Baseline gender assessment report

"Upscaling Improved Cookstove Dissemination in Myanmar"

A programme funded by The European Union

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1. Introduction

GERES, through its global initiative StovePlus, designed a program of activities aimed at upscaling improved cookstove sector in Myanmar based on best practices from Cambodia and the region (…) [which is funded by] the European Commission (…).

(…)

This Gender Baseline Report is a document that captures the baseline scenario in cookstove access to the extent possible. (…) This report captures:

- The country level gender indicators, gender in relevant national policy and generally the country level gender analysis through literature search.
- The cookstove sector gender baseline in the demand and supply side with pointers for a gender mainstreamed cookstove dissemination strategy.
- The existing capacity in the implementation team to identify and address gender issues in the programme
- Assesses the existing channels of communication with women on cooking, health and energy issues
- Captures the cultural issues around women's income generation activities.

1.1 Gender in literature survey

According to 2010 figures, the national poverty rate in Myanmar is 32%, with a significant urban-rural gap[1]. The majority of people in Myanmar spend 70% of their income on food. More than 5 million people live under the food poverty line. About 1/3 of children under five years of age are malnourished.[2]

In the 2011 Gender Inequality Index, Myanmar ranked 96 out of 146 countries, ahead of some other regional developing country members[3]. Disaggregated analysis points to gender disparities in some of the poorest rural areas. Women in Myanmar enjoy equal rights in inheritance laws but patriarchal cultural values related to women's roles and responsibilities still shape familiar relationships, contribute to the gendered division of labour and limit women's participation in decision making.
Myanmar has reached gender parity in education as girls account for 50% of enrolment in schools. The reported literacy rate is over 90%, but school attendance beyond the primary level is very low[4].
Myanmar has a high maternal mortality ratio 240 deaths per 100,000 live births. The number of deaths due to pneumonia, COPD and lung cancer attributable to the use of solid fuels in 2004 is 18,100[5].

Although not specific only to gender, poverty, (which typically affects women more than men) is just being recognized by the Govt. of Myanmar. Field research conducted by development practitioners indicate that a large fraction of rural people are living under $1.25 US a day (below the poverty line). With almost 100% of rural households cooking on open fires, the burden of firewood collection falls disproportionately on women. More than 58% of the time, it is the women's task to collect firewood and they spend more than 217 hours a year on this activity (Mercy Corps-Myanmar, 2012).

In 2011, Mercy Corps Myanmar conducted a Household Energy Poverty Analysis (HAPA) in the Ayeyarwady's Laputta township. The survey interviewed 396 households in 70 villages around Laputta to understand household and community level energy access situation. The market research found that 87% of rural households used firewood over 3-stone fires and had no access to more fuel efficient cookstoves due to a deficit or absence of a market. Only 13% of rural household used some kind of fuel efficient improved cookstove. All rural households used firewood as the main cooking fuel. In urban and peri-urban areas, 75% of households used ICS with 35% using charcoal and 40% using firewood. The two principal reasons given for not using an ICS were that the households could not afford one (49%) or that they had not heard about benefits of using ICS (38%). Others indicated that "there were no sellers in their area". 100% of households indicated that they would buy an ICS if it was available at their village at an affordable price.

In 2010, 70% of the population had access to safe drinking water but the access differed between the poor / non poor and rural / urban residents. Only 26% of the population had access to electricity with differences in access between the poor / non poor, rural/ urban. Women suffer the most from lack of access to electricity because of the high economic and health costs associated with using biomass as

[1] BTI Country Report, Myanmar 2012

[2] Food and Agricultural Organization, 2009

[3] United Nations Development Programme: Human Development Report 2011' Sustainability and equity' A Better Future for All, New York

[4] Myanmar Cookstove Market Assessment Report, Emerging Markets Consulting for GERES 2015

[5] as cited in WHO, UNDP, 2009

sources of energy. As a result women spend significant amount of time transporting fuel and cooking also takes longer time.

Women's participation in the labour market (85.7%) is higher than that of men (82.9%)[6]. The share of women in paid employment outside the agriculture sector was around 44.7% in 2010. In the informal segment however, about two-third's of Myanmar women contribute to household income through economic activity.

70% of Myanmar lives in rural areas with two–third of the population working in the agriculture sector. Women usually work longer hours and have less leisure than men. Traditionally women planters in rural areas and street vendors in urban areas are recognized as women's occupation.

1.2 Energy access issues in literature survey

Myanmar is highly forested with 48% (34.9 million hectares) of land area under forest cover. It is however one of the poorest countries in south east Asia.

Country	Per capita GDP $
Myanmar	850
Cambodia	1015
Laos PDR	1400
Thailand	5500

Myanmar is a biomass centred economy. Wood is 70% of the primary energy supply. Households consume more than 70% of the energy produced.

Some energy statistics for Myanmar are given below:[7]

Electrification rate:	13%
%age of households using solid fuels:	95%
National Power Grid Network:	7% (or 4550) of the country's villages
Time spent in collecting firewood:	233 hrs /yr.
Population without access to electricity:	44 million (87%)
Dependence on traditional solid fuels:	48 million (95%) (highest in Asia)
Population access to safe drinking water:	62.6 million
Population with access to sanitation:	67.3 million

Average price of firewood increased by a factor of 8 between 1988-1997. Average price of firewood further quadrupled between 1994 – 2004. The demand for fuelwood and charcoal for cooking is rising with the growth in population, resulting in indiscriminate cutting of trees for fuelwood in forest areas adjacent to villages and towns. In addition, illegal logging of valuable trees in some areas is worsening deforestation and environmental degradation … It is highly probable that unless alternative sources of fuel are provided the rate of depletion of unclassified forests will be aggravated, particularly in the dry zone.

Biomass energy resources in Myanmar

[6] Myanmar Cookstove Market Assessment Report, Emerging Markets Consulting for GERES 2015

[7] Accelerating Energy Access for All in Myanmar UNDP 2013

Type	Qty million tons / yr.
Rice husk	4.392
Lumber waste	1.5 million
Bagasse	2.126
Molasses	0.240
Livestock waste	34.421

Price of traditional biomass fuels in Myanmar (*as observed during GERES' mission*)

Fuel type	Unit of measure	Price per unit	Consumption per day (average HH size of 5)	Consumption per month (average HH size of 5)	Consumption per month on cooking ($US)
Firewood	Viss (approx. 1.6 kg)	200 MMK ($0.22 US)	2.2 viss	66 viss	13,200 MMK ($15 US)
Charcoal	Viss (approx.1.6 kg)	400 MMK ($0.44 US)	1.5 viss	45 viss	18,000 MMK ($21 US)

MMK: Myanmar Kyats, ExR: 1 $US= 1000 MMK

1.3 Institutional mechanisms for addressing gender[8]

The UN Committee on Elimination of Discrimination against Women expressed concern over the widespread domestic violence and sexual violence which is accompanied by a culture of silence. Myanmar does not have specific legislation against gender based violence although there are penal code provisions against sexual assault and rape. Public awareness on this issue is low.

Myanmar's national machinery for promotion of gender equity includes the Ministry of Social Welfare, Relief & Rehabilitation, the Myanmar National Committee for Women's Affairs and Myanmar Women's Affairs Federation. However these agencies lack capacity, resources and institutional support to carry out their mandate. Myanmar is signatory to a number of international conventions related to gender and development including Convention for Elimination of all forms of Discrimination Against Women.

[8] Interim Country Partnership Strategy: Myanmar 2012 -14

2.0 Methodology

The Gender Rapid Assessment (RGA) methodology was used for developing the gender baseline. The RGA is a tool that assesses the gender status and answers questions relating to gender equity. The RGA, when used to assess the gender baseline of a project, would answer the following broad questions:

- What role are women currently playing and what potential roles can women effectively play in reaching improved cookstoves to every household and kitchen?
- What role are women currently playing and what role can women play in awareness creation, stove production, marketing, skill development and decision making?
- What is the health burden currently perceived by women as a result of use of traditional cookstoves and in what ways can women benefit from use of cleaner fuels and improved cookstoves?
- What are the gender issues around improved cookstove access?

Within each of the above issues, the RGA builds an understanding of gender issues in terms of:

- What is the present status?
- What are the opportunities and obstacles to women's participation and benefiting from project interventions?
- In what ways, the project strategy can be retrofitted to maximize benefits for women and men.

2.1 Gender Rapid Assessment Methodology

Most societies allocate different roles, responsibilities and activities to men and women. The realities of women's and men's lives are different, and equal opportunity does not necessarily mean equal results. The Gender Rapid Assessment Methodology is a tool to understand access and control over resources and benefits. For this project a consultative approach has been adopted for obtaining inputs on various categories of inquiry. These include focus group discussions and a one-to one questionnaire with stove users and producer groups. Discussions were also held with enumerators about their experiences in conducting the FGDs so that all aspects that could not be reported are also captured for this report.

The following categories of enquiry and issues were considered pertinent in the RGA methodology for the project.

Category of enquiry	Issues to consider
Roles and responsibilities • what do men/women do? Cooking, fetching fuel fetching water, tending to livestock, farm work, housework, etc.	• time spent in different tasks, opportunities, created or lost for productive roles • division, of responsibilities in productive roles (paid work, self-employment, and subsistence production) • reproductive roles (domestic work, childcare and care of the sick and elderly) • community participation/self-help groups
Assets and skills • how do men/ women produce stoves, sell stoves, etc • what livelihood assets/ opportunities do men women have access to? • what constraints do they face?	Access to and use of time saving or drudgery reducing equipment • human assets (e.g. access to information, education / training, knowledge and skills, finance, markets) • natural assets (e.g. land, labour, raw materials,)

	• socio-cultural assets (e.g. social networks, societal barriers, conventional roles) • physical assets (transport, communications) • financial assets (capital/income, credit)
Power and decision-making • what decision-making do men and/or women participate in? • what decision-making do men/women usually control (able to make decisions)? • what constraints do they face?	• household level (e.g. decisions over household expenditure) • community level (e.g. decisions on the management of resources and services) • business level (scale of operations, networking, time and opportunities for business development
Needs, priorities and perspectives • what are women's and men's needs and priorities? • what perspectives do they have on • appropriate and sustainable ways of addressing their needs?	• "practical" gender needs (needs arising in the context of the existing gender roles/assets) • "strategic" gender needs (i.e. requiring changes to existing gender roles/assets to create greater equality of influence, opportunity and benefit e.g. increasing women's access to decision-making) • perspectives on improved services and delivery systems

2.1.1 Focus Group Discussions

The Focus Group Discussions (FGDs) were strategized during the field trip of the ENERGIA consultant and in consultation with GERES project manager and the EGG teams. FGDs were planned with women stove users, male members in the family. After ascertaining easy communication between men and women stove producers through an informal meeting with them, it was decided that there was no need for gender segregated discussion with producer groups.

Focus group discussions with women stove users were designed to capture the following:

- Their daily routine, how they spend their time, household work, income generating work, rest & leisure, levels of exhaustion, what they would do if they had more time etc.
- Gender roles: who collects fuel, fetches water etc.
- About daily cooking: conveniences and hardships, what they would like to change about cooking related activities
- Health issues: largely because of IAP but also about reproductive health if the women chose to speak about it.
- Decision making: How are financial decisions taken generally and how would a stove purchase decision be taken
- Women's aspirations for themselves if they had more time and more money
- Who are the community influencers?

Discussions with male members of the households focused on what men thought about gender roles, women's health and decision making. They were also asked questions about:

- Whether they cooked occasionally to support their wives and their experiences in cooking
- Whether they had more rest and leisure than women and if their aspirations were different
- How often did they traveled to nearby towns and what purchases were made? Would they bring home an improved stove, etc.

Focus group discussions with family owned stove producers and women's stove production groups were aimed at capturing the following as the baseline situation:

- Whether there is gender stereotyping of stove production in general and in specific processes in stove production
- Whether women stove producers face hurdles or hardships in production
- Whether family owned or women stove producers face bias in access to markets, resources, skills, capital
- Whether the barriers to growth for women and family owned stove businesses are different and how these barriers can be overcome?
- In regions of high male migration, what would be the impact of stove building on happy, secure lives for families

In the pilot phase, during the field trip of ENERGIA consultant, 2 FGDs were held with each of the above segments. Later more FGDs were held in different project areas to comprehensively capture the baseline.

2.1.2 Questionnaire based discussions

Questionnaire based discussions were held one-on-one with stove users. The same questions were asked to both men's and women's groups. The topics covered in the questionnaire based discussions were not very different from the topics covered in FGDs but had more details. This would be useful for establishing the gender baseline and also for future activities that would be planned in stove dissemination. Questions were asked on topics like

- Cookstoves and cooking practices
- Health impacts
- Fuel collection
- Gender roles in typical household tasks
- Decision making in the household
- Priorities on investments of men and women

Gender aspects related to stove production were also captured in a questionnaire. This was a part of a larger much more detailed questionnaire on different aspects of stove production.

2.1.3 Discussions with project implementation team

Discussions were held with enumerators after the FGDs primarily to capture any additional information provided by stove users and to ensure that no gender aspects were missed out.
Thus the inputs for compiling the gender baseline using gender rapid assessment techniques were:

- Inputs from the Myanmar Cookstove Assessment Survey
- Gender aspects in demand side: using focus group discussions
- Gender aspects in supply side: using focus group discussions
- Capacity to address gender issues: open ended questionnaire
- Gender in marketing and communication material based on discussions with GERES and EGG teams. Efforts were made to capture or review marketing and communication material of existing stove producers, the role of men and women in existing supply chains, discussions, interviews with key members in the supply side
- Gender in relevant national policy (review of policy documents)

3.0 Gender baseline reporting

Myanmar is making progress with regard to addressing gender inequality particularly with regard to education and representation in workforce. Challenges that remain for Myanmar women include high maternal mortality rates, unequal pay for similar work with men and low political representation**.**

Gender Equality Statistics

Myanmar	
UNDP Gender Inequality Index1 (2013)	0.43 (ranking 83out of 149 countries)
Population with secondary education (%)	18.0% (female) 17.6% (male)
Literacy rate, adult female (% of female ages 15 and above), 2012	90%
Labor force participation rate, female (%), 2012	85.7% (female) 82.9% (male)
Reported amount less women are paid than men per day of casual work.	Ks 500 to Ks 1,000
Maternal mortality ratio, deaths per 100,000 live births , 2010	200 (Can be as high as 700 in some ethnic states.)
The average sex ratio male / female with a large variation	94.7 (108 in Kachin) and 87 in Magway

3.1 Socio-economic profiling of target segment

3.1.1 What work do men and women do?

Most men are daily wage earners. They work on land or in their own business. They do exhausting manual work and get very tired. They earn on an average 5000- 7000 MMKs / day. Besides working as farm labour they also work as Motorcycle carry ferrying passengers, as carpenters or masons in construction.

Women are completely engaged in household chores cooking, fetching fuel, fetching water, tending to livestock, farm work, housework etc. They also work as farm labour and take small jobs for value addition to farm produce. They say that they are not tired but if they saved time they would like to either take rest or spend more time in doing household chores. Women's days are longer than men's days because they wake up earlier by about 30 – 60 mins. All families have an early dinner (at around 6 pm). Often men sleep later because they drink alcohol at night. They say it is required for their tired bones as they work very hard in the day.

Most men are better able to define their working hours because they leave home and come back at fixed times. Women who work on household chores throughout the day, are not able to provide details on time spent in different tasks. Household tasks are varied including productive, income generating work like tending to livestock and cooking, cleaning, looking after children, family elders etc. which are non

remunerative financially. So the distinction between productive work, paid work and unpaid work is somewhat blurred in most households. Typically men also regularly go to market (in nearby towns), go to banks, are involved in sale of farm produce, livestock etc. Although men do this type of work, decisions, particularly about sale of farm produce / livestock are taken jointly or women are informed / aware about these decisions.

Reproductive roles, child care and care of the sick and elderly are usually the responsibilities of women. However it was observed that in Myanmar there is a fair amount of flexibility between men and women's work in the household. For example men also take care of the children and the elderly and also cook on days when women are very tired or when they return late from work.

3.1.2 Community engagement

During the field visit, it was observed that communities of women were very engaged with each other and there was a lot of conversation between them almost every day. They meet in usual meeting places like near the water well / hand pump or at a health centre. But formal institutions or mechanisms for women's participation in community activities like self help groups were absent. Similarly institutionalized meeting of farmers, youth groups etc. were not formalized.

3.1.3 Assets and skills

How do men/ women produce stoves, sell stoves etc

During the field visit, in focus group discussions and in responses to questionnaires it was observed that the technique of stove production was the same irrespective of who built the stoves. In family owned businesses gender stereotyping of certain processes in stove making were observed. For example, heavy processes requiring physical labour like clay mixing or stove firing were usually done by men. Other jobs like casting, trimming etc. were usually done by women.

In family owned businesses, men were more engaged in commercial activities around like procurement of raw materials, and supply of stoves to retailers. In women only businesses, women managed procurement, production and supply to retailers. It was reported that women were also able to obtain bulk orders from Govt. and donor agencies

3.1.4 What livelihood assets/ opportunities do men / women have access to? What constraints do they face?

Livelihood assets in rural areas were farm land, livestock, fruit producing trees etc. These were usually family assets. Women were involved in tending to the family livestock especially pigs and poultry which were livelihood assets for the family. They were also engaged in post harvest farm work like cleaning tamarind and other such seasonal job work which fetched the family some income. In FGDs it emerged that both men and women often experienced exhaustion and that was also a constraint. But a woman's day was longer and less remunerative by about 500 -1000 MMT / day.

3.1.5 Access to and use of time saving or drudgery reducing equipment

It was observed that both men and women in rural Myanmar did not have access to time saving or drudgery reducing equipment. In Focus Group Discussions women especially asked for fuel efficient stoves because they would then be able to reduce time spent in cooking or collecting fuel.

Agricultural implements or tools for drudgery free agriculture were also not observed perhaps because of the low electricity penetration into rural areas. This severely eroded farm productivity. Human and animal power was most commonly used. There are very few tractors in the country as well. This

observation fits well with the comments in the FGDs that exhaustion of male members and women engaged in stone masonry work was very high.

3.1.6 Human assets

(e.g. access to information, education / training, knowledge and skills, finance, markets)
Inadequate institutional and human resource capital remains one of Myanmar's greatest handicap. In spite of high women's literacy rate in Myanmar and higher percentage of women with access to secondary education, women in rural Myanmar get burdened with several household tasks and are not able to realize their full potential. While there is high penetration of the mobile phones, and radio / TV, the latter are used for entertainment and in a limited way for access to information.

3.1.7 Natural assets

Myanmar is blessed with abundant natural assets, forests, water, etc. However this cannot be exploited or is inefficiently exploited because of lack of electricity and equipment. Fuel consumption was very high and around villages a lot of deforestation was observed. Fuel was collected in rural areas whereas in some peri urban areas it was purchased. In FGDs all women and men said that they would like to conserve biomass because time and effort spent in collection are quite high. There was no gender stereotyping in fetching firewood as both men and women fetched firewood depending on need and convenience. Agro residues are also collected locally as fuel. Fuel collection is also done by men as a side activity when herding animals / livestock.

But fetching water was mostly a woman's job. This could possibly indicate that with increasing effort required for collection of fuel, the associated gender roles also shifted. The Market Assessment Report also reports increased difficulty in collection because of lower availability.

3.1.8 Power and decision-making

FGDs and questionnaires showed that decision making about major issues was a joint decision of men and women and sometimes elders as well. These include decisions on schooling, purchase of assets, taking loans, purchase and sale of livestock etc. Decisions taken only by women are largely kitchen related- purchase of stove (within a reasonable cost, food for the family etc). We were not able to collect adequate information on decision making relating to health check ups. Decisions on treatments were taken jointly in the family.

3.1.9 Needs, priorities and perspectives

The survey also asked questions on household investment priorities of men and women. The women could only define family needs and priorities. As most villages were unelectrified or marginally electrified, need for household lighting and mobile phones were high on the list of needs of both men and women. They also aspired for TVs more than for radios. Livestock, especially pigs was a high priority as an asset (possibly because of availability of investible amounts for livestock investments. investment in land did not rate very high, probably because of the manner in which the land records were maintained and how decisions on inheritance of property were taken. Women were by and large in agreement with the decisions taken by men and men also consulted women on family decisions.

3.2 Gender baseline inferences from Myanmar Cookstove Market Assessment Survey

Some salient gender observations that emerged out of the Myanmar Market Assessment survey were:
A disturbing finding has been that the life span of women is lower by almost 10 years and indoor air pollution is a high risk for women (15-49%). However the Gender Rapid Assessment does not show a high level of awareness among women about the same. The FGDs showed that men had observed higher respiratory stress among women but not so much women themselves.

The gender inequality index is also low in the country inspite of higher (than men) literacy, with secondary education and women in labour force. The factors pulling this index down are reproductive health, empowerment and labour markets (where women are paid lower wages for the same job). Women were paid 500 – 1000 MMT less than men as daily wage.

3.3 Gender aspects in demand side

The FGDs were conducted largely with men, women and stove producers who had some exposure to improved stoves. FGDs were held in a comfortable atmosphere with good responses from all participants. Neither men nor women were hard pressed for time, it seemed. Some of the questions asked or points raised about opportunity for rest, recreation augmenting livelihoods lost were raised for the first time and it took time for the participants to react. The FGDs also enabled sensitization of men and women about the benefits of improved cookstoves.

3.3.1 Awareness about improved cookstoves

As mentioned awareness about improved cookstoves were high because of the selection of participants in FGDs. Discontent with 3 stone fires because they were dirty, smoky and sooty and required time for frequent cleaning emerged very strongly. Some of the participants had experienced that improved cookstoves save time, fuel and increase the comfort level in the kitchens and they discussed these aspects often in FGDS. The preferred improved stove attributes among women were a stove that was safe to use, saved time, reduced fuel consumption and smoke in that order of preference. The fear of fire hazard associated with conventional stoves emerged very strongly in the responses because all kitchens were built out of combustible material like treated thatch.

3.3.2 Gender disaggregated responsibilities in fuel collection and impact on men and women

95% of rural households used firewood for cooking. No gender stereotyping of fuel collection responsibilities were observed. Often men herding cattle also took on the additional responsibility of collecting firewood. However the time spent in collecting firewood was increasing. Some women especially those working in stove production and perhaps in other productive livelihoods like stone crushing said that they preferred to buy firewood. The EMC survey says that more than 50% of the rural households buy firewood and the others collect locally. The survey also has a region wise expenditure pattern on fuel spend. The reason for shifting to purchase rather than collection is stated as reduced availability and longer distances to be traveled for collection. Households spent about 4000 - 6000 MMK / month on fuel purchase which is roughly 2 days wage for women (cost of 5-6 bundles used every day was reported to be 100 MMK).

3.3.3 Health impacts observed and perceived because of indoor air pollution from cooking

There was greater awareness among men about the health impacts on women. Many women said that they had no health impacts or problems because of cooking. Nevertheless, majority of women indicated eye irritation and chronic coughing during cooking. Many women said that they would like to reduce time spent in cooking and fuel collection so that they could take rest. This is perhaps an indication that women do feel exhausted every day and exhaustion is perhaps a health concern.

In a village, the midwife was the person that most women went to for health care not necessarily only related maternity and child care. So if midwives could become agents of health awareness and intervention then women would be more likely to take preventive steps

3.3.4 Time spent in cooking and opportunities for livelihood, rest, recreation lost?

Most women were not able to quantify the time spent on cooking. However a typical meal in Myanmar is very basic consisting of rice and some broth. So the cooking time saving because of adoption of an ICS would at best be 10 -15 mins / meal. The EMC survey shows that most users of ICS in urban / peri urban areas and over 50% of rural households purchase fuel. FGDs were not able to quantify time saved in fuel collection per day or per week for various reasons including seasonal collection of fuel. Fuel was collected both by men and women, depending on the type of non household work done by women. For example where rural women worked in quarries / mining etc., fuel was either purchased or it was collected by men. In FGDs, women said that rest was the highest priority with time saving. Some also said that they could devote more time to household chores. Time for productive activities did not figure in the discussion perhaps because they could not visualize the amount of time saved.

3.3.5 Types of cookstoves currently available in Myanmar and their appeal to women

The Cookstove Market Assessment Report has captured extensively the types of cookstoves currently available, their brief description, the fuels used, region of use and the cost. Although appeal of these stoves to women have not been covered in the survey, based on features and cost it is possible to hazard an educated guess. Field visits and FGDs based efforts were also made to locations where women were using the A1 stove. This helped in obtaining women's response to the A1 stove to be disseminated by project in comparison the conventional stove.

The conventional stoves were either bent steel rod stoves made by local fabricators or mud stoves made by local potters. Both the stoves cost between 2000 – 3000 MMK (cost of A1 stove 4000-4500 MMK). But there would be regional variations in cost.

The A1 stove was generally well liked by women users. The advantages cited were:

- Low cost
- Fuel saving
- Ease of use
- Faster cooking
- Portability
- Safety to use

Women in FGDs did not usually raise the issue of smoke in the kitchen. Reasons for the same could be the lack of awareness and type of kitchens (almost open, well ventilated, made from local materials and porous walls that would allow quick escape of smoke). It could be seen that all kitchens had blackened walls indicating that there was particulate matter emission.

3.3.6 Other aspects covered

In men's discussions it emerged that men in Myanmar were more familiar with cooking and aware about cookstoves than in other regions. The meal in Myanmar was very simple and men also cooked once or twice a month when women were tired or unwell.

As the improved cookstoves were very moderately priced, in locations visited during the field trip most households said that they could afford to buy a stove repeatedly even if the life of the stove was one year or less. During field trips we could also locate retail outlets selling and households using ICS, (especially in villages where potter households were making ICS. But it was also observed that some households were using damaged stoves. The reason for the same needs to be investigated.

Considering the remoteness of villages, the unending daily chores of women and their inability to take time off and travel outside the villages, user trainings may be time consuming and expensive. With high percentage of households owning TVs and radios, a media based user training may be worth considering.

The focus group discussions could not capture the prevalence of women-headed households. But they should be preferentially addressed as these households would be the most disadvantaged sections.

3.4 Gender aspects in the supply side

Gender aspects on the supply side were captured through field visits, focus group discussions and questionnaires with stove producers. It was reported that there were about 30 producer groups producing clay stoves similar to A1 stoves with relatively different degrees of sophistication. Not enough attention has been paid to stove retailers as yet, and this aspect of the supply side has to be addressed through more work and interaction with stove retailers. This would be done later in the project as involvement of stove retailers and the gender aspects would become clear a little later in the project cycle.

3.4.1 Conventional stove production methods and role of men and women in production

Conventionally the most common stoves sighted were the tripod (similar to a steel rod bent in the form of a stove with legs. In some places mud stoves, similar looking to A1 but unbaked and no standardization of dimensions were also observed. The FGDs also stated that many women would make their conventional cookstove themselves in the house but were keen to shift to an efficient stove. The

tripod stove was made locally by blacksmiths which is typically a male skill in Myanmar. It is unlikely that the producers of tripod stoves would have any knowledge of stove design.

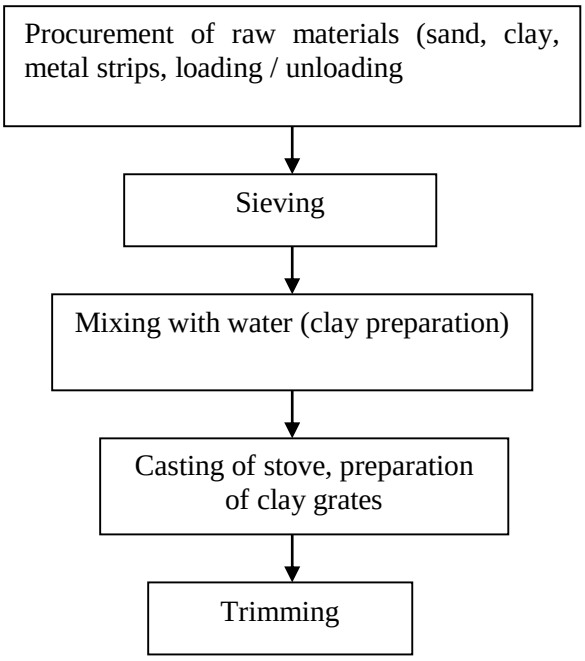
3.4.2 Technology barriers in supply side affecting women's participation

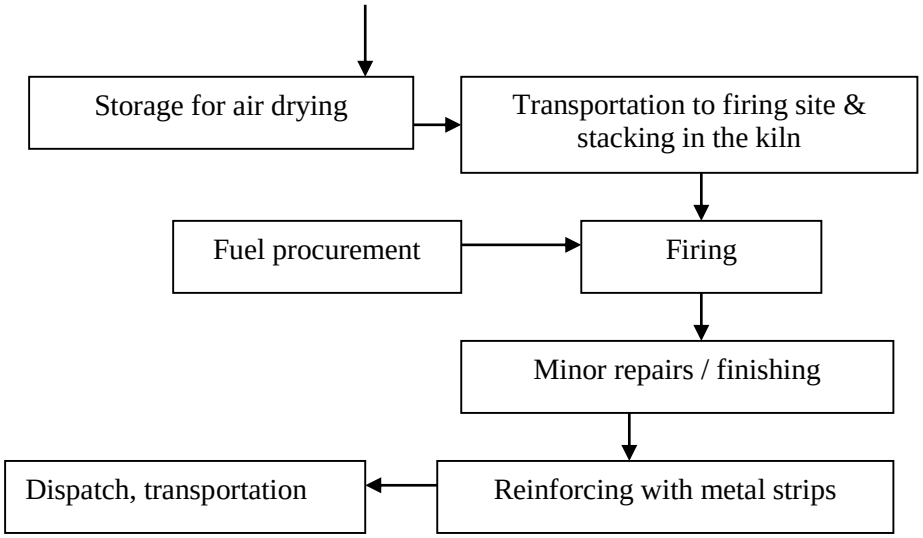
All FGDs and questionnaire based surveys were limited to the A1 stove users. Except in the case of women only stove producers, the recurring issue emerging was that the daily wage for women was less than that for men. A look at the production process showed that except for two operations (clay mixing which required heavy physical labour) and stove firing, women are ideally suited and actually preferred for all other production processes. It is therefore possibly to overcome the physical barriers of women by introduction of equipment like clay mixers and fuel efficient clay firing kilns which would enable more complete participation of women in the stove production process and ensure gender parity in wages. A FGD among producer groups stated that the daily wage of men stove producers was between 5000 – 7000 MMK and that of women stove producers were 3000 – 5000 MMK. The GERES project has collected more data on payment per trimmed stove. This can also be used to further assess the lack of pay parity for men and women in stove production. The project can also assist in identifying suitable kilns for stove firing that can reduce rejections during firing although it has no dedicated budget for technology acquisition. It would also be worthwhile to similarly identify options for procurement of clay mixers of a suitable capacity to reduce women's drudgery and showcase stove building as an activity with pay parity between men and women.

3.4.3 Typical production capacity

The typical production capacity varied in family businesses and in larger woman producer groups. However it was observed that production capacity was a function of space available and orders received (ability of stove producers to market their stoves to retailers). A typical family owned stove production facility producing 500 – 600 stoves/ month (or 6000 stoves/ year required space of 40 ft by 80 ft.

Production flow chart





Gendered production activities

Activity	In women producer groups	In family owned business
Procurement of raw materials	♀♂	♂
Sieving	♀	♀
Clay preparation	♀	♀♂
Casting of stove	♀	♀♂
Trimming	♀	♀♂
Storage for air drying	♀	♀♂
Transportation to firing site & stacking	♀	♀♂
Firing	♀♂	♂
Minor repairs	♀	♀
Reinforcing with metal strips	♀	♀
Dispatch / transportation	♀	♂

3.4.4 Aspirations and drivers of women stove producers

It was observed that the task of managing a woman only stove production was uphill and it took longer to stabilize. EGG had indicated that there would be about 5-6 women stove producer groups. But after having done so, the women stove producers were more motivated and were able to increase production and scale up operations much faster. As women stove producers did not hire men, the issue of pay parity was not a factor. Rather women stove producers were looking for market expansion and availability of capital on more attractive terms. They knew that on a per stove basis the investment required was lower for higher production capacities.

3.4.5 Access to markets and access to finance

Presently finance for starting stove production by family and women owned businesses was provided by private money lenders. During field visits, it was informed that the interest rates for private money

lending, especially in small villages were very high (significantly more than the lending rates of MFIs). Access to markets was a critical issue for small town based family businesses and currently the same was not facilitated formally. Information collected during the field visit showed that the stove producers sold the stoves for 1500 – 2000 MMK to retailers who then sold the stoves at 3000 – 4000 MMK with an almost 100% retailer margin. An independent assessment of the same is awaited from EMC. However presently this was not a concern as the market price of the stove was acceptable by most purchasers. . Some well-established women stove producers are able to get orders for stoves from Govt. or other development / aid agencies. The retailers place orders for stoves with stove producers. EGG was requested to compile the number of women stove producers and the number of stoves produced by them. This could be the baseline for the project. They have said that this was possible as they had trained women stove builders as a part of an FAO project.

3.4.6 Stove dissemination methods and role/ involvement of women in creating awareness, generating demand and in cookstove distribution

There was no formal method for stove dissemination before the start of the project. It was being facilitated by EGG but their impact and reach was limited. While the GERES and the EGG team agrees that the role of women in creating awareness and generating demand would be very high, the strategy for the same has to be conceived. There is limited experience or learning on the subject. An earlier project of FAO supported posters that created health awareness through exposure to smoke by display of posters. The effectiveness of the posters could not be independently verified. The scope and deliverable of that project was not as large or the same as the current GERES project and there is an opportunity to grow the project with women's involvement in all aspects

3.4.7 Role of women in consumer financing for cookstoves

Consumer financing is usually a limiting factor in the rapid acceptance of stoves. However in Myanmar and for A1 stoves, FGDs have shown that given the low cost of the stove, its affordability or willingness to pay is not a barrier. Consumer finance therefore may not be necessary for stove purchase.

3.4.8 Women stove entrepreneurs and their experiences

The focus group discussion with Women producer's group at Tamar Myaing Anouk Ma Oat Block, Chaung U Township, Sagaing Region was especially inspirational. The group of 5-6 women had emerged out of a long struggle of about 15 years to emerge as the most successful all woman stove producer group. They are producing stoves for retail markets and also for bulk orders. It was suggested that their story be captured as an inspirational success story to motivate more women to enter stove production.

3.4.9 Barriers that inhibit women's participation in the supply side

FGDs showed that there were no cultural barriers that inhibited women's participation in stove production. Most women are happy to work in stove production businesses from home as they are able to manage their household tasks, child rearing and stove production very well. Some women also said that family businesses are good because they are a way or stopping male migration out of Myanmar etc. Some women recounted terrible stories of male migration and wanted families to live together at any cost.

Night time stove firing would be a constraint for women. This was a batch process and usually done over a long period. Women faced hardships in staying away from home, close to a kiln at night. Women

stove producers said that initially they found stove firing a challenge without help of men, but later they have learned to cope. In one location it was observed that women fire stoves along side other pottery ware so that each batch for firing was of a higher capacity with more people around the kiln at the time of firing. Fuel efficient kilns that are also smokeless and can bake stoves faster in the day time would be a gender friendly intervention they agreed. Energia technical consultant has access to some technology developing institutions in India and can recommend suitable fuel efficient kilns for suitability and further evaluation for meeting the identified needs.

The above has to be understood in the context that stove production is not a typical woman's enterprise like prepared food business, tailoring or livestock etc. So it is likely that the FGDs with women stove producers are capturing the reality of today and not the struggle of the past years. So if new women stove producers have to emerge, then there would surely be need for capacity development, motivation and success stories about how one group has overcome cultural issues and the long time that it has taken to do so.

3.5 Capacity in the community to address gender issues in supply and demand side

In the demand side there were no specific capacity building needs for use of A1 stoves. The issues could largely be addressed through a user manual (preferably pictorial) about how to use the A1 stove. The A1 stove is not expected to have any maintenance related needs except perhaps regular cleaning. The expected life of the stove can also be stated in user manuals so that women stove builders do not get a bad name for producing a stove with a life of around 1 year.

What needs to be tracked on the demand side is the decision making and its implementation process. FGDs with men and women user groups have stated that stove purchase at the current cost of the stove would be a woman's decision. However as the stoves would be retailed in small towns and women do not travel very much outside their village, the actual task of stove purchase would be implemented by men. . So it is important to reach out to men with awareness creation as well. It has been reported that only men (most often) travel to nearby towns for purchases and for trade. It does not seem like there is any existing capacity to address this different need of men and women (women to take decision and men to execute the same) as the same has perhaps emerged for the first time.

On the supply side there may be need for refresher training of family and women's group not so much in stove production but in managing inventory and other business skills to ensure that trained producers do no drop out of business. For women producers it may be important to ensure that the training timings are convenient. It may be important to sensitize bulk purchasers of stoves about women stove producers and the hardships that they have faced in achieving their goals. This would preferentially help women stove producers and strengthen their success story.

3.5.1 Role of women in stove distribution and skill set of men / women in distribution

This aspect has not been captured adequately in FGDs and questionnaires so far. During a field visit a stop over was made at a stove retailer close to a women producer group. This was a shop selling several different items of utility to a household, and not only A1 stoves. Discussions showed that men from nearby villages and women or men from the towns bought the stove but not in very large numbers. There was also no marketing or posters displayed in the store that would educate users about the benefit of A1 stoves. A later discussion on stove retailing showed that there were indeed some posters prepared

in an earlier FAO project. In FGDs with women stove producer groups, some women mentioned that their family members were engaged in stove retailing. The subject of stove retailing was not adequately understood as yet. The gender baseline in stove retailing could be captured and it was decided this definitely had to be captured but could be deferred until active stove production was well underway.

3.5.2 Need for capacity development for women stove producers and retailers

The baseline situation shows high competency among few women in stove production. EMC would provide GERES with a baseline of producers covered under their assessment. But there is high need for capacity development on the supply side to address the project goal of distribution of 300,000 stoves and also for ensuring geographic expansion and sustainability of the activities initiated by the project. The engendered processes initiated by the project must be well documented. A competent team of capacity developers on the supply side should also be continuously engaged in training and experience sharing. ENERGIA would like to work with the project team to define / develop content for gendered capacity building and its institutionalization beyond the project deliverables. One possible action could be introduction of a course on cookstove demand and supply into formal education courses.

3.5.3 Capacity of the management team

During the field trip to the project areas in Myanmar, it was observed that the desire and commitment to address gender issues in the project was very high. But neither the management team nor any member of the field team had any prior experience or exposure on gender mainstreaming. All gender sensitive processes introduced in the past like promotion of women's groups of stove producers or linking them to markets were largely because of good intentions and not very well documented or publicized either.

There was more than adequate representation of women in the field teams of EGG. GERES has recruited 4 women in their management team recently and now the representation of women in the management team of GERES in Myanmar is more than 50%. The new team can be again exposed to gender mainstreaming processes. This was done as a part of the first field visit but may have to be repeated during each subsequent visit to reach out to new staff as they get recruited.

3.5.4 Gender capacity upgradation matrix

If there is interest among the project implementation team, efforts would be made to develop a gender capacity upgradation matrix as a part of the gender action plan to track the involvement and participation of women and efforts taken towards the same. This could possibly be aligned to the M&E of human resource capacity upgradation. Energia technical consultant would propose version 1 of the same for further discussion and its subsequent adoption.

3.6 Existing channels of communication with women on cooking, health and energy issues

This baseline report has identified a few existing channels for effective communication with women for awareness creation on local and global issues that would be addressed by the project. Securing women's respiratory health through awareness and enabling access to stoves would be the primary goal of the gendered communication strategy.

At the baseline however, it appears that level of awareness about IAP and health impacts among stove users (more among women) is extremely low. There was in fact a near unanimous belief that the two are not related in any way. In spite of very leading questions, women were not stating smoke inhalation and its side effects as a pain point.

This baseline report has identified the midwife as one of the key influencers of women on health issues. FGDs have also identified that male members of households made very pertinent observations on smoke inhalation and women's health. They could also be influencers and with awareness could ensure that women in their households were not exposed to IAP.

3.7 Gender in communication material (including reporting to donors) from GERES

ENERGIA can review the communication material developed by GERES and add / recommend infusion of gender perspectives into the same. It has been assessed that given the traditional gender indicators in Myanmar (higher women's literacy, higher participation in work force, flexibility) and high resilience shown by men in changing gender roles (men cook often, collect firewood regularly etc.) the project could be showcased as a success story in gender mainstreaming at international platforms. However the project would have to address a few gender disparities to be able to do so. The most important change would have to be to ensure pay parity for men and women for similar productivity in stove production or sale.

3.8 Cultural issues around women's income generation activities

This baseline report has captured as many cultural issues as could be done at this early stage of the project and through the Gender Rapid Assessment methodology. However with more intensive interaction with the demand and supply side elements and higher exposure gender sensitization of field teams, this repository of cultural issues and methodologies adopted to overcome the same would be constantly expanding. The same could form a more detailed baseline for the newer project areas. In future interaction with field teams, efforts would be made to identify barriers for women to engage in income generation; perhaps issues like long years of childbearing, distance from populated centers, high cost of travel would emerge and not necessarily issues like literacy / numeracy or social exclusion. Views of opinion leaders (men and women) on whether women could be engaged in supply chains, and which functions in the supply chain they would be best engaged would be actively sought.