REPUBLIC OF RWANDA



GENDER PROFILE IN THE ENERGY SECTOR

GENDER MONITORING OFFICE

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I. INTRODUCTION

The Government of Rwanda has set an ambitious target to reach 100% electrification rate by 2024. The vision 2050 also focuses on the high quality and standards of living to transform the lives of households and individuals with the focus on provision of affordable, reliable and clean energy to both men and women.

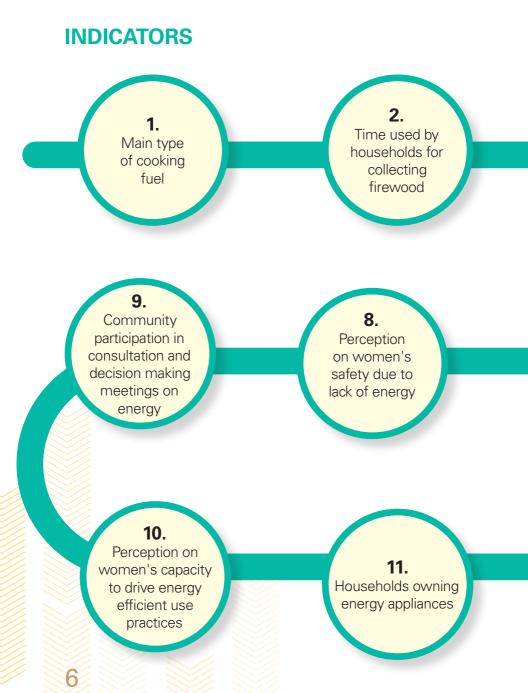
Access and use of energy is vital for improved livelihood both for rural and urban development and also enhances business development, investment and income growth among Rwandans. Mainstreaming and institutionalizing gender equality in the energy sector is thus very essential to ensure that both men and women contribute and equally benefit from designed and implemented energy programs.

The gender profile in energy sector was developed to gather relevant qualitative and quantitative baseline data on the status, attitudes and access to energy services as well as track how the sector is delivering on gender equality promotion. It contains data sourced from nationally recognized surveys and reports as well as primary data collected from a household survey conducted by Gender Monitoring Office to supplement the missing gender disaggregated data on a few critical areas.

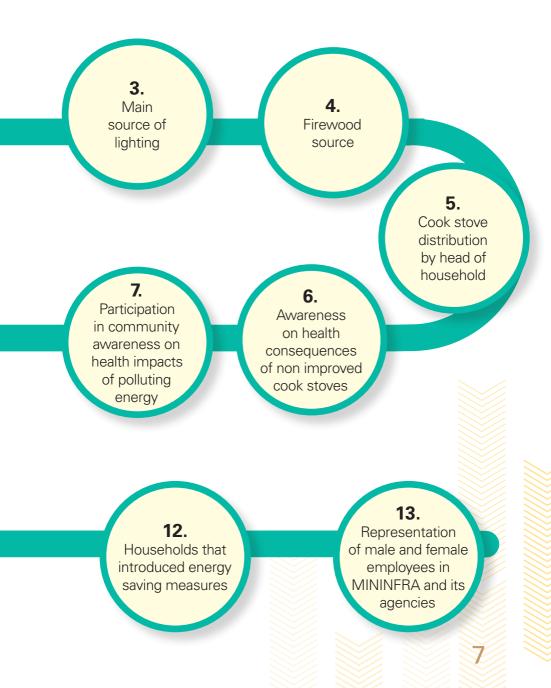
The booklet indicates gender status in the energy sector and also highlights areas that require improvement throughout the broader energy sector programs. Contained Information will also guide policy makers, stakeholders and all actors in advancing policy actions geared towards promoting accountability to gender equality in the energy sector.

GMO appreciates the engagement of key national stakeholders, technical support of IPAR and contribution of development partners especially the Belgian Embassy and the Belgian Development Agency (Enabel) who technically and financially supported the development of the current profile.

The Gender Monitoring Office commits to continue tracking gender equality progress in this sector and avail user friendly information to guide gender responsive programming, decision making and institutionalization of gender accountability in the energy sector.



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II. POLICY AND DEVELOPMENT FRAMEWORKS

- National Strategy for Transformation (NST) 2017-2024: Specifies that gender equality promotion is a prerequisite to achieving equitable and sustainable development, and guides that gender equality be considered as a cross-cutting area in all development sectors including the energy sector. The strategy further targets to halve the number of households depending on firewood as a source of energy for cooking by 2024. This will be achieved by focusing on promoting use of alternative fuels such as cooking gas and biogas. Efforts will be concentrated on promoting use of cooking gas in urban areas.
- The Infrastructure Gender Mainstreaming Strategy (2017-2022): Provides an outline of how the infrastructure sub-sectors will mainstream gender in its plans, processes, programs and projects.
- **The National Gender Policy (2010):** Highlights that limited source of energy affects more women than men as women are more involved in household activities requiring use of energy and guides to instituting appropriate intervention measures to facilitate access to energy to reduce the energy burden especially for women.
 - **The National Energy policy (2015):** Specifies key commitments towards gender mainstreaming in the energy sector including considering gender issues at every stage of the energy project cycle and in all major sub-sector strategies and action plans. It also recommends to address energy concerns in a gender-sensitive manner while identifying and evaluating appropriate technologies for any given energy service.

- Energy Sector Strategic Plan 2013/14 2017/18: The plan commits to devise strategies that will free up the time spent by women in collecting firewood which is still the main source of cooking energy in Rwanda, through providing improved energy cooking stoves and other alternative sources of energy which shall improve health and environmental conditions of households while at the same time reducing workload and gain time to undertake more other productive activities.
- Energy Sector Strategic Plan 2018/19 2023/24: As a high level target objective, the strategy commits to halve the number of HH using traditional cooking technologies to achieve a sustainable balance between supply and demand of biomass through promotion of most energy efficient technologies.



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III. GENDER EQUALITY IN ENERGY SECTOR

1. Main type of cooking fuel by sex of household head

Type of Energy	2010/2011	2013/2014	2016/2017
Firewood —	85.5 88.5	82.2 86.3	78.3 84.7
Charcoal	11.6 8.1	16.2 12.2	18.9 13.0
Crop waste	2.0 3.0	0.6 11	0.6 0.8
Gas or biogas	0.1 0.0	0.2 0.1	1.2 0.9
Other	0.8 0.3	0.7 0.3	1.1 0.6
	Male 🔵	Female	

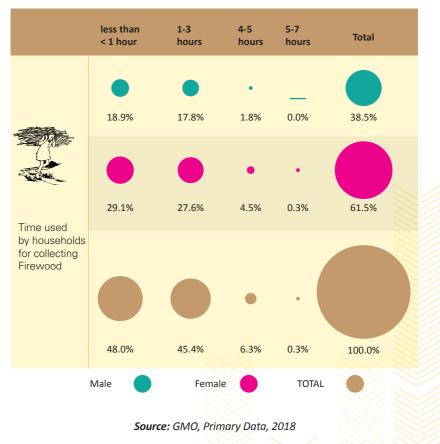
Source: EICV4, 2013/2014 and EICV5 2016/2017, Thematic Report-Utilities and Amenities

The use of Biomass (Firewood and Charcoal) remains predominant among male and female headed households as source of cooking energy.

Comparing these data with the EICV4, it is noticeable that there has been a slight decrease in the use of firewood for female and male headed households.

There is need to increase awareness targeting female headed households on the availability of LPG as an alternative source of clean fuel for cooking, provide incentives for the private sector to invest in storage and filling facilities across the country to improve LPG availability and reliability.

2. Time used by households for collecting firewood by sex of head of household head



Firewood collection is at most done by women and children taking them between one hour and three hours. This remains a huge workload for women, limiting them a chance to engage in other productive activities.

Scale up of alternative sources of energy for cooking will reduce workload on women while giving ample time to engage in economic activities. This will also reduce air pollution and health issues resulting from the use of firewood.

3. Main source of lighting by sex of household head.

Year	201	0/2011	20:	13/2014	2016	/2017
Electricity distributor	12.1	7.3	21.1	16.2	29.4	20.3
Qil Lamp	10.2	8.3	& 5.1	& 4.7	& 1.5	& 1.4
Firewood	6 .4	14.9	4.0	10.0	2.5	7.1
L Candle	Î 5.7	1 6.3	7.4	7.3	6.0	1 6.6
Sex of Head of House Hold		Male		Female		

Source: EICV4, 2013/2014 and EICV5 2016/2017, Thematic Report-Utilities and Amenities

Year	2010	/2011	201	3/2014	2016/	2017
Lantern	33.5	38.0	() 12.6	() 14.6	<u>)</u> 3.3	() 4.4
Battery	47 30.5	23.8	44.8	42.3	48.6	54.7
۲ Solar panel	0.4	0.1	1.9	1.1	8.3	4.5
4 Other	4 1.1	* 1.3	4 3.1	* 3.7	* 0.5	* 1.0
Sex of Head of House Hold	1	Male		Female		

Main source of lighting by sex of household head. (Continued)

Source: EICV4, 2013/2014 and EICV5 2016/2017, Thematic Report-Utilities and Amenities

The percentage of households using electricity as the main source of energy for lighting has increased over the last three years. Electricity use as a source of lighting among female headed households has increased slightly by 4 percentage points from 16% in 2013/14 to 20% in 2016/17 compared to male headed households which increased by 8 percentage points from 21% to 29% in the same period.

It should be noted that the biggest gain was in use of solar panel, which shows the strong impact of government promoting the use of solar panel to rapidly increase the access to electricity to the population. GENDER PROFILE IN THE ENERGY SECTOR

For female headed household, the use of solar panel has increased from 1% to 4.5% while for male headed household it has increased from 2% to 8.5% in three years.

Though the use of electricity and solar energy as sources of lighting has increased, gender gaps are still noticed and efforts to address them are highly recommended.

4. Firewood source by sex of the household head



Source: GMO, Primary Data, 2018

Most of households use biomass which is mostly gathered from

the nature (46.8%). It is therefore recommended to put in place a comprehensive biomass strategy that will recommend and guide the alternative sources of biomass for cooking based on what is available in each area.

5. Cook stove distribution by sex of household head

Type of Cookstove	Male HH (%)	Female HH (%)
Three-stone stove	51.5	58.3
Self Built Stove	15.2	13.6
Manufactured Stove	<u>ن</u> ۱.0
	Male	Female

Source: EICV5 2016/2017, Thematic Report-Utilities and Amenities

Cook stove distribution by sex of household head. (Continued)

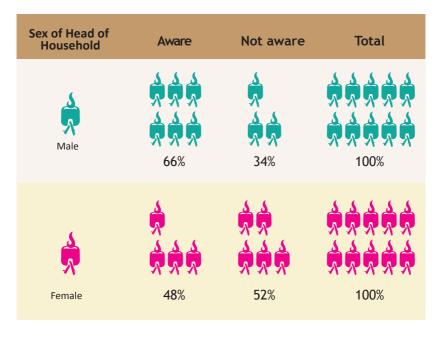
Type of Cookstove	Male HH (%)	Female HH (%)
Charcoal/ fire Stove	17.3	13.0
Efficient Cookstove	13.5	13.5
Other	1.1	0.6
	Male	Female

Source: EICV5 2016/2017, Thematic Report-Utilities and Amenities

Most of households in Rwanda are still using traditional three stone stoves which imply using more firewood. More efforts should then be employed to expand access to improved cook stoves given the overwhelming evidence of the negative health and environmental consequences.

Usage of improved cook stoves will reduce the household burden for firewood collection which benefits all family members. However, women will benefit more as they will save time to do other productive activities.

6. Awareness on health consequences of non improved cook stoves

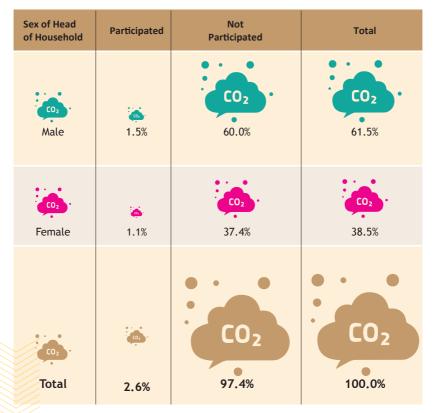


Source: GMO, Primary Data, 2018

48% and 66 % of male and women households surveyed respectively are aware that are households using polluting energy sources (notably firewood and charcoal) have negative effects on health and the environment such as indoor air pollution. The health risks cited by the women include eye problems, headaches, diseases of the respiratory system and back pain from carrying heavy loads of wood.

The use of clean energy such as LPG, biogas and improved cook stoves with minimized indoor air pollution is thus recommended to preserve the health conditions of the family.

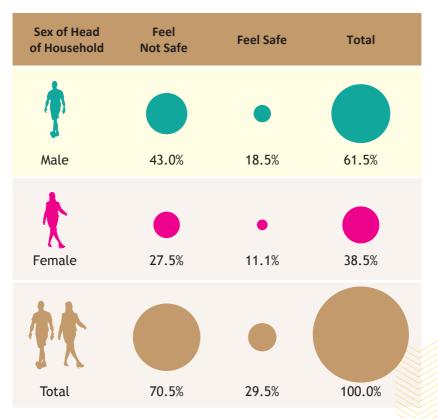
7. **Participation in community awareness on health** impacts of polluting energy



Source: GMO, Primary Data, 2018

Whereas various awareness campaigns were conducted by different institutions and actors intervening in the energy sector, it is observed that members of male and female households who participated in such awareness campaigns or trainings on the health consequences of harmful energy sources remain very minimal. More awareness campaigns are needed on harmful effects of unclean energy to lure communities into less harmful alternative energy sources.

8. Perception on women's safety due to lack of energy



Source: GMO, Primary Data, 2018

70.5% of 985 surveyed male and female headed households believe that unavailability of energy mostly for cooking and lighting affects community safety especially women and girls while collecting firewood, fetching water and travelling during evening and nights. The mentioned risks and fears by women and girls include rape, home burglaries and cases of accidents which may endanger their lives.

9. Community participation in consultation and decision making meetings on energy

	Yes	No	Total
.	ែរ 6.6%	5 4.9%	61.5%
ĹТЛ	k .2%	17. 34.3%	38.5%
Participation in planning and consultation meetings on energy	<mark>ដើរ</mark> 10.8%	89.2%	100.0%
	Male 🔵	Female 🔴	Total 🛑

Source: GMO, Primary Data, 2018

Only 4.2% of surveyed female headed households and 6.6 % of surveyed male headed households confirmed to have attended or participated in any planning, consultation and decision making meeting for the energy sector; which shows that community involvement in decision making in energy sector for household remains low, whether for male of female households.

More participation in decision making by male and females discussing the sources and benefits of clean energy should be increased to enable policy and decision makers get community insights while designing and implementing energy interventions and programs.

10. Perception on women's capacity to drive energy efficient use practices

	Believe Women are Capable	Don't Believe Women are Capabl	e Total
Perception on women's capacity to drive energy efficient use practices	 	(*) 14.6%	 <p< th=""></p<>
	26.6%	11.9%	38.5%
	 (*) (*)	(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)<l< th=""><th> <</th></l<>	 <
	Male 🔵	Female	Total

Source: GMO, Primary Data, 2018

73.5 % of 958 of surveyed male and female headed Households believe that women in community are capable of initiating and driving energy efficient use practices.

However, it was observed that women in genaral, only have a stronger decision-making role when it comes to cook stove purchase decisions, compared to decisions about purchasing a solar product or an electric appliance, which in the majority cases is done by men1. This slows the household pace to adapt to more efficient energy sources and limitsed role of women to trigger the change within households.

Type of 2013/2014 2016/2017 Asset Refrigerator 1.7 0.6 1.9 1.0 00000 Cooking 3.1 0.9 0.4 2.9 machine Male Female Total

11. Households owning energy appliances

Source: EICV5 2016/2017, Thematic Report-Utilities and Amenities

The number of households owning at least a refrigerator remain almost the same in 2013-14 or and 2016-17. However, the percentage of households owning at least one cooking machine has significantly increased more especially for female headed households. Awareness on the use and benefits of such labour saving energy appliances should be increased to reduce the workload for women as well as raising men's willingness to also perform the cooking responsibilities in the household.

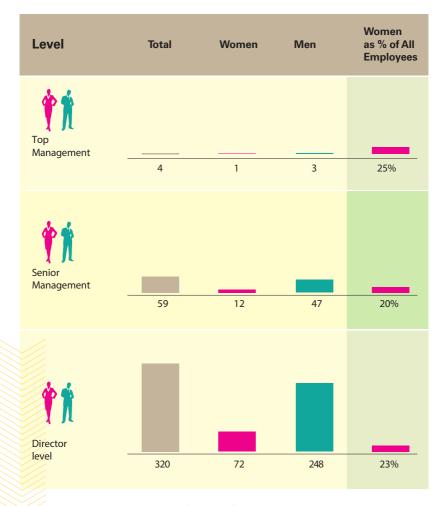
	Yes	No	Total
Households that Introduced Energy Saving Measures	26.3%	35.2%	61.5%
	** 16.0%	22.5 %	38.5 %
	42.3% Male	57.7% Female	100.0%

12. Households that introduced energy saving measures

Source: GMO, Primary Data, 2018

42.3% of surveyed households have managed to introduce measures for energy saving. However, a huge difference is still observed among female and male headed households that practice energy saving measures. Energy access programs and other interventions should then more analyse various gender issues hindering especially women to introduce and champion such energy saving initiatives and measures.

13. Representation of male and female employees in MININFRA and affiliated agencies



Source: Ministry of Infrastructure GBS, 2018/2019



Representation of male and female employees in MININFRA and affiliated agencies (Continued)

Source: Ministry of Infrastructure GBS, 2018/2019

IV. KEY STRATEGIC RECOMMENDATIONS

- Devise measures to improve women's access to affordable, reliable and modern energy services especially those in rural areas and households headed by poor women.
- Increase awareness targeting female and male headed households on the availability of LPG as an alternative source of clean fuel for cooking, provide incentives for the private sector to invest in storage and filling facilities across the country to improve LPG availability and reliability.
- Develop credit enhancement and micro-finance programs specifically targeting women's and youth investments in clean energy technologies and enhance women's capacity to engage as energy entrepreneurs.
- Carry out research on the prevalence of health-related impact of biomass fuels, specifically the prevalence of respiratory illness particularly amongst women and children in rural areas where biomass is the main source of fuel.

Initiate capacity development initiatives on targeted gender analysis for the energy sector to facilitate effective gender mainstreaming and designing gender responsive programs that will lead to the attainment of gender targets as enshrined in the NST and Energy sector strategic plan 2018/19 - 2023/24.

Institutionalize the collection and management of sex disaggregated data across all actors in the energy sector and promote the culture of using generated data to inform evidence planning, programming and decision making.



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