestos, et al. 2013:17). In conjunction with this, it has also been stated that MHM is

² Right to human dignity, right to equality, bodily integrity, health and wellbeing.

essential for women and girls to live a productive and healthy life (Mahon and Fernandes 2010:100).

This lack of attention has however recently been acknowledged in creating the post-MDG agenda by the World Health Organization (WHO) and the United Nations Children's Fund's (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation³. Before being able to include it as a tangible target however, the existing knowledge-gap on MHM needs to be filled. There is a lack of information on for example how the MHM situation looks like in working places, on the teachers' and health workers' knowledge about MHM and the costs and benefits of MHM (economically, regarding school, work and absenteeism); issues that are strongly related to development (JMP 2012:10).

Not much information exists on MHM in Southeast Asian countries. Most of the research and reports address the situation in Africa and South-Asia. In Laos, such material is non-existent. This thesis will therefore attempt in bridging the established knowledge gap and contribute with some baseline information on the situation in Laos. The aim of this thesis is to connect the women and girls' wellbeing to development; their personal challenges with MHM may affect more than their own quality of life. By researching on Laos, this study will therefore contribute to the larger discourse on MHM and the limited research on MHM in a Southeast Asian country.

1.1. Purpose and research question

The research problem in this thesis is the lack of information on what effects MHM has on women and girl's everyday life and what cost and benefits the practice can result in. The purpose is therefore to look into how MHM is affecting the women and girls' life-quality in their daily life. Drawn from the research problem and purpose, the following research question has been formulated to guide this study: *How does the menstrual hygiene management of the rural women and girls of Savannakhet, Laos affect their quality of life?*

The following sub-questions will help to guide the research:

- What are the MHM practices of women and girls in Savannakhet?
- How does their access to water, toilets and pads look like?

³ JMP for Water Supply and Sanitation is a team of independent technical and policy experts who monitor and influence the sector development (JMP nd. a.; JMP nd. b).

- How do their feelings and cultural attitudes towards menstruation look like?
- What knowledge regarding menstruation and MHM do they possess?

This thesis has chosen to focus on rural villages in Savannakhet province mainly due to its accessibility through Stichting Nederlandse Vrijwilligers (SNV) Netherlands Development Organisation who acted as gatekeepers. Their earlier research and work in the area as well as established contacts served as a great advantage. Savannakhet is also a unique province in the sense that it holds the highest female population of all the provinces (<460 000) and one of the highest rates of open defecation; 56.6%. This can be compared to the capital Vientiane that has the lowest with 1.5% and Saravane province with the highest; 77.5% Moreover, it inhabits one of the highest population (>900 000) and is the most densely populated province (Lao Statistics Bureau 2012:22, 35).

1.2 Definitions

MHM is a new concept with few existing definitions yet to be properly scrutinized. Those that exist have received mixed criticism of not being inclusive enough (Patkar 2011). A clear explanation will therefore be offered before moving on to any further discussions.

WHO and UNICEF (2012:16) offer the following definition:

1. *Women and adolescent girls use a clean material to absorb or collect menstrual blood and this material can be changed in privacy as often as necessary for the duration of menstruation. MHM also includes using soap and water for washing the body as required and having access to facilities to dispose of used menstrual management materials.*

The London school of Hygiene and Tropical Medicine (Biran et al. 2012:56) offers a narrow definition in order to simplify the measuring of the access to MHM:

2. *...[G]ood menstrual hygiene management (MHM) is defined as being able to use a clean and dry menstrual management material, either a locally made or mass manufactured pad/tampon or a cup, which is changed at least once per day for the duration of a menstrual period and being able to use soap and water for body hygiene.*

What these definitions fail to mention is the software side of MHM; the feelings, emotions and knowledge associated with MHM. Even if the women get a good access to facilities and products such as clean toilets, water and pads, they need to possess the proper knowledge to maintain this access in a hygienic and safe way (George 2013:11). The definitions also fail to mention the social norms, cultural and traditional aspects that have shown to affect the women's practice significantly in some countries (George 2014). As will be seen later in the thesis, the hardware and software sides of MHM are interdependent. Having a good access to the hardware does not exclude the possibility of women still being assigned to sleeping in sheds. Having the proper knowledge but not any facilities will not support the women in maintaining a good MHM practice either.

It is understandable that the hardware aspect of MHM has been the main focus since the hardware components "*are those most commonly included in monitoring programmes*" (Biran et al. 2012:62). It however attempts to simplify a complex issue by ignoring the immeasurable parts of MHM and the specific social contexts. As Archana Patkar (2011:3) mentions, *[...]good MHM has to be more than just facilities for washing and disposal*. If issues such as shame, silence and disgust are not addressed, the women will not be able to live safe and dignified lives (ibid.).

Having scrutinized the existing definitions of MHM, this thesis will adapt its own definition. Considering that this study will mainly depart from qualitative data based on subjective thoughts and feelings, this thesis will combine the definition given by WHO and UNICEF together with the concerns Archana Patkar has identified. The following sentence will therefore be added to definition 1.: *MHM also includes the freedom of movement, dignity and the absence of shame and fear related to menstruation.*

1.3 Disposition

In the following section, the background to the sanitation situation in Laos will be discussed followed by a literature review of the existing MHM literature. The next section will then outline the thesis' 'methodology; including its limitations, validity and ethical considerations. The following part will then explain the theoretical framework and motivate on its applicability on the thesis and in answering the research question. The fieldwork findings will sequentially be discussed in the analysis by applying the two theoretical frameworks. Lastly,

the conclusion will discuss the analysis; if and how it answers the research questions and what the results mean in relation to the development discourse and the existing MHM research.

2. Background

2.1 WASH in Laos

Laos is a land-locked country (see picture 1) governed under a one-party communist state. Although the country has good prospects in graduating from the UN's Development Program's list over the least-developed countries by 2020, improvements in several aspects are still needed. The infrastructure is still underdeveloped which can be seen on the rural road conditions (CIA 2014).

Picture 1 – Map over Laos



(CIA 2014)

Map over Savannakhet, Laos and the neighbouring countries

The proportion of the population with access to improved sanitation has increased through the years. Since the 1990's, the coverage of improved sanitation⁴ in Laos has increased three-fold with positive prospects in reaching their MDG target; 60% coverage by 2015. Although the urban coverage has reached 87%, the rural areas of the country still need improvements with under half of the population having access to improved sanitation. Open defecation is still

⁴ An improved type of sanitation facility is defined as one that hygienically separates human excreta from human contact.

widely practiced among the rural population (45%), meaning that even if Laos manages to achieve their 60%-target, it is still not enough from a public health point of view (Lao PDR and the UN 2013:154) (see table 1 and 2). Moreover, it is stated that poor sanitation and hygiene alone are the underlying causes of at least 6000 premature deaths per year in Laos (WSP 2012:1).

Table 1. MDG target

	1990	1995	2000	2005	2011	Target 2015
<i>7.9 Proportion of population using an improved sanitation facility</i>	-	17%	26%	45%	57%	60%

Table 1 shows Laos' progress in achieving target 7.9 in MDG goal 7 (to halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation).

(Lao PDR and the UN 2013:137)

Table 2. Improved sanitation

		Estimated coverage 2013 update			
		Improved	Shared	Other unimproved	Open defecation
Rural	1990				
	1995	12%	0%	10%	78%
	2000	17%	0%	10%	73%
	2005	31%	1%	8%	60%
	2010	45%	1%	6%	48%
	2011	48%	1%	6%	45%
		Estimated coverage 2013 update			
		Improved	Shared	Other unimproved	Open defecation
Urban	1990				
	1995	61%	3%	10%	26%
	2000	65%	4%	8%	23%
	2005	75%	4%	6%	15%
	2010	85%	5%	3%	7%
	2011	87%	5%	2%	6%

The tables show the progress and estimated coverage of improved sanitation in urban vs. rural Laos. Note the high differences in access to improved sanitation and practice of open defecation between rural and urban areas.

(WHO-UNICEF 2013)

From an economic point of view, it was estimated that Laos lost about 193 million USD due to poor sanitation and hygiene in 2006 (WSP 2012:1). Investing in water and sanitation has thus been propagated to benefit Laos economically. It will contribute in reducing the cost of treating health issues and the loss of workforce/productivity due to poor health; not only the person who is sick but also the family member who has to stay at home to care for the sick

(Sanitation and Water for All 2012:1). Considering the ties proper MHM has to health, this information points to a probable national economic profit in investing on MHM.

In the Northern provinces of Laos (Oudomxai, Xiengkuan, Vientiane and Champassak), it has been observed that the MHM of women in the remote rural areas are poor. They do not have access to menstrual pads and in some instances panties as well. Those who are able to use cloths wash them in secluded areas. Some women are not allowed in to their homes during their period and have to spend those days in a small hut nearby. The women also follow dietary restrictions during their periods of not consuming anything cold and to eat a lot of garlic and ginger. Blood poisoning (septicaemia) and UTIs in relation to poor menstrual hygiene have also been observed (Azikiwe 2013, see appendix 1). These results are confirmed by Rashid (2013) (see appendix 1) to be similar in Savannakhet. Before exploring this possibility further, a literature review will outline the major MHM areas of research framed within women's role in WASH. When referring to women and girls, I am primarily addressing women and girls in developing countries.

2.2. Approaching MHM

2.2.1 Women and WASH

Moving to the current literature on MHM, it has been found that more reports and research on MHM are found to address women's role in WASH. This can be seen in the WHO's declaration of 2005-2015 as the decade of water; attempting to eventually being able to provide full access to water and sanitation for all people globally (Montgomery and Elimelech 2007). Moreover, the 28th of May 2014 marks the first global celebration of the Menstrual Hygiene Day in an attempt to create awareness of the right to manage menstruation hygienically (WashUnited 2013). Already back in 1977, women's central role in managing and providing water was recognized during the UN's water conference in Mar del Plata. The following years, reports and research have continued to discuss men and women's equal importance in WASH and their differing needs in hygiene. It has for example been found that some women who have no access to a toilet nearby hold themselves throughout the day and only relieve themselves after nightfall. This has seen to increase the risk of for example contracting urinary tract infections, chronic constipation and being exposed to sexual assaults in the dark (Fisher 2006).

2.2.2 Education

One of the subjects that has received more attention within MHM is education and whether an improved access to girl-friendly toilets⁵, pads and knowledge on MHM in school can increase the girl's attendance and enrolment rates. The data is however conflicting. According to Adukia (2013:1) the 'menstruation hypothesis', which states that menstruation creates an impediment for girls to go to school, is one of the reasons to the high dropout rates among girls who reach puberty. This belief has contributed to the construction of girl-friendly toilets with enough space and privacy for the girls to change and wash themselves. However, the limited MHM data is also conflicting. While the qualitative data is pointing towards linkages between school sanitation and girls' enrolment rates, there is still not enough quantitative data that can support the hypothesis. The same goes for the data on school dropout; most of the data is of qualitative nature and the quantitative data is conflictive.

Some reports have chosen to use self-reports, which makes the data unreliable when working with such a sensitive subject. It is also difficult to know whether the absence is directly related to MHM. Students would cover for friends by reporting another reason for their absence or head home after half a day in school; after the attendance has been taken (Biran et al. 2009:60). While some studies did not find any relation between the access to sanitary napkins and school attendance, Scott et al. (2009:4) found a 9-14% improvement in attendance when sanitary napkins and/or MHM education was provided at the researched schools in Ghana. Considering how interrelated the different factors within MHM is, the study is criticized for not taking into consideration the girls' age and already existing MHM provisions in the school in their analysis (Biran et al. 2012:60). Due to the secrecy and shame related to menstruation, the girls would not tell the teacher the true reason to why they are not feeling well. The teacher would in turn not make the immediate correlation (ibid., 59).

In an article review on MHM and its health effects, it was found that educational interventions could have a positive effect on improving the girls' MHM practices and reduce social restrictions. There was however, a lack of quantitative evidence proving that MHM reduces school absenteeism in this case as well. Moreover, the evidence does not tell whether an increased level of knowledge on MHM affects their school attendance. Just because one

⁵ Girl-friendly toilets include space to change and wash in privacy, separate toilets for boys and girls and good access to water and soap (IRC 2006).

knows more about MHM does not exclude the possibility that one stays at home due to shame, abdominal pains or other MHM-related issues (Sumpter and Torondel 2013:1, 13).

2.2.3 Environmental aspect

The discussion on the environmental aspects within MHM has also gained attention in the literature. Depending on what pads the women use and what kind of toilet they have access to, their disposal can affect the environment in different ways. Due to the shame and fear related to menstruation, some women dispose pads in secrecy; in the garbage or in the pit latrines. The pads together with other items such as condoms and pampers that are thrown into the pits fills them up faster than expected and may also result in blockages when they need to be emptied. Modern types of pads contain so-called superabsorbent polymers, designed to better soak up the menstrual blood. When thrown into the toilets, they will soak up the water in the wastewater treatments and may cause blockages in the sewer systems (Unilever Domestos, et al. 2013:18; Bharadwaj and Patkar 2004:6).

In a major literature review where 85 water and sanitation professionals were consulted, it was concluded that few efforts have been made in trying to produce and sell affordable reusable or biodegradable pads for the poorest of the poor. Waste management training has so far not included the issue of washing reusable pads and disposing them in an environmental way. No one knows the impacts the current disposal of pads has on the environment (Bharadwaj and Patkar 2004:4). What we however know is that over 12 billion pads and tampons are thrown away around the world every year (Biran et al. 2012:60).

2.2.4 Cultural beliefs

It has been established in the literature that girls in developing countries usually grow up without knowing what menstruation is and how to take care of themselves during their period. The advice shared to girls from the mothers may also be incorrect or consist of cultural beliefs that restrict them from living a normal life (House et al. 2012:22). Although there are some similarities among the beliefs and cultural practices, there are also a lot of local differences depending on religion and social contexts, which need to be identified case by case (ibid.:25,26). In Lebanon, a quantitative study on 389 adolescent girls showed that 89.5% did not follow the recommended menstrual hygiene practices. Instead, they adopted sociocultural beliefs such as not showering during the first three days of their menstruation or during the whole period (Santina et al. 2013).

The literature further discusses the acceptance of different sanitary products in relation to the cultural and environmental context such as water, comfort, affordability, probability of leakage etc. Research is currently done in different countries on the preferences in using alternative menstrual pads such as locally produced re-usable sanitary pads and homemade disposable sanitary pads (House et al. 2012:64,67-69). In Kenya, a mixed methods research on the use of menstrual cups⁶ showed, despite some scepticism in the beginning, the acceptance and confidence in using the cup increased when the girls gained more knowledge on how to use it and had tried it on (APHCR 2010). In Uganda however, it was recommended that menstrual cups should not be introduced due to the local norms in inserting a foreign object into the vagina. Girls might also share menstrual cups; resulting in a health risk (Scott et al. 2013). These findings open up possibilities in the alternatives of menstrual protection and emphasize the importance of knowledge sharing and knowing the cultural context and social norms.

2.2.5 Future trends

Having addressed the trends in the MHM literature, several authors still emphasize the lack of attention on the effects of MHM (Bharadwaj and Patkar 2004; Sommer, Kjellén and Pensulo 2013; Sommer 2011). There is thus still a great demand for more knowledge and research conducted on the abovementioned challenges as well as the direct impacts poor MHM have on health and the economic impacts and losses related to MHM (Keiser 2013, appendix 1). Through a systematic review of 14 articles addressing health and social effects of MHM, it was concluded that there is still no understanding on how MHM impact on women and girls' freedoms, health and the effects it has on their life-quality (Sumpter and Torondel 2013:13). The hope is that this thesis will contribute with something new into the MHM literature by addressing some of these neglected areas while answering the research questions. In doing so, it will also automatically contribute with information on the cultural beliefs, what pads that are most preferred and open up for a discussion on the environmental aspects in the Laotian context.

⁶ A menstrual cup is a small cup made out of medical silicone that is inserted into the vagina to catch the blood flow.

3. Methods

3.1 Philosophical Worldview

This thesis has adopted a worldview influenced by pragmatism and combined it with a mixed methods approach. This means that the focus is on answering the research problem and less on the methods that are used. The most important thing is to find an answer to the question and any approaches qualitative and quantitative are allowed; ‘the end justifies the means’. Although methods will be mixed, the qualitative approach will be the dominant method since the focus is to explore the women’s subjective opinions and in understanding the problem from their view. It will thus be a pre-dominantly inductive study where the findings guide the research rather than the theory. Theory is applied in explaining the findings and not the other way around (Bryman 2012:69-70, Creswell 2009; Scheyvens and Storey 2003:57). Drawing from this, the study will also adapt an interpretivistic and constructivistic position. In interpretivism the aim is to understand humans’ behaviour rather than to explain it; a view advocated by Max Weber and his German term *Verstehen* (Bryman 2012:16). The ontological worldview of constructivism, considers the world to be a social construction that is constructed by social actors and their actions. The knowledge about reality is changing constantly. This thesis will therefore only present one specific version of reality (ibid.,19).

3.2 Mixed methods

Another reason for using a mixed methods approach is the lack of research on MHM. This approach gives the research its exploratory nature (Morse and Niehaus 2009:15) and will contribute with another dimension to the issue. Due to a miscalculation in population by the Social Development Alliance Association (SODA); a local non-governmental organisation that assisted in gathering the quantitative data, the size of the quantitative data will not be representative. They also had some challenges in translating the questionnaires; changing the meaning of some of the questions. Not all of the answers are thus compatible with the aim of the thesis and will therefore not be presented. This was however solved by making the following decision. The quantitative data will serve as a supplemental mode of enquiring data (cf. Morse and Niehaus 2009:14) and only complement with descriptive data. Its role in this study is to increase the sample size and act as a complementary method and assist in describing the women’s situation (cf. Morse and Niehaus 2009:86,87). The qualitative material will give the research its depth whereas the quantitative data will explore and enrich the description of the women by assisting with basic information about the MHM situation in

Savannakhet. A concurrent and embedded design has been applied; meaning the data was collected at the same point of time and that the quantitative data has been embedded into the qualitative data (Creswell 2009:210). The results from and analysis of the quantitative and qualitative data will be presented together in the analysis (Morse and Niehaus 2009). Due to its lack in representativeness, this thesis will be a case study, and only represent one specific version of reality; the results cannot be generalized (Mikkelsen 2005:92).

There are some limitations in using mixed methods. Some researchers point to the incompatibility in mixing methods as they are considered to belong to two different paradigms. Mixed methods have been said to be lacking validity since there is currently no consensus on how it should be measured and evaluated. There also exists a question regarding the definition of mixed methods (Morse and Niehaus 2009:19-20). Some see it as a mix of a qualitative and quantitative method while Morse and Niehaus (2009:20) state that the mix can be between two qualitative or quantitative methods. It is however considered that these limitations do not affect the validity of this study per se. Since the aim of this thesis is not to evaluate, measurability does not become an issue. As the thesis will mix qualitative and quantitative data, the problems of defining mixed methods will not affect this study. It is however acknowledged that using mixed methods has its limitations and one has to be careful of these drawbacks when designing the study.

An emic and etic perspective will be applied onto the methodology. Emic represents the understanding of the insider's view on reality and how she views the world. Information like this is often gathered through open-ended questions and allows for different realities from the respondents. The etic approach chooses to have an external perspective on reality and tries to make sense of the answers through a scientific analysis. In this case, the emic answers that have been gathered through qualitative field-methods will be analysed from both an emic and etic approach (Given 2008) by combining the Focus on Opportunity, Ability and Motivation (FOAM) framework and capabilities approach.

3.3 Fieldwork methods and material

This case study is based on primary and secondary sources of data. The primary sources consist mainly of qualitative and quantitative data gathered through a month's fieldwork (see appendix 1) in Savannakhet, Laos, complemented with interviews with midwives working for the United Nations Populations Fund (UNFPA) and informal e-mail correspondence with

researchers working with WASH and/or MHM. The secondary sources consist of reports, articles on MHM and on Laos that are available through the Internet as well as books for the theoretical framework. In order to obtain a high reliability of the sources, most of the literature used are from well-established organizations and recognized authors within WASH and/or MHM. The sources also complement each other in constructing reliable data where the secondary sources indicate previous trends in MHM, which are then compared to the findings in the primary empirical data.

SNV Netherlands Development Organization and its staff acted as gatekeepers as they had already established projects and contacts in the area. They supported in organizing all the practicalities such as transport and interpreters. The fieldwork-material has thus also resulted in a report for SNV (Chin in press). The site for the data gathering was set in three districts (Atsaphon, Phin and Xonnabouli) in the rural parts of Savannakhet province, Laos. The choice of the villages was based on the grounds on getting as high variation of women as possible in terms of their sanitation coverage, ethnic diversity, accessibility to larger towns and the presence of schools. In terms of physical access to the villages, this showed to be a problem due to the earlier mentioned bad road quality but was solved by adding other villages (see appendix 2).

Thirteen research assistants from the department of provincial rural development (PRDO), the local departments of health and education, Lao Women's Union and SODA, was involved in gathering the quantitative data. Due to the sensitivity of the questions, only female assistants could participate in the fieldwork. There were however two male supervisor that accompanied the fieldwork who assisted in double-checking the questionnaires. This did not cause any problem to the fieldwork and actual interviews. The quantitative data was gathered through closed questionnaires; set questions with multiple choices (see appendix 3). Prior to the fieldwork, the research assistants participated in a two-day workshop organized by me in cooperation with SNV on menstruation, qualitative versus quantitative fieldwork and the FOAM framework. They also helped in adjusting the questionnaires to the local context and in interpreting the questionnaires into Laotian. One day was then devoted in testing out the questions in a nearby village; giving time for final adjustments before the actual fieldwork. These activities were done in order to increase the reliability and strength of the empirical data. Two teams of six respective seven people conducted the gathering of quantitative data in parallel. In total, four quantitative questionnaires were developed; for senior and class

teachers, school directors and headmasters, women in households and for health workers. The thesis will mainly present the results from women in households. The other forms are more relevant for the report than for the aim of this academic research. In total, 284 women in households answered the questionnaire with zero dropouts.

I collected the qualitative data in cooperation with an interpreter by using open-ended, semi-structured questions during group interviews. Some data might have been lost in translation since all the answers are based on the translation given by the translator. Having to use a translator has however also been to the study's advantage since she has helped in analysing the underlying meaning of the answers and putting them into the right context. Cooperating with a research has also given the research access to several people's interpretation of the findings. In total, 14 group interviews were conducted with women in households and 4 group interviews with schoolgirls. Depending on the amount of participants, the length of the interviews varied from 40 minutes up to 1,5 hour. The individual interviews with the midwives from UNFPA were conducted to gain more background information about the women's MHM situation in Laos. The e-mail correspondences with researchers were made to gain more information on the current MHM research and on conducting MHM fieldwork in Laos (see appendix 1). In interviewing the schoolgirls and women, a participatory approach was used in finding out their MHM situation (cf. Sommer 2010:274). The girls were asked to draw their dream toilet and then describe the contents of the pictures. The women were asked how they would design their toilet to provide for their MHM needs if they won 100000LAK⁷ on lottery that they had to allocate in building a toilet. In this way, it became possible to get a perspective of what priorities they have when it comes to MHM and what they would like to have access to.

Except for some demographic questions, the questionnaires and qualitative questions were based on the FOAM-framework; including questions that covered both hardware (toilets, water, pads) and software (culture of shame, taboo, knowledge) (see appendix 3 and 4). All the questionnaires were based on the FOAM-framework. The qualitative data together with observation notes were transcribed by me after each day out in the field and coded into different categories with the help of the FOAM-framework after the fieldwork. The analysis will thus also follow the structure of the FOAM-framework. For the quantitative data, the interviewers double-checked the answers after every interview before handing it to their

⁷ 1 USD ≈ 8.000 LAK (Laotian Kip) (Oanda 2014)

supervisor who re-checked them. SODA coded all the variables and entered the answers into the Statistical Package for the Social Sciences (SPSS) (version 21) after the fieldwork. After entering the data, we cooperated in checking for errors and it was cleaned through consistency checks on the first five per cent of the results and complemented with random checks to examine the overall integrity of the dataset. The data was then explored by using descriptive statistics and graphs (Analyze>Descriptive Statistics>Frequencies). For the questions that offered multiple answers, all the answers had to be merged by being defined into sets before they were analysed (Analyze>Multiple Response>Define variable sets). As the quantitative data will only be used in the descriptive phase of analysis, only univariate analysis has been used. The results are presented with the help of tables, histograms and bar-graphs (Pallant 2007). Due to the possibility to stay out in the villages for an extensive period of time, participatory observation was also practiced (Scheyvens and Storey 2010: 39, 59).

While no political issues were touched upon in the interviews, it should be taken into consideration that Laos is still governed under strong communistic influences. Any kind of action taken; who, where and when to interview, needed to be approved by the government. Prior to the fieldwork, an official letter containing purpose of visit, place and time was handed in to PRDO for approval. Once approved, changes to the fieldwork schedule were merely impossible. A PRDO-representative and a representative from the district accompanied me during the fieldwork and reported back to their respective bosses. Doing fieldwork in Laos thus meant the work was executed under specific circumstances. Although it has to a certain extent limited the freedom in conducting the fieldwork, collaborating with the government increases access to their resources in terms of gatekeepers and gives the study validity. The government moreover showed an interest in receiving the results of the fieldwork. The village chiefs and the women are also more eager to collaborate; giving a possibly greater access to the respondents than if the fieldwork had been done independently. Having a fixed schedule meant that no delays were acceptable, resulting in efficient work from all the parties.

3.4 Methods of selection

It was a challenge in creating focus group discussions with the women and girls despite using semi-structured and open-ended questions. This was partly due to the difficulties in facilitating a group discussion through a translator but also due to the cultural context. The women are not used to talking about menstruation and it was apparent that the older the

women were, the easier it was for them to open up. The younger girls would not speak unless spoken to. This was explained by the research team to be a sign of respect for the elder/authorities and/or because of shyness. The mix of shyness and cultural tradition among the women and girls resulted in group interviews rather than group discussions.

While the initial plan was to only include menstruating women and girls, this distinction was difficult to make since the selection of women had to be done by the village chief; who was in most of the cases, a man. Although the criteria were given to him, women of all ages, menstruating/non-menstruating women and girls showed up and the shyness made the distinction difficult to make. Some women were on contraceptives⁸ whereas others were not having their period due to pregnancy or lactation. Furthermore, it was found that the women, who were not menstruating, could contribute with useful information for the research. Convenience sampling was used for all data gathering where the women who were available participated. In certain cases, I had to wait until nightfall since the women would be busy working. So, although the selection of villages was purposive, the selection of participants was non-purposive (Scheyvens and Storey 2010:42-43).

The difficulties in researching on schools and the difficulties in finding schoolgirls who have reached menarche resulted in a focus on women in households. When interviewing some of the girls in the class, the teacher would stop teaching the whole class; meaning that we were disrupting their education. It was also difficult to find participants among the students from an ethical point-of view. It was up to the teacher to find girls who had reached menarche in their class. The teacher would find these girls either based on their own knowledge or ask the class directly. When an authority figure orders the girls to answer, this may force the girls to admit something they do not feel comfortable doing. Since menstruation is taboo and the girls were reluctant in answering most of the questions when being selected, interviews with schoolgirls were discontinued.

Although cooperating with SNV served as a huge advantage in terms of accessibility, their previous work in the area also served as an obstacle. Although it was clearly addressed with the participants that they will not be compensated in any way, SODA warned that there is a risk they were not answering truthfully and exaggerating; believing the poorer situation they

⁸ Women who take certain contraceptive pills or have inserted a contraceptive implant may as a result stop menstruating completely (amenorrhea) (NHS 2013).

portray, the more compensation will they be given by SNV or the government. We therefore made sure to clarify the purposes of the research prior to any interviews.

3.5 Validity and reliability

Qualitative reliability was achieved by documenting the methods in detail. The consistency is seen in replicating the use of the FOAM-framework albeit in a new context; menstrual hygiene. Qualitative validity; the accuracy of the findings, have been obtained through saturation in the responses and by cross-referencing and triangulating with the quantitative data and existing literature. Rich and thick descriptions have been used in describing the setting to offer the reader a clearer picture (cf. Creswell 2009:190-192).

Concerning the quantitative data, it is to be used as a supporting source of data. Validity in this case is thus different from a purely quantitative research where a large sample size may be needed and having to motivate the possibility to generalize the findings in time and place. In this scenario, the quantitative data have been triangulated as mentioned above (cf. *ibid.*, 162-166).

3.6 Ethical considerations

Targeting such a sensitive issue, the anonymity of the participants had to be taken into consideration. All the answers were given under confidentiality. No names will be mentioned. When examples are given, only the names of the districts will be mentioned and not the specific villages so to preserve the participants' anonymity. Prior to the interviews, the participants were informed about the aim of the research and what their contributions will result in. The participants gave their informed consent orally before the interview and were given the option to stop the process at any time (see appendix 3 and 4). In respect of the culture and local practices, I chose to dress modestly and wear a traditional skirt (*sinh*) during the fieldwork (cf. Creswell 2009:89.90; Scheyvens and Storey 2010:142-143, 146-147). This decreased the power imbalance that may occur when people from different socio-economic statuses meet. In order to gain trust among the women, interviews sometimes had to be conducted in informal settings; in their houses or out in the open at night (cf. Scheyvens and Storey 2010:151). In some cases the village chiefs gathered the women to an official meeting place such as the school or temple. In one case, a man showed up; feeling obligated to fill in

for his wife since she could not attend. The orders from an authority figure questions the ethics of the interviews but are counteracted by asking for informed consent.

Furthermore, I tried to be reflexive over my own positionality; my sex, social class, ethnic and religious background. It was apparent that my appearances and background mattered. According to one of my colleagues, my Asian/Lao appearance made it more important for me to wear the *sinh*. If a white woman had worn pants, the people would brush it off as a common mistake by a ‘*falang*’ (foreigner), but looking as a native, I should know better. My appearances and being a female has been observed to make it easier for the women to open up (cf. Sultana 2007).

3.7 Delimitation

Gender will not be discussed in this thesis. When looking into the gender-based approach to public health, it is acknowledged that men and women are different and have different needs and experiences. Including gender however would also assume that the needs of men and the relationship between men and women are scrutinized, since gender does not solely deal with the needs of women (WHO 2007). When addressing gender, one usually refers to the social constructs of men and women whereas this thesis will take its point of departure from a biological function. Excluding a gender-based approach for this thesis however does not deny the complexity of MHM where societal gender roles matter (WHO nd.) as well as including men and boys in any MHM project. Their knowledge and understanding in the subject will reduce teasing and increase access to sanitary products (House et al. 2012:56).

4. Theoretical framework

Using solely the FOAM-framework in analysing the results is not sufficient. Although FOAM-framework will help to explain how and why the women practice MHM, it does not fully explain how their practices affect their life-quality. To complement FOAM-framework, the capabilities approach by Amartya Sen (2001) will be incorporated in analysing the results.

Combining the FOAM framework with the capabilities approach will give a more inclusive analysis where the two theories complement each other. They address similar areas of concern but from different perspectives. Sen offers the criteria for obtaining a high quality of life

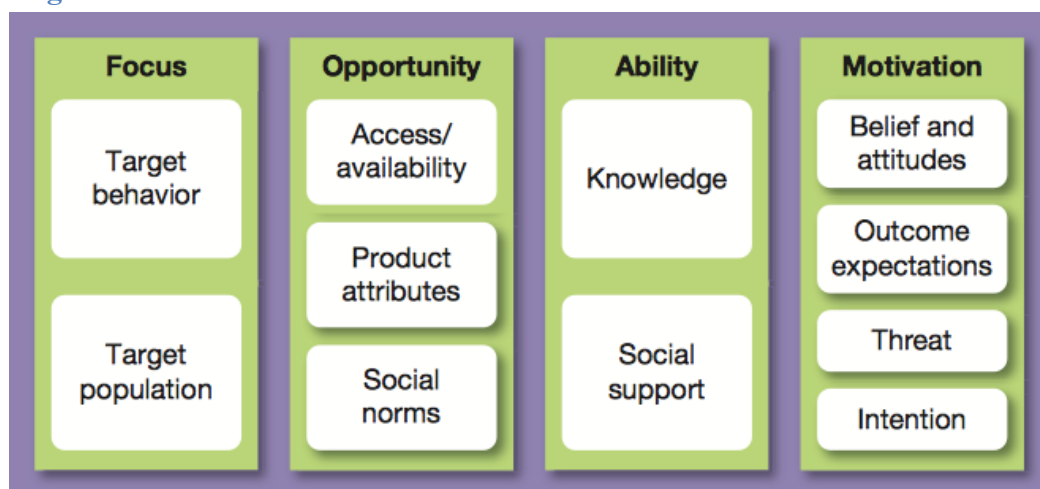
while the FOAM-framework analyses whether they have the pre-requisites in obtaining these criteria. The FOAM-framework will thus analyse the women's current access to their freedoms whereas the capabilities approach will analyse what effects this access have on their life quality and ability to participate in everyday life. The theories are also considered suitable with the thesis' philosophical worldview due to their emphasis on subjective opinions and flexibility in being applied to specific cases.

4.1 FOAM-framework

The FOAM-framework is a practical framework developed by the Water and Sanitation Program (WSP) to support the design of effective sanitation programs and analyse sanitation behaviours. The framework is developed by adapting several behavioural theories⁹ such as the Health Belief Model and Stages of Change to analyse and increase the practice of sanitary behaviour such as hand washing. It addresses the hardware as well as software aspects of hygiene management such as product attributes and knowledge. Due to its focus on sanitary behaviour, this framework is believed to be applicable in framing the existing challenges within MHM as well.

FOAM-framework analyses the factors that might affect a person to practice sanitation in a certain way; it divides these into four categories addressing factors such as social norms, knowledge and expectations related to sanitation (Coombes and Devine 2010) (see figure 1).

Figure 1. FOAM-framework



A figure over all the categories included in the FOAM-framework

(ibid., 5)

⁹ Other theories that FOAM-framework is based on: diffusion of innovation theory, health promotion, quality-of-care research, social cognition models and theories from social psychology (Coombes and Devine 2010).

For every category, there are guiding questions in order to analyse the specific conditions in one's research. To adapt the framework into this thesis' focus on menstrual hygiene, the questions have been adapted by for example substituting hand-washing with MHM and access to soap with access to pads etc.

The first step is to identify one's *focus*; who is the target audience and what is the targeted behaviour? The next step is to see whether they have the *opportunity* to perform the desired MHM behaviour. These consist of mainly external factors, which the person usually does not have much control over. To analyse their opportunities, three categories are studied:

- Access/availability: Are menstrual pads, water and toilets available in stores and accessible in households?
- Product attributes: Are the attributes of the toilets, water and pads encouraging or deterring the women and girls from using them? For example comfort, hygienic, odour etc.
- Social norms: Do the social norms support or deter MHM?

The third step addresses their perceived and actual *ability* to perform MHM; is she capable of performing MHM? This is investigated by looking into the following categories:

- Knowledge: What level of knowledge do they have on menstruation and menstrual hygiene and in what way does this affect their practice?
- Social support: How does their social support from mothers, friends and teachers look like (physical, emotional informational and practical)?

The last step discusses a person's self-interest and *motivation* in performing MHM; do they want to perform MHM? In doing so, four areas of concern are studied:

Attitudes and beliefs: How do they perceive and understand menstruation and MHM and how does this affect their perception of their locus of control?¹⁰

Expectations: What outcomes do they expect from practicing good MHM? What expectations do they have from others in practicing good MHM?

Threat: What threats do they relate to poor MHM in terms of perceived susceptibility (risk assessment) and perceived severity (potential level of severity)?

Intention: What intentions do they have in practicing good MHM?

¹⁰ Internal locus of control = I can control whether to practice good MHM
External locus of control= whether I can practice good MHM is not up to me.

4.2 Capabilities approach

“What is each person able to do and to be?” This question, as expressed by Nussbaum (2011:18), is the centrality in the capabilities approach and lays the ground for the work of Sen (2001). According to Sen (2001), measuring happiness through people’s level of materialistic resources does not give an inclusive picture of the individual’s quality of life. It does not take into consideration subjective feelings and freedom of choice that might affect the person’s wellbeing. The capabilities approach was thus developed as a counter weight to the mainstream positions within welfare economics and political philosophy and ethics. It wanted to conceptualize the human’s ability to participate in decision-making and the freedom it has to act the way it wants to (Frediani et al. 2014:3).

The theory tries to give development a more complex shape. Measuring the Gross National Product (GNP) of a country does not mirror whether its people is able to express themselves freely and/or have access to public facilities (Sen 2001:3) such as water and sanitation. The capabilities approach puts the individual in the centre; she has a voice and it needs to be involved in shaping her own destiny; they are agents of their own freedom. Quality of life should not be measured in commodity but in the freedom of choice an individual has (ibid., 24). According to Sen (2001:4), expanding people’s freedom is the way to achieve development; it is both the means and ends. Individual freedom is needed in order for people to influence their lives to eventually reach development. The level of development will then be measured by the amount of freedom the people possess. The higher level of access the individual has to his/her freedom, he/she will be able to live more freely (ibid., 53). This approach can be connected to the FOAM framework where the women and girls’ freedom to practice MHM are much related to the opportunities and abilities they are given.

Sen continues by explaining that every individual’s instrumental freedoms can be roughly divided into five categories; political freedoms, economic facilities, social opportunities, transparency guarantees and protective security (Sen 2001:10). By enhancing the people’s instrumental freedoms, development will be reached (2001:33). He however underlines that these five freedoms are only suggestions; the list is much more complex and long (Sen 2001:38). Basic capabilities such as avoiding starvation, being able to live a long and healthy life and all the capabilities associated with being able to count, read and write are included in measuring the individual’s life-quality (Sen 2001:36). All five instrumental freedoms are

interconnected. As an example, improving the social opportunities of one individual may in turn have a positive effect for her to be more politically active. In some situations, a person's freedoms can however also come in conflict with each other. For example when the economic or social changes come in conflict with tradition and culture, it is up to the person who find her/himself in this situation and need to live their life in this situation that needs to make the decision on how to prioritize. It is therefore important they get the freedom to choose/affect the decision. In order for people to take a well-informed decision, education is in many cases required (Sen 2001:30, 319); one of the categories that are also mentioned in the FOAM-framework. This once again shows the interconnections between the freedoms. Although the capabilities are evidently interconnected, this research will mainly focus on the social opportunities and economic facilities since they are most relevant in analysing the results. Below follows a short explanation of the two instrumental freedoms.

Economic facilities – the chances people have in using money to spend, produce or exchange other products. It is explained that these opportunities are restricted to whatever means are actually available to be distributed. Exchange rates as well as market prices will affect the possibilities as well.

Social opportunities – the opportunities available for the individuals to educate themselves and take care of their health; being able to live better. Social opportunities are emphasized as a pre-requisite for being able to exercise one's political freedom and make use of the economic facilities (Sen 2001:38,39).

In Sen's (2001:15) eyes, there are also a lot of different forms of unfreedom in the world. Famine, the lack of basic sanitary facilities and basic human rights are some examples of these unfreedoms. The relations between the capabilities approach is also found in the current WASH-literature. There are more and more indications pointing towards the implications WASH has on health as well as the contributions WASH has on the economical and social development of countries and societies (Fisher 2006:foreword). The literature acknowledges that women play a key role in alleviating poverty and in achieving social transformation due to their heavy workload; taking care of the household and trying to participate in income generating activities at the same time. It has therefore been seen that international development assistance would do better by improving women's status in low-income countries (Ray 2007:422, 423).

4.2.1 Women's capabilities

Sen (2001:189-203) advocates the importance in the free agency of women and promotes a complementary view on the women's participatory role as agents of change. Before, the society would strive for the wellbeing of women through equal treatment of all. Although this is not wrong, the focus has now moved on in treating women as free agents and not passive actors. These two views are closely related to each other. Women are now seen as people who can choose and take responsibility. They too have abilities that can help them excel in life. Improving women's earning power, ability to earn an income, read, write and educate themselves has shown to have a positive effect in improving women's agency. Turning them into agents, getting to among other things, participate in the workforce and earning their own money will thus increase their level of wellbeing. Women who work outside of their homes and who earn their own income have shown to contribute to women's empowerment and social standing since they will have more to say in where the money should be allocated (Sen 2001:189-203).

The individual has a responsibility to act or not act and should not be merely seen as a passive entity. Focusing on women as agents is important due to the effects it has, not only on themselves but also on the rest of their family and household. It has been shown that "*women's empowerment within the family can reduce child mortality significantly*" (ibid., 193). Women's wellbeing thus has a strong connection to their children's wellbeing. Giving women the opportunity to educate themselves, voice their opinion and make their own decisions gives them a greater ability to make informed decisions regarding their own body. If one were to see the research problem from Sen's (2001) capabilities approach, a good practice of MHM would imply that the women and girls possess an active role to make informed choices and decisions about their MHM.

4.2.2 Merging theories

In merging the two theories, they strengthen each other's argument. Both theories put the individual's interests in focus; not the household nor the community. The individual however act and live in a community with social rules where interaction is inevitable; which is addressed in the FOAM-framework through the individual's social norms and social support. The capabilities approach is also shown to not focus on wealth and numbers. It touches upon immeasurable factors that are also brought up in the FOAM-framework; such as opportunities, social support and perceived abilities. Although immeasurability is also one of

the human capabilities' weaknesses, the thesis' qualitative focus on the participants' opinions means it has no bearing in this case. Another strength as well as weakness of the capabilities approach is that it is a flexible tool. Due to its general nature it is up to the person using the approach to apply it in the way deemed suitable. If the person is biased, this will affect the final analysis (Robeyns 2003:65,55). Applying another theoretical framework will assist in counteracting this weakness.

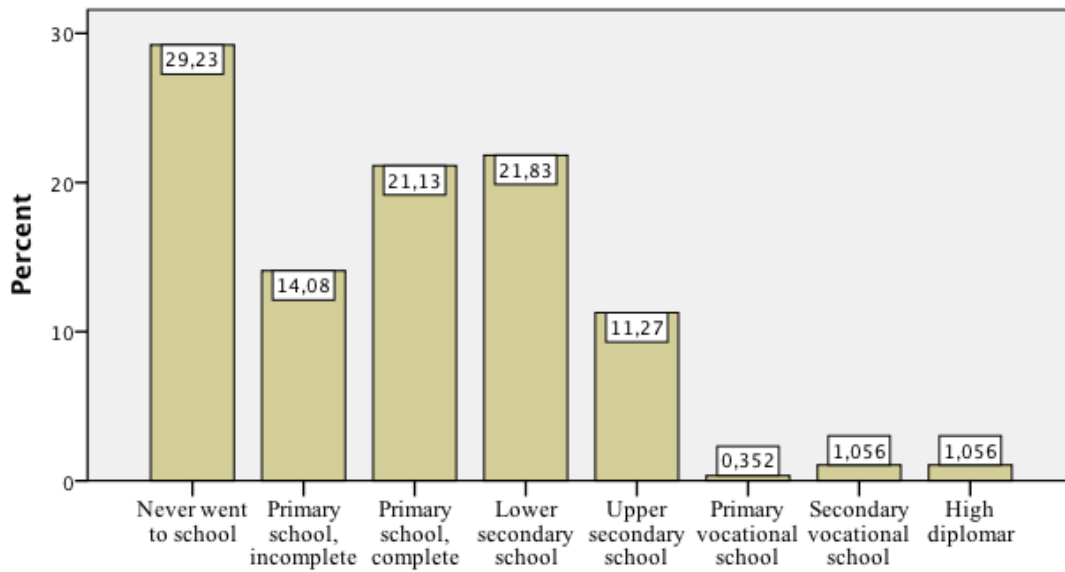
5. Results and analysis

Below follows a presentation and analysis of the results from the fieldwork structured according to the FOAM-framework and analysed through the FOAM-framework and the capabilities approach. All the numbers and data are derived from the fieldwork unless referenced otherwise.

5.1 Focus - Who is the target audience and what is the desired behaviour?

This thesis has targeted primarily women in households but also to a certain extent schoolgirls in primary and secondary schools. The desired behaviour is the opportunity to practice good MHM. The average age of the women interviewed for the quantitative data was 36-40 years old although the dispersion among the ages was quite equal. The highest percentage of households (28%) earns 300.001-600.000LAK/month where the mean of income is accounted to 687.618LAK (see appendix 5 and 6). Most of the women who participated in the qualitative interviews were subsistence farmers. The majority of respondents have no formal education or only primary education (see figure 2).

Figure 2. Level of education



The level of education among the women who answered the quantitative questionnaires

5.2 Opportunity -Does the individual have the resources to perform MHM?

5.2.1 Access/availability

All of the women have some kind of access to a water source with the majority of households getting its water from boreholes (25%). Some of the households also have several sources of water they can choose from. Other kinds of sources of water can for example be dug wells, rainwater harvesting, and wells. Although the quality of the water was not tested, it was observed that some of the water had a strong unpleasant smell. Some villages also suffer from water shortage during the dry season; November-March.

Only 56% of the households have access to toilets. Of these 56%, 66% owns their own toilet whereas the rest have access to a shared toilet. Only 49% of the 284 women choose to use a toilet during menstruation. The normal construction of toilets in the villages is so called pour-and-flush toilets that roughly consist of a squatting area connected to a septic tank. By pouring water down the hole, you flush the excreta down to the septic tank. Without water, the toilets will therefore not function (see picture 2).

Picture 2. Pour-flush toilets in school



School in Namakkeua village, Atsaphon district

In the schools, the girls have a limited access to functioning pour-flush toilets and water. Only some schools offer separate toilets for boys and girls. In other cases, the toilets do not have functioning locks; deterring the girls from using them especially during their period. Even in cases where the toilets worked well, the girls would rather run home and use the toilet at home fearing they might leave some blood and smell behind in the school toilets. The girls however said they would still go to school when they have their period. This however does not indicate how much time they loose out on in class by using the toilet at home. Although the data indicates that menstruation may not be the number one cause to school dropouts in these cases, the lack of adequate facilities could very well be a contributing factor. As expressed by Kirk and Sommer (2006:6), interrupted attendance, insufficient learning leading up to poor results could result in dropouts. One of the girls in Atsaphon district who had dropped out of school motivated that she did so because she could not understand the teacher and felt stupid. It has also been proven by several authors that “[e]ducation provides opportunities for upward economic mobility” ...”and gender equality in education and economic opportunity has been associated with a broad range of social and economic benefits.” (Adukia (2013:1). Menstruation may also limit their participation in school. The girls may hesitate to go up in front of the class or stand up to answer questions for the fear of leaking and staining themselves (Kirk and Sommer 2006:8).

In rural Savannakhet, baths are taken out in the open; outside one’s home with the help of a scoop and a big barrel of water or near a stream (see picture 3). Since the baths are taken out in the open, the women would wrap a piece of cloth around their body while showering. When cleaning the lower part of the body they would scoop water upwards by carefully

lifting up the cloth. When showering the upper part of the body they would unwrap the cloth and pour water in-between the body and the cloth. The showers are also taken outside during menstruation.

Picture 3. How to shower



A woman washing her clothes and taking a bath in Phin district

As shown in table 3, 54% of the women use disposable pads during their menstruation while almost 22% still use old cloths. The column marked ‘Percent’ shows the total number of people using the different categories of menstrual protection. Since some of the women use more than just one material, they were given the option to choose multiple answers. The number of answers (frequency) thus amount to 375 instead of 284.

Table 3. What kind of materials do you use?

	Frequency	Percent
Old cloths	81	21,6%
Pads (disposable)	203	54,1%
Nothing	33	8,8%
Wear double sinhs	58	15,5%
Total	375	100,0%

The results of a multiple choice question showing that far from all women use pads during their whole period.

Those who wear sinhs shower every time they change; in average 3 times/day or up to 5 times/day. The women who wear the disposable pads would change at home where no one can see them. They can buy them either at the local village store or at the markets. When purchased, they are usually stored and hidden in their closets. Furthermore, disposable pads are not accessible to all women partly due to financial reasons. Some of the women have expressed they have never tried using pads since their household do not have the resources to allocate money to buy pads and/or panties. Some of the women would however like to try if

they were given the chance. Other women only have money to buy a limited amount of pads, meaning they would only use them during the days with heavy bleeding or when they have to leave the house. The schools do not provide their female students with any pads in case of emergency.

5.2.2 Product attributes

Although some women and girls may have access to facilities and menstrual products, the attributes are in some instances deterring them from using them. According to SODA (2014:14), some of the women expressed in relation to the questionnaires that they felt ashamed and not safe in having to share a toilet. One woman in Phin district said, having to defecate at their neighbour's made her uncomfortable and she had trouble to perform. She and her daughter would rather wait until sundown before relieving themselves. This however, made her worry about their security in having to go out at night. Not all of the households understand the point in using a toilet. Defecating openly at the river not only removes the excreta from the scene but it will also act as a natural bide; decreasing the cost of toilet paper. This however poses a challenge from a health point of view considering that some of the families get their water from the river for bathing and washing (see picture 2). This also supports the earlier explanation of how achieving the MDG sanitation goal is not enough from a health cost point of view.

Other chooses to go out to the woods with a shovel and dig a hole to defecate in. Both of these options of open defecation could be creating a time-restriction for the women since they are wasting time on finding a private place to defecate in. It is stated in the literature that a lack of improved sanitation can result in a welfare loss through the additional time (20 minutes extra per day) they have to spend in searching for a private space to defecate in (WSP 2009:31). Adding to the time-restriction, the women dispose the used disposable pads by burying them out in the forest or near the house. The women consider this to be the optimal way to keep the environment clean. Although some burn them, others think this will create a bad smell. Burying them in the forest will also prevent the pigs and dogs from picking them up. Some of the women said they would only sneak out to the forest at night since they are too ashamed to let anyone see them go out. If they bury them during the day, they would make sure to hide the used pads on themselves so no one can see them. The attributes in open defecation and in burying the pads consequently do not seem to be optimal in these cases.

When the women were asked what they would invest in if they had the resources to design a toilet of their choice (see appendix 4), they prioritized not only the construction of a basic toilet (since they do not have access to one) but also a ‘beautiful’ toilet like the ones they have seen in the city. Their description of a ‘beautiful’ toilet includes a tiled toilet with wallpaper, a mirror, good access to water and cleaning tools such as detergents and brushes. The girls in schools on the other hand were asked to draw their dream toilet. Most of the girls would draw similar components such as separate toilets for boys and girls, good lighting, cleaning tools such as detergents and brushes and a water tank (see appendix 7).

The lack of private showers may pose as an obstacle for the women to clean themselves properly during their period. Having to change the disposable pads at home where no one can see them means they do not have proper access to water. Some women find the pads to be uncomfortable even if they have never tried them before. They consider them to be bad for their health by blocking the blood from exiting the body. In this sense, the product is deterring them from using it. This problem will be further discussed under *9.4.3 Threat*. Other women however prefer the pads. It provides freedom for them to move around, they do not leak as easily and they are comfortable; not as thick as the cloth.

In terms of the cost of disposable pads, a packet of three pads cost around 3000LAK/package. 62% of the women answered that they spend 3000LAK/month on pads. This information together with table 4 shows that far from all women use pads during their whole period. Those who answered ‘other’ use the pads only when they can afford to buy them or when they have an appointment outside their home.

Table 4. When do you use the pads?

	Frequency	Percent
During the whole menstruation	142	42,9%
Only when I bleed heavily	67	20,2%
Only when I need to leave the house	113	34,1%
Other	9	2,7%
Total	331	100,0%

The results of a multiple choice question showing that less than half of the women use pads during their whole period.

5.2.3 Social norms

According to Tilley et al. (2013:308-309), the social norms have to be taken into consideration in order to construct toilets suitable for women; without attributes that cause fear, shame or disgust. Following the local social norms related to MHM in Savannakhet, menstruation is a personal matter that should be taken care of in privacy. Because of this, it does not provide any support in practicing MHM in a proper and hygienic manner. Some mothers would not advise their daughters about menstruation; resulting in them not knowing what menstruation is and how to practice MHM. This was apparent in the group discussions where it was initially extremely difficult for the participants to talk about menstruation. It was also shown in the questions that were posed by the women during the interviews; for example how often they should be menstruating and why they have menstruation.

The unwritten rules seem to tell the women that menstruation is dirty and smelly. Some would not tell their husbands that they have their period until he approaches her for sex. One woman would not even tell her husband then. She would just refuse to sleep with him. Telling the husband about your period would deter him from wanting to sleep with you since he consider you to be dirty and smelly. One husband would even advise his wife to make sure no one notice that she has her period (by not soiling her clothes with blood). Some women would take advantage of this and lie to their husband that they are still menstruating just to avoid having sex. The social norms do not seem to take the women's needs and opinions into consideration. Other women said that their men would notice if they have their period by their smell. This avoidance in mentioning menstruation within the family and with the rest of the community is supported in the literature as well. A multi-country study of sexual maturation made by the Forum of African Women Educationalists in Uganda found that the 'culture of silence' was limiting the girls from accessing information and reinforces the taboo surrounding menstruation (Kirk & Sommer 2006:2).

5.2.4 Summary

The analysis of the three categories shows that not all women have the freedom and opportunity to perform MHM. A lack of access to toilets, showers and pads, partly due to an already established lack in economic facilities together with the poor attributes, limit their social opportunities. Furthermore, the social norms are telling them sharing information about menstruation is not acceptable and are limiting them from maintaining a good menstrual hygiene. The lack of opportunities in maintaining a good menstrual hygiene may have

negative effects on the girls' opportunities in accessing their social opportunities and economic facilities in acquiring a formal education. The social norms are therefore seen to restrict the women and girls' ability to make informed choices.

Since the capabilities approach is much based on subjective opinions however, some women may define their access/availability and product attributes as sufficient while others think they are hindering them from exercising their capabilities. How this may affect their life-quality may therefore differ from individual to individual. Although some prefer to defecate out in the open, this could be due to their lack of options. Those who have access to a shared toilet at least have the freedom and choice to exercise their capability. The same goes with the access to pads; having the option to choose is a prerequisite. Whether these are informed choices or not however, are difficult to tell. Therefore, an overarching theme in the analysis of their opportunities is, although not all women consider their current situation as negative, not all of them have the pre-requisites, opportunities and choice, in performing proper MHM either.

5.3 Ability – Is the individual capable of performing MHM?

5.3.1 Knowledge

It was found that the women and girls' knowledge regarding menstruation and MHM is lacking. Although four out of the twelve interviewed head teachers at primary and lower secondary schools stated that MHM is part of their school curricula, (see table 5), the girls' knowledge regarding menstruation showed to be shallow.

Table 5. Is MHM part of your school curricula?

	Frequency	Percent
Yes	4	33,3
No	6	50,0
Do not know	1	8,3
No comment	1	8,3
Total	12	100,0

Of all the head teachers interviewed, only four have MHM in their school curricula.

The girls who have been taught about menstruation in school did so either in late primary school grade 5 or in secondary school; when some of the girls had already started to menstruate. The information they were taught was limited and in conjunction with learning about the reproductive system. When they were asked what they had learnt, they could not

specify or was too shy to share. This finding is also supported in the literature where it was found that teaching about menstruation and puberty in school in developing countries is usually not covered in a girl-friendly way. In cases where the human reproductive system has been mentioned in relation to the biology curricula, it has concentrated on the technical aspects and less on the social and emotional aspects (Kirk & Sommer 2006:8).

Some girls stated that they had learnt in grade 5 primary school to take showers, clean themselves more often when menstruating and wash their hands before going to the toilet. This was however the exception rather than the rule. Most of the girls that were asked did not know how to explain menstruation or menstrual hygiene. They would just say that you should wash yourself, buy pads and it is normal; all the girls will get it. You may also experience some head ache and stomach ache. When asked from where they got this advice, some answered their mothers, friends or they just knew. It has however been observed and confirmed by locals that the most probable reason for ‘just knowing’ is through observing their mothers or elder sisters practicing MHM.

The women gave similar answers. Considering the taboo surrounding menstruation, some of the women’s knowledge on menstruation has been acquired from female relatives, friends, through experience or even gossip. They knew regular menstruation is something good since they have heard rumours of women with long periods or no periods at all that have been sick. Some stated they knew what menstruation is. But, when they had to explain, they had no idea what to say whereas a few would advice washing oneself more often, use pads and it will come once a month. Those who said they knew what menstruation is were then also asked who had informed them (table 6a and 6b). The majority answered their mothers.

Table 6a. Do you know why you have menstruation?

	Frequency	Percent
Yes	156	54,9
No	128	45,1
Total	284	100,0

Table 6b. If yes, who taught you?

	Frequency	Percent
School	10	6,4
Mother	86	54,8
Sister	7	4,5
Aunt	10	6,4
Close friend	22	14,0
No one	19	12,1
Other	3	1,9
Total	157	100,0

Table 6a and 6b shows that almost half of the women who answered the quantitative questionnaire do not know why they have menstruation. Of those who knew, almost 55% received the information from their mothers.

As seen in table 7, most of the women responded that no one had given them advice on how to use the disposable pads. The second most common source to get advice from is a close friend and the guidelines assigned on the packages of pads. In the questionnaire, the question was formed as a multiple choice question meaning the women could choose several answers. 281 represent the number (N) of responders. This question was only directed to those who stated that they had knowledge about pads. Those who did not use it and had no idea how to use it was exempted from answering. The sources of information about menstruation and pads therefore differ.

Table 7. Where do you get your advice about pads?

	Frequency	Percent
Mother	47	16,7%
Sister	17	6,0%
Aunt	20	7,1%
Close friend	53	18,9%
No one	93	33,1%
Guidelines on product	51	18,1%
Total	281	100,0%

The table shows that one third of the women do not receive any information about pads.

In addition, many of the women and girls stated they did not know what menstruation was during menarche. They thought something had entered their vagina; an insect of some sort, and it was causing them to bleed. This can be compared to Wateraid's (2009:6) findings in a research on menstrual hygiene on four secondary schools in Nepal. The majority of schoolgirls indicated that they were not prepared or told anything about menstruation; where

it came from etc., before their first period. They were therefore both shocked and scared at the onset of menarche.

There are several reasons for the lack of knowledge sharing. The mothers assume their daughters know more than them; that they have already acquired this information through friends and school. The daughters however, are too shy to go to their mothers with their problems. One mother did not even know her daughter already had her period since she has been hiding the disposable pads under her bed. Another reason is that the mothers do not know what to consult them about. They do not know enough information in order to share. This is also mentioned in earlier research; not all mothers have attended school and are able to advise their girls how to manage their period in school (Kirk & Sommer 2006:6). This is also supported by the fieldwork where one of the women said her daughter had introduced her to the pads instead of the other way around.

5.3.2 Social support

Not many girls are receiving emotional and/or physical support from their mothers regarding MHM. The women in turn may not receive social support from their husbands. Some schools are also reluctant in bringing it up; assuming something as private as MHM should be taken care of in the private sphere of the household. One girl in Xonnabouri district was worried her friends would think she is 'no good' anymore since menstruation is considered bad and smelly. When she was asked what advice she would give to a fellow student however, she said the girl should go to school and not be shy since menstruation is something normal. Among those who were interviewed, 2 of them were under so-called teacher training. They said that the students learn about menstruation in school but only how it is related to sexual reproduction. They themselves have not received training on how they should educate the children on menstruation and thus what kind of social support the students should be given. These findings are reinforced by similar results from a Rockefeller research in Zimbabwe, Kenya and Uganda where the primary school teachers' own lack in knowledge and training have them avoiding the subject in class (Kirk & Sommer 2006:9). It is therefore shown that the women and girl's social sphere is not offering them the social support they may need in accessing their capabilities.

5.3.3 Summary

Although the women and girls may know menstruation is something normal and not harmful, their knowledge on the purpose of having menstruation and how to manage one's hygiene is limited. This lack in knowledge is then partly the cause and result of a lack in social support and social norms. The individual's capabilities are thus impaired by unfreedoms; the lack of opportunities to have a good health and to educate themselves about menstruation and MHM in a supporting environment. Without an education the women are less capable in upholding a good menstrual hygiene and in making informed choices in general. An impaired health can also decrease the female teachers' ability to work during her period and participate in income-generating activities. These results however only establish a lack of knowledge and opens up for further research on what implications this have on their practice of MHM; does an increased knowledge result in better MHM? Similar conclusions to the ones drawn regarding their opportunities can also be drawn here; their perceived abilities and subjective opinions should be taken into consideration as well as their freedom to make decisions.

5.4 Motivation – Does the individual want to perform MHM?

5.4.1 Belief and attitudes

Some women and girls believe they have a greater internal locus of control than others. While some have the option in choosing between different menstrual protections and in practicing proper MHM or not, some do not have the opportunity and control. Many of them however also have an external locus of control in their beliefs of myths that are related to menstruation. MHM becomes something that is out of their control. In general, the women think menstruation is something good. They consider it to be the body's way of getting rid of 'old' blood. The blood that comes out is therefore also considered dirty. They explain this by saying that before their period, they would get angry, easily upset, have stomach ache and head aches. After their period however, all this would go away and their skin would look radiant; have a pleasant 'glow' to it. One of the women even said menstruation before marriage is good since your beautiful skin would help you attract men. Since the blood is dirty, it also becomes important for the women to keep themselves clean. This also explains their choice in burying the used disposable pads.

The women in the villages believe in a lot of traditional practices and myths in relation to what one should do and not do during one's period. Although most of the younger

generations have started to become more lenient with these myths, there are still women and girls who practice them. They would avoid drinking anything cold, not eat papaya-salad¹¹, and not wash their hair or their body during their menses (see table 8).

Table 8. What cultural beliefs do you practice?

	Frequency	Percent
Cannot drink cold drinks or beer	63	10,0%
Have to eat special food	20	3,2%
Cannot wash hair	179	28,4%
Cannot visit the temple	96	15,2%
Cannot sleep with my husband	226	35,9%
Other	46	7,3%
Total	630	100,0%

The multiple choice question shows that cultural practices are still widely practiced among the women.

Some elder women in Atsaphon district do not wash themselves with cold water since they believe showering with warm water will help them to get rid of the bad smell. During their period they would therefore heat up water for bathing. Some would not visit the Buddhist temple since it is considered a sin to pollute a holy place. The outcome of not following some of these practices differs but most of them believe it will prolong their period. Eating papaya-salad can also result in a woman missing out on her period and get white discharges instead. One girl even said her doctor told her to stop eating papaya-salad and tamarinds during her period since this was the cause to her stomach aches and fever. Although the women consider it important to keep themselves clean, some would abstain from washing themselves. One woman in Atsaphon district however said she chose to wash her hair on the third day since that was the time it started to smell. So, although some follow the rules blindly; exerting an external locus of control, there are those who choose to act and reason differently.

In the rural areas of Laos, it is common to wash one's body with a piece of sandstone to get rid of dirt. This practice is however avoided during a woman's period since the woman's body is considered weak and scrubbing might entangle the blood vessels. In Atsaphon district, some women believe there is different quality to their blood. The colour of the blood can tell if there is something wrong with you. Eating papaya-salad for example, increases the risk of getting bright looking blood. Similar beliefs were found in Northern Thailand where thin or

¹¹ Papaya salad or tam maak hoong is a traditional Lao dish consisting of shredded unripe papaya, chilli, sugar, garlic, lime, shrimp paste or fermented fish sauce (padaek), tomatoes and fish sauce.

black blood is a sign of bad health (Ember and Ember 2003:281). Menstrual beliefs and myths are found in other cultures and religions as well. Menstruation is for example associated with evil spirits and black magic in countries such as Tanzania, Bangladesh and Surinam. Abstaining from showering and dietary restrictions such as the practices found in Savannakhet is also found in Afghanistan, Nepal and Iran (House et al. 2012:25-28).

5.4.2 Outcome expectations

It is not possible in this case to know what the women expect from practicing a good MHM. Since some of them do not see a problem in their current practice, they have trouble in imagining how it would look like otherwise. One can only speculate from the other answers they have given. Considering the women think menstrual blood is dirty, they may expect to feel clean and comfortable if they practice proper MHM. Some may also expect that they will be able to feel more comfortable by using pads. Currently, most of the women would work as normal despite having to wear the *sinh* and soiling themselves. 97% of the respondents in the quantitative questionnaire stated they still work as usual. The answer however does not indicate how much of this work is located around their homes and how they feel. Others however, would stay at home during their period; restricting them from their daily work.

5.4.3 Threat

Although some of the women cannot use the pads due to economical restrictions, others have tried but think they are uncomfortable. Even some who have never tried it said that they are uncomfortable. They believe the pads are blocking the blood from exiting their body since the stain of blood on the pad is considerably smaller than the one on their *sinh*. They however also relate their stomach pains to the pads. Some would therefore only use them when they go out and change back to the *sinh* when they are at home. It can thus be perceived that the women may see the pads as a threat to their MHM. The women also seem to be concerned over the threat of infections during their menstruation. Although this may not be a threat in practicing MHM, it is a relating factor. They restrict themselves from eating certain food since they believe the diet will be harmful to their health. Table 9 not only shows a lack of social support through the women's fear of letting people notice they have their period. It also shows the women are motivated in practicing MHM for the fear of getting sick, attracting infections and that other people may consider them dirty. They however do not seem to find MHM to be threatening.

Table 9. What are you afraid of during your period?

	Frequency	Percent
Afraid of other people knowing I am having my period	118	21,7%
Afraid of someone seeing me use the pad	99	18,2%
Afraid of getting sick and getting infections	112	20,6%
Afraid people think I am dirty	167	30,6%
Not afraid of anything	49	9,0%
Total	545	100,0%

The answers to this question show that menstruation is strongly associated with fear and shame.

5.4.4 Intention

Despite the women's conception about the pads, there is also an intention detected among the participants to upkeep a good level of hygiene and health as seen in the table above. They are concerned in cleaning themselves more often and know they will smell if they do not do so. Their intention in building a toilet with privacy and adequate access to water and cleaning tools adds to their objective to practice MHM. They choose to bury the used pads since they believe it to be the most environmentally friendly and clean way. When given the chance, the women would ask about their personal challenges with their periods such as; "Why do I menstruate every single day?" or "Why do I get white discharge?" At the end of the quantitative questionnaires, they were given the opportunity to give further comments. Almost 25% of the respondents expressed a wish to receive more knowledge about MHM. The intention to practice good MHM is thus there.

5.4.5 Summary

The women and girls' cultural beliefs may not always be limiting their social opportunities and economic facilities directly. Living under certain restrictions may however have an effect on their health. Should a capability then come in conflict with tradition and culture such as not visiting the temple, the women should according to Sen (2001) have the freedom to choose and prioritize; which the woman in Atsaphon who choose to wash her hair demonstrated. She also showed that although there are myths, some women have the freedom and choice to break them if they want. Once again, the effects in these cases are subjective.

If the women expect more physical freedom by practicing MHM, some of the women's current situation is restricting them from accessing their capabilities. Being restricted to one's home during menstruation no matter fulltime or part-time, complicates the opportunities to

work outside the home and participate in income-generating activities. The women and girls' perceived threats might therefore have a negative effect on their life-quality as well. The intention to practice MHM also shows that they currently do not have a satisfied access to their capabilities. They want to learn more about MHM so that they can make informed decisions.

6. Conclusion

As stated by Bobel in the introduction and confirmed in this study, menstruation is also seen as problematic and in need of a solution for the women and girls in rural Savannakhet. The analysis concludes that the women and girls' current MHM have several negative effects on their life-quality and everyday life. Although most of them seem to have the motivation and intention to practice MHM and access their capabilities, they are restricted in doing so by their lack of opportunities and abilities. Their lack in access to functioning toilets, water, panties and comfortable pads are resulting in a physical impediment in practicing MHM. The ruling social norms have in turn created a society that lacks social support and where cultural menstrual practices are still common. Furthermore, menstruation is considered taboo and shameful; making it difficult for sharing knowledge in schools and in homes. All of this has resulted in a poor MHM that is seen to have negative effects on their social opportunities in achieving a good health, move around freely and educate themselves as well as their economic facilities in participating in income-generating activities. The analysis has thus identified interdependency in the two capabilities where restrictions to the respondents' social opportunities, have implications on their economic facilities and vice-versa. Considering social opportunities are a pre-requisite in exercising other capabilities such as one's political freedom, the women and girls' poor MHM is having a negative effect on their opportunities in achieving a higher life-quality.

Many of the women and girls' challenges can be identified in the current literature; confirming the effects MHM has on their capabilities. Availability to facilities and pads as well as specific cultural beliefs and knowledge has shown to be highly relevant in describing the situation in Savannakhet as well. There were however some findings that are unique for this specific case. Although the girls' lack of facilities and products are impeding on their education and thus confirming the previous literature, it was surprising that the girls said they

still went to school. The difficulties in interviewing them however show that much more research is needed to confirm this finding. The women's belief in the pads having such negative attributes and that it could result in stomach ache has not been found in other MHM literature. This contributes to opening up the discussion for possible materials in producing affordable pads for the women and girls in rural Savannakhet as well as the best way of disposing them. Moreover, the results confirm that the softwre aspects; feelings, emotions and knowledge play a major role in analysing the women and girl's access to MHM. Girls who are too ashamed to ask their mothers about menstruation is an example of how improving the access of girl-friendly toilets and pads are not enough to assess the complexities of MHM.

In this thesis, combining the FOAM-framework and the capabilities approach have proven to be fruitful in answering the research question. They have complemented each other and offered a better understanding of the respondent's MHM behaviour and how it affects their everyday life. What one has to have in mind though, is that more factors play into the evaluation of the individual's quality of life than those mentioned in the thesis. One's health may for example be impaired by diseases with no relation to MHM and the women's restricted ability in working outside the home could be caused by their double-burden in having to take care of the household at the same time. This reflects the strength in the capabilities approach where several capabilities needs to be taken into consideration and that are interdependent of each other. It also shows how flexible it can be adapted to different cases. Therefore, all of them have to be taken into account when evaluating the individual's life-quality. The flexibility also reflects one of the theory's weaknesses. Its flexibility is dependent on the author's application and ability in analysing the results in a subjective and holistic way. Therefore, an analysis of two capabilities is not sufficient in drawing conclusions on how much MHM contribute directly to a person's quality of life. The findings merely state that their poor MHM indicate a negative effect on their capabilities in achieving a higher life-quality.

Although the findings point to a negative effect on the respondent's life-quality, the qualitative results are derived from the respondent's subjective opinions. Not all of them see their current MHM practice as problematic. Some would for example stay at home while others would still go outside despite their lack in menstrual pads. As mentioned earlier however, their level of freedom and choice in exercising their capabilities may be affecting

their opinion. If they have never experienced using pads, they might see their use of sinhs as sufficient in managing their menstruation. If they do not possess enough knowledge about menstruation, they may not see their irregular bleedings as problematic.

The thesis has not only succeeded in pioneering on the MHM research in Southeast Asia and Laos and in contributing with new data, it has also established that much more research is needed; both qualitative and quantitative. The direct economic and health impacts related to MHM, still needs more research. The thesis has however been able to show there are strong indications that poor MHM have a negative impact on the women and girls' freedom, health and life-quality in rural Savannakhet. Without a good health and knowledge about MHM, it becomes difficult for them to perform in their daily life. This in turn might in the long run impede on their ability in contributing to their own and the community's welfare. In Laos' case, an investment in MHM in relation to WASH could possibly result in a economic benefit. It also shows that including the needs of women can contribute in a better understanding of women's challenges with WASH and in achieving development goals such as inclusive access to improved sanitation and gender equality.

Any implementation of WASH-projects or any kind of development project is thus recommended to consider the implications of MHM. Factors that should be taken into consideration are the improvement of access to facilities and products for women and girls but also breaking the myths through knowledge sharing and to improve the social support. In order to do this, more research on local differences will be needed as well. To reconnect to a previously mentioned statement, it is a human right for women to be able to manage their period in a safe and dignified right. It is therefore time that we respect this right by including MHM into the development discourse.

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Appendix 1. Fieldwork and interview schedule

November, Quantitative and qualitative data collection

District	District	District
25 November	Khokhouanxang & Thamhamleuarm	Xonnabouri
26 November	Phoxakhoun & Phone	Xonnabouri & Phin
27 November	Namakkeua & Termkao	Atsaphon & Phin
28 November	Koutxoung & Dongphoungoern	Atsaphon & Phin
29 November	Nakhaoumeun	Atsaphon

December, qualitative data collection only

Date	Village	District
4 December	Dongphoungern	Phin
5 December	Thermkao	Phin
6 December	Phone	Phin
9 December	Thamkhamleuam	Xonnabouri
10 December	Khokhouanxang	Xonnabouri
12 December	Nakham	Atsaphon
13 December	Houydoua	Atsaphon

Interviews with midwife-nurse clinical training advisors from UNFPA

(Transcript of the interviews available upon request)

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Appendix 2 – Village list

Village List									
Nur	Village (Laotian)	Village (English)	District	Majority Ethnic Group	Secondary Ethnic Group	Population	Household	Sanitation Coverage (March 2013)	Data sampling
1	ຫ້ວຍເດືອ	Houydoua	Atsa	Phouthai		551	96	21%	Qualitative
2	ກູດສູງ	Kuthsung	Atsa	Phouthai		858	136	53%	Qualitative & Quantitative
3	ນາໝາກເກືອ	Namakkeau	Atsa	Phouthai		1 237	186	5%	Qualitative & Quantitative
4	ນາຂາມ	Nakham	Atsa	Phouthai		650	106	100%	Qualitative
5	ນາເຂົາຫີນ	Nakhaomeun	Atsa	Phouthai		662	96	100%	Quantitative
6	ດົງພູເງິນ	Dongphoungoern	Phin	Katang	Laoloum 15%, Phouthai 5%	336	56	52%	Qualitative & Quantitative
7	ພອນ	Phone	Phin	Katang		486	60	9%	Qualitative & Quantitative
8	ເທີມເກົາ	Thermkao	Phin	Katang		219	37	83%	Qualitative & Quantitative
9	ໂຄກຫົວຊ້າງ	Khokhouaxang	Xon	Laoloum	Katang 10%	770	161	40%	Qualitative & Quantitative
10	ໄພໄຊຄູນ	Phoxaikhoun	Xon	Laoloum		1 021	151	1%	Qualitative & Quantitative
11	ຫໍາຄໍາເຫຼືອມ	Thakhamlearn	Xon	Laoloum	Katang 10%	989	130	34%	Qualitative & Quantitative

(Numbers supplied by SNV Netherlands Development Organisation 2013, *SSH4A*.)

Appendix 3. Form 4: Questionnaires for women in households

(English version that has been translated back after modifications were done out in the field on the Lao version)

Name of district	
Name of village	
Name of interviewee, phone number	
Name of interviewer	
Name of quality control advisor	
Date	
Form no	

Good morning/afternoon. My name is ..., we are helping an organization called SNV to conduct a research on menstruation. We would like to discuss with you about your knowledge on menstruation and how you manage yourself during your menstruation so that we can better understand your situation and needs. This study will be the first of its kind in Savannakhet and we hope that you would like to take part of it. The study is led by a university student who will also use your answers for her master thesis in Sweden.

Your answers will be kept confidential. We will not share your names with anyone. If you do not want to answer any of these questions or if you want to stop the interview at any time, just let us know. There are no right and wrong answers in our discussion. So do not be afraid to tell us what you think and know. We thank you in advance for your opinions and your participation in this study.

Oral consent: Yes No

Age:	
Ethnicity:	
Income:	
Size of family:	
Age of menarche:	
Number of daughters:	
Age of daughter(s):	
Education level	

A.

1. Does your household have access to a toilet?

YES NO

(if yes, please specify; shared toilet....., own private toilet.... Other.....)

2. Do you use the toilet?

YES NO (why not?) (skip next question)

3. Do you use the toilet during menstruation?

YES NO

4. Do you think that you have enough access to water and toilet during your

menstruation?

YES

NO

5. Where do you get water for drinking and washing?

1. Piped water
2. Piped into dwelling
3. Piped into yard or plot
4. Public tap/stand pipe
5. Tubewell/borehole
6. Dug well
7. Protected well
8. Unprotected well
9. Water from spring
10. Protected spring
11. Unprotected spring
12. Rain water collection
13. Tanker-truck
14. Cart with small tank/drum
15. Surface water (river, stream dam...)
16. Bottled water
17. other (specify)

6. Do you use soap or detergent for washing your body and cloths?

YES

NO

7. What kind of menstrual protection do you use during your period?

- a. Old cloths
- b. Pad (disposable)
- c. Nothing
- d. Old cloths

8. For how long have you been using the sanitary protection?

.....years

9. When do you use them?

- a. During my whole menstruation
- b. When I bleed heavily
- c. Only when I need to leave the house
- d. Other (specify...)

10. Are you satisfied with the pads that you are using?

Yes ...

No....

Do not know....

11. Where do you dispose the used sanitary pads?

Burn

Bury

Wash

Other

12. From where do you get your sanitary pads?

From the shop I make them myself someone gave me (who.....)

13. How much do you pay for your pads per month?

.....KIP

14. How much are you willing to buy/can afford to pay per month?

.....KIP

B.

15. a. Do you know why you have menstruation?

YES

NO

b. If yes, who taught you?

1. School ,

2. Mother ,

3. Sister ,

4. Aunt ,

5. Close friend ,

6. No one ,

7. Other

16. (If applicable,) Have you talked to your daughter(s) about menstruation?

YES

NO

17. How many times do you have your period per month?

1. Once a month ,

2. twice a month ,

3. more than 2 times ,

4. every two month ,

5. every three month ,

6. more seldom

18. How many times do you change your sanitary pad a day?

Once , Twice , Three times , More than three times

19. Who taught you how to use sanitary pad?

1. School ,

2. Mother ,

3. Sister ,

4. Aunt ,

5. Close friend ,

6. No one ,

7. Other

20. Do you think that menstruation is dirty?

YES

NO

21. Do you clean yourself more thoroughly during menstruation?

YES

No

22. Do you work/do household chores as usual during menstruation?

YES

No

23. What cultural beliefs do you practice during your period?

1. Cannot drink cold drinks or beer
2. Have to eat special food
3. Cannot wash hair
4. Cannot visit the temple
5. Cannot sleep with my husband
6. Other

24. What are you afraid of during your menstruation?

1. Afraid of other people knowing that I have my period
2. Afraid of someone seeing me use the pad
3. Afraid of getting sick and getting infections
4. Afraid people think I am dirty
5. Not afraid of anything

25. What are the challenges/problems you face during menstruation?

.....
.....

Other comments:

.....
.....
.....
.....
.....
.....
.....

Thank you very much for your time and responses in this survey

Appendix 4 – Interview guide: group interviews (women)

Examples of questions discussed

Introduction and objective of the study

Good morning/afternoon. My name is Liyen and I am a university student from Sweden. We are helping SNV to conduct a research on menstruation. One part of the study is to conduct group interviews with women. We would like to discuss with you about your knowledge on menstruation and how you manage yourself during your menstruation so that we can better understand your situation and needs. This study will be the first of its kind in Savannakhet and we hope that you would like to take part of it. The study is led by me and I will also use your answers for my master thesis in Sweden.

Your answers will be kept confidential. We will not share your names with anyone. If you do not want to answer any of these questions or if you want to stop the interview at any time, just let us know. There are no right and wrong answers in our discussion. So do not be afraid to tell us what you think and know. We thank you in advance for your opinions and your participation in this study.

Date and time:

Number of participants:

Village:

Age of participants:

Education level:

Children:

Ethnicity:

Age of menarche:

A

1. Do you use soap to clean yourself with?
2. Where do you get your water and soap from during your period?
3. What about toilets? Do you have access to toilets? Do you use them during menstruation? Why/why not?
4. Those of you who do not have a toilet to use, where do you go to relieve yourselves?
5. What kind of sanitary pads do you use?
 - If made of cloth: How do you clean them and where?
 - If paper pads: How do you dispose them?
6. Why are you using the pads you are using?
7. Where did you get them?
8. Where do you store them?
9. Are you satisfied with the pads you are using?
10. Have you ever tried the paper pads? What do you think about them?/Why not?
11. Close your eyes and picture this: You have won 100 000KIP on lottery. But the lottery states that the money has to go to improve your sanitary situation in your household, what would you do? Would you improve your access to water? Build a better toilet? Buy pads? Think for a couple of minutes. What would you do first?
Open your eyes, now please describe for me. What would you do and why?

B

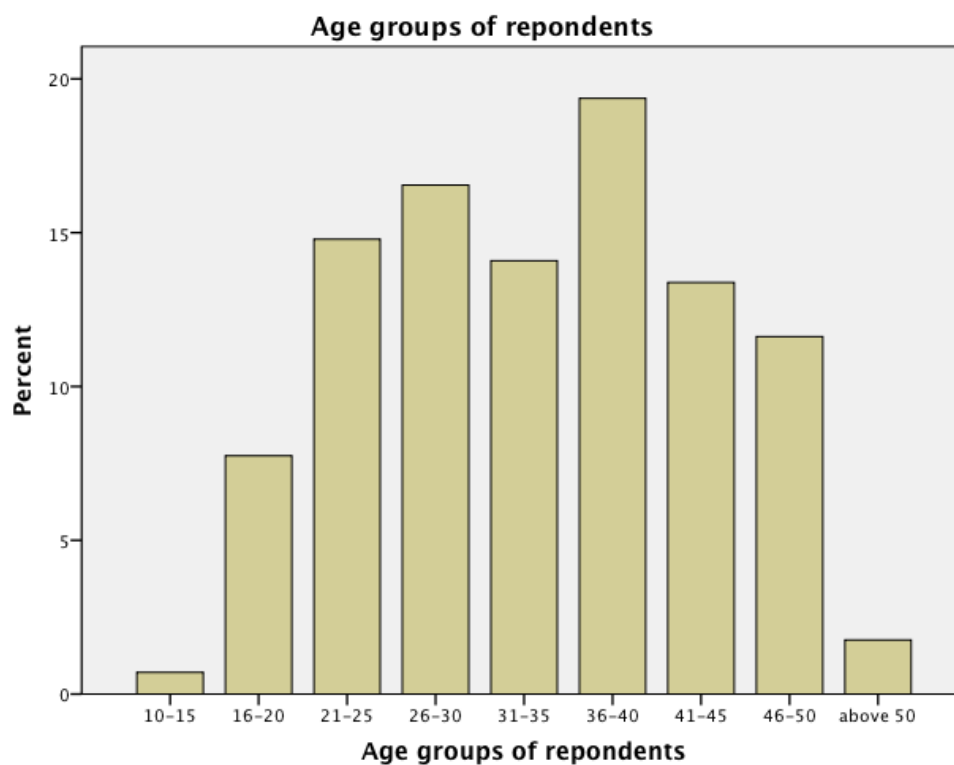
1. Those of you who have daughters, do you talk with your daughters about menstruation? Why/ why not?

2. Pretend that I am your daughter asking you about what menstruation is. How would you explain it to me? (For example, where does the blood come from? Why do I have menstruation?)
3. The information that you just told me, who taught you this information?
4. Did you learn anything about menstruation in school? If so, what?
5. Did you know what menstruation was when you had your first period? What did you think it was?
6. What do you think about menstruation? Do you think that it is something good or bad? Why?
7. Do you clean yourself more often during menstruation? Why/why not? How often?
8. What do you think will happen to you if you do not clean yourself during menstruation?
9. Do you talk with your female friends about menstruation? What do you talk about?
10. Do you do things as usual during your menstruation? Such as chores around the household, working out in the field. If not, why not?
11. Do you eat as normal during your menstruation? Are there any foods you avoid/cannot eat? If yes why?
12. Are you afraid of anything during your menstruation? Why?/why not?
13. Do you talk to your husband about your menstruation? Why/why not?

That was the last question I had for you. I would like to thank you for your answers and that you took your time to participate in this discussion. Is there any other information regarding menstruation that you think I should know? Do you have any questions for me?

**Appendix 5. Age groups of respondents
(women in households, quantitative data)**

Age groups of respondents		
Age	Frequency	Percent
10-15	2	0,7
16-20	22	7,7
21-25	42	14,8
26-30	47	16,5
31-35	40	14,1
36-40	55	19,4
41-45	38	13,4
46-50	33	11,6
above 50	5	1,8
Total	284	100,0



**Appendix 6. Average income per month
(women in households, quantitative data)**

Statistics

Average income per month

N	Valid	275
	Missing	9
Mean		687618,18
Minimum		40000
Maximum		8300000

Missing value= no income

