

**RESEARCH PAPER****Electrification: Impacts on Women's Lives in Hunza and Nagar****<sup>1</sup>Rozmeen, <sup>2</sup>Zubair Ahmed, and <sup>3</sup>Ehsan Ullah\***

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**\*Corresponding Author:** ehsan@nips.qau.edu.pk**ABSTRACT**

Electrification has a significant impact on women in every field. Electricity enables women to be more advanced and makes their lives easier by reducing their workload through technology. The study aims to explore the socio-economic impact of electrification on women in Hunza Valley. This study is qualitative, and the researcher used different qualitative tools, i.e., in-depth interviews and an interview guide. Purposive sampling was used by the researcher, and 25 women were interviewed during the fieldwork. The data of the present study were analyzed thematically, and different themes were present in the study. The findings of the study suggest that access to electricity changes the life of rural women in every field of life, such as access to electric gadgets, education, health, information, decision making, participation in income-generating activities, saved time and increased productivity, changes in developmental skills, and learning opportunities. Therefore, the process of electrification and tools linked with the electrification should be employed with modernized apparatus to facilitate women's role in the workplace in Hunza, Gilgit Baltistan, with the aim to help enhance the well-being as well as the conditions of women.

**KEYWORDS** Electrification, Women's Lives, Hunza, Nagar**Introduction**

Women's empowerment is a movement that aims to promote gender equality and provide women with equal opportunities and rights. It evolves by empowering women socially, economically, and politically, empowering them to make decisions and control their lives through initiatives such as education, health care, and financial independence. However, electrification impacts the empowerment of women. It focuses on various aspects such as economic autonomy, mobility, decision-making abilities, and time allocation in fuel collection. The quality of electrification has a positive impact on all empowerment indices. However, the effect varies based on deficiency, living standard, and education. It encourages female participation in formal employment and perceptions of their status. Women's participation in electrification is necessary and beneficial for the area's sustainable development. The development market for domestic appliances is driven by electricity, which significantly impacts production and commerce and makes a broader development.

Electrification significantly impacts people wherever they live, whether in rural or urban areas. Gilgit Baltistan is an agricultural area where most people depend on farming and domestic activities. Unavailability of electricity is a significant issue that affects various aspects of daily life. It involves individual communities and the entire country. It refers to the lack of access to a reliable electrical power supply. Electricity is now an international issue in its own right; indeed, an entire complex of interrelated problems is evolving at a wild rate. It resists economic growth. Without electricity, schools cannot provide quality education, hospitals struggle to deliver essential medical services, and

businesses are not run properly. This study examines how electrification impacts women socially, economically, in education, and health, because no research has been conducted on women in the local area. Electrification has empowered the socio-economic condition of women in Hunza. Primarily, the income is generated by farming small enterprises such as selling fruits and vegetables, tailoring, and making handicrafts. So, electricity is vital in enabling them to bring these goods into the market and benefit them. The electrification of the district of Hunza had a significant impact both socially and economically. Socially, access to electricity has improved the residents' quality of life. It has enabled them to use electric appliances and lighting, making daily tasks more efficient. Electricity helps to establish educational services, health care facilities, and community centers to facilitate communities. Economically, the availability of electricity has created opportunities for businesses, leading to job creation and increased income levels. Electricity has also improved productivity in the agricultural sector. Electrification improves the lives of residents both socially and economically and promotes growth in the region. The study addresses how electrification impacts women's overall life in the district of Hunza and finds the gap between electrification and women's empowerment in this area.

This qualitative analysis primarily examines the impacts of the use of electricity on women's lives in Hunza and Nagar, Gilgit Baltistan, Pakistan. It mainly focuses on the transformation of work and education, including the choices and roles of women due to the use of electrification. Therefore, the study seeks to understand the real-life challenges, experiences, and support for better development goals for rural women in Hunza and Nagar.

## **Literature Review**

This study involves various secondary scholarly sources. The reviewed literature is based on discussions on women's roles in electrification and its impact on women's lives globally. Women are serious about the economic development of rural communities in South Africa. The study suggests that access to electricity and smaller family sizes are the reasons for the higher incomes amongst female-headed households (Ahmed, et. al, 2015). Energy has a positive impact on the development of the agricultural division. The sector plays a vital role in rural development (Makuwaza, 2021; Fortunière & Murat, 2005; Presbey, 2013; Sedai et al., 2020; Hwang & Yoon, 2021). Rural electrification is commonly known as a means for development and improved well-being. Access to electricity is important for reaching the Millennium Development Goals. The Sustainable Development Goals of the United Nations usually report that having access to modern sources of energy improves well-being and social mobility by decreasing the time needed for fundamental domestic tasks such as cooking (Peters & Vance, 2011; Viteri & Henao, 2023). Electrification improves labor efficiency, provides rural jobs, and has an impact on home consumption. It has become an essential service in today's human life with the growth of industries and the expanding population (Ikhsan & Amri, 2022; Raza et al., 2016). Due to access to electricity, women can spend more time on income-generating activities by using different appliances. Access to electricity benefited women by small businesses. It allows women to pursue their interests, engage in leisure activities, and spend quality time with friends and family. It also upgrades the employment and enterprise development among women. Women's work has a significant role in helping low-income families leave poverty. Electricity brings change in households, for example, for health through smokeless stoves, and time availability generates women's income. Due to electricity, we have to use safer streets at night. It gives access to women access to attend meetings and participate in education classes from which women gain self-worth, and it connects them with the outside world. Electrification has a great capacity to have a powerful impact in regions that have roads and connections with near marketable hubs. Women's trading power essentially involves their welfare, such as traveling alone, having bank accounts, and participating in social groups, just because of electrification. Also, being connected to electricity has a significant impact on household income (Rao et al., 2016; Kanti Bose et al.,

2013; Lee et al., 2020; Sedai et al., 2020; Bridge et al., 2016; Batchelor, 2003). Electricity directly provides jobs in the household by empowering the creation of new goods and services for the market. It empowers both women and children in rural areas of the developing world. Access to electricity changes rural areas' economy, providing resources to engage women in paid employment (Dinkelman, 2011; Tenezakis, 2019). It strongly impacts the literacy rate, better health, and a higher level of development. Women with better opportunities in villages have a relaxed life compared to remote areas in towns. Women are more attached to their responsibilities with electricity, so they spend their evenings watching television. She makes an effort to use different electric appliances like a mixer/grinder, etc., making it easy to work for females. Through electrification, the community can leverage its local skills and resources to generate income by providing goods and services supplied by wealthier village people. Also, an adaptation of labor-saving technologies can alleviate the burden on rural women, leading to increased labor productivity (Bank, 2004; Biswas et al., 2001). Electricity has become a significant form of end-use energy in the present society. The influence of electricity is tremendous and has been known as a basic human need. It is a critical infrastructure element on which the country's socio-economic development dramatically depends. The collection of water and firewood is a daily chore of villagers. For example, this is a massive problem for females and children. These women travel 2 to 3 kilometers daily to gather firewood in rural areas. But the presence of electricity progressed to different availability, like water, and the health condition of villagers. Due to electrification, the women also had more choices in what they wanted to do with their free time and the available resources (Jamal Alam, 2019; Jayasekara, 2018). The advancement of electricity demand can impact the social structure and network of electrified communities (Riva et al., 2018). Access to clean energy is empowering at both macro and micro levels. It builds livelihoods and develops local economies, although at the micro level. It is responsible and caters to time poverty. Electricity access also gives women extra time in skill training sessions to get jobs or start businesses. Electricity supply to rural households increases the efficiency of companies and helps increase women's non-farm self-employment (Kabiraj & Singhal, 2023). Additionally, access to power has supported economic welfare, as productivity increases with businesses, replacing manual work with automated processes and finally leading to a positive virtuous growth cycle. The reliability of household electricity is a significant factor in reducing household and labor market differences between men and women. This study examines both extensive and intensive boundaries of employment activities of home production, such as fuel and water collection. Economic and social decision-making ability, health-related fuel choices, introductory household service provisions, and reliable electrification benefit women more than men (Sedai et al., 2021; Feron, 2016). The arrival of electrification brings up different technologies or appliances that can empower women to improve their economic condition, become active leaders to more commit to their families, communities, and local economies (Kanti Bose et al., 2013).

## **Materials and Methods**

The researcher has chosen the qualitative research method, which is carried out in Hunza by using the data collection tools and techniques; in-depth interviews to know about the Impact of Electrification on rural women in Hunza by using the purposive sampling technique. Twenty-five interviews were conducted where the respondents were above 18 years. Data was collected from different categories of women like housewives, farmers, teachers, Pico centers/ tailors, beauty parlors, female head teachers, lady health workers, handicraft makers, and small businesswomen who sell vegetables, fruits, and local dishes to empower themselves. The narratives are translated from Burushaski to English for understanding and analysis purposes. The researcher has used thematic analysis in her research data analysis, in which the researcher evaluated the data into themes.

## **Results and Discussions**

### **Women's Livelihood and Decision-Making Abilities**

If we mention the role of electricity in empowering rural women, electricity has played a significant role in improving the status of women in rural areas. Before the arrival of electricity, decision-making in households was primarily the responsibility of men. However, with the introduction of electricity, women gained access to allowing them to establish a strong presence in decision-making within their homes. Before the availability of electricity, men were only responsible for decision-making in households, and women did not have the opportunity to participate actively in various matters. This economic independence has empowered women and given them a significant role in household decision-making.

The introduction of electricity has allowed women to acquire skills and seek employment opportunities independently. Women in rural areas equipped with electricity-powered machines such as sewing machines and heaters have started small businesses, contributing to their financial well-being. They have become involved in decision-making regarding their children's education, family finances, and other household matters. In the past, unemployed women did not receive much appreciation or opportunities to participate in household decision-making. However, with electricity, women have become more skilled and economically self-sufficient, increasing their influence in household matters. Women in rural areas are now actively engaged in making decisions related to their family's children's education and improving the overall economic conditions of their households.

By utilizing electricity-powered technologies such as mobile phones and computers, women have expanded their horizons and actively seek opportunities for income generation. In the present era, women's empowerment through electricity has enabled them to take charge of their households and make informed decisions independently. Modern technology and electricity have enabled women to contribute to their financial independence and enhance their role in decision-making processes. Electricity has played a transformative role in empowering rural women, enabling them to acquire skills, seek employment opportunities, and actively participate in household decision-making.

One of my respondents argues that if we talk about the role of electricity in empowering a woman or making decisions in her household, I'll provide my example. Initially, when I was in a difficult situation, and my family's financial condition was weak, I wasn't engaged in any work. My husband worked in a bakery, and our financial situation was challenging. However, when my children grew up, I decided to contribute to the family income. I started with what I was doing before, which was stitching manually. Finally, thanks to God, I upgraded to using an electric sewing machine, and I now earn double that amount compared to before. Since I started contributing, my husband has respected me more. Initially, I used a simple machine, but now, with the help of electricity, I use a motorized machine for laundry. This has significantly increased my income. Now, I earn more than my husband. Initially, I faced opposition from my family when I decided to work. However, with my determination and hard work, I have established a good position for myself. My husband now respects me because I earn more. Since I started working, my husband has handed me the entire house management. Now, I have an important role in making decisions about our home, whether related to our children's education, health, or the household's financial situation. Electricity has played a crucial role in empowering women like me. It has enabled me to take charge of my life and make decisions for my family. My income contributes to various aspects of my family's well-being, whether education, health, or overall financial improvement. My biggest decision was to provide my children with an education in a good school. At that time, I had no income, and my husband

worked in a bakery. Despite facing opposition from my family, I decided to work and enroll my children in a good school by doing various jobs, including stitching. However, with the introduction of electricity and various machines, women can now perform tasks traditionally associated with men. One of the respondents mentioned that.

If we talk about the significance of a woman earning through electricity, then a woman who earns holds much importance compared to a non-earning woman. Nowadays, many women have acquired various skills through electricity and empowered themselves. If we discuss our surroundings, women who earn through their skills are highly valued in our homes. They contribute significantly by earning for themselves and fulfilling the needs of their families. In today's world, the value of money is immense, and it is also given importance in our homes, where individuals earn by acquiring some skill. Talking about my home, my mother earns by selling milk from the dairy farm and contributes to our household income. Since my mother started earning, my father has involved her in making decisions in every matter of the house. Similarly, in most matters related to the household, my father seeks advice from my mother and acts upon her opinion. The decisions my mother provides input on are implemented. In this way, my parents collaborate in decision-making, and my mother's opinion is highly valued. Her earnings have given her a significant role in the family, and her contributions are respected in various aspects of our home and family matters. They mention that both my parents earn, and due to the dual income, our father involves us in every decision regarding the house. We collectively make decisions on any matter, whether it's a domestic issue or a household decision. We all play a role in determining how our earnings should be spent and how household expenses should be managed. Whether it's supporting the education of our siblings or any other matter, we jointly decide on it.

In my opinion, electricity has not only provided us with conveniences, but it has also contributed to gender equality between men and women. In the past, men were primarily responsible for certain tasks, and women for others. However, with the advent of machines, both men and women now share various responsibilities in the household, breaking traditional gender roles. Women are now involved in tasks traditionally considered for men, and vice versa, all made possible by the introduction of machines.

Many of the respondents mention that Women who earn should manage their households by establishing an effective system and handling their finances wisely. This awareness comes when women actively contribute to the financial well-being of their homes. On the other hand, a non-earning woman may be dependent solely on her husband's income, and she might not know how to manage household expenses or plan for the future when the husband is the sole earner. In today's era, as more women contribute to the household income, men and women collaboratively manage their household systems. A woman who earns has the right to participate in decision-making for every matter because her contribution plays a crucial role in enhancing the household's financial stability. This includes having an equal say in financial decisions, balancing household expenses, and planning for the future. Women who earn for their households can actively contribute to various aspects of their homes, making decisions on issues such as managing the household budget and addressing family matters. In these areas, such women find it easier to navigate because they earn for themselves, fulfilling their own needs and supporting the overall economic, mental, and social well-being of their families. These women can efficiently handle the household budget, ensuring that financial resources are allocated appropriately. They can make informed decisions on how to manage expenses, prioritize needs, and plan for future financial goals. Additionally, when it comes to addressing family issues, these women can provide valuable insights and support, leveraging their financial independence to contribute positively to the overall dynamics of the household. The respondents reported that. A time has come when it is no longer said that only men should work or only women should work. Both men and women engage in various responsibilities, both within and outside the home. Men are involved in household

chores, and women also take part in earning a living, whether through agricultural activities or external employment.

In the past, it was a different era when men were primarily responsible for earning outside the home, while women managed domestic chores by staying at home. However, in today's context, both men and women contribute to household responsibilities, and both are engaged in earning a livelihood, whether within the home or outside. Nowadays, for a household and society to progress, both men and women must work together. Until both genders collaborate in their efforts, society and the home cannot truly prosper. Therefore, in this era, it is imperative for both men and women to actively participate in work and contribute to the development of both the household and society as a whole. If we talk about empowered women, a working woman never relies on others for her needs. She consistently fulfills the requirements of her children and ensures that they are not influenced by anyone, be it in terms of food or clothing. Such a woman does not depend on others; she manages everything on her own and provides her children with a good upbringing. On the other hand, women who do not earn and are financially dependent on others often remain reliant on external support. They wait for their husbands to provide them with money, keeping them in a state of dependency. Every woman, if she can earn something for herself and her children, I want to say that if she is capable of any job or business, she should strive to earn something for herself and fulfill the needs of herself and her children. Such women who earn something are given the right to make decisions in every matter within their homes.

One of my respondents responded that when I wasn't earning, I was not given much importance, and my efforts were not valued. Later, when I fulfilled the needs of my family, took care of my in-laws, met my husband's requirements, and especially fulfilled the needs of my children, and then I earned a good place at home. Initially, when I used to handle household chores and responsibilities, my efforts were overlooked, and it seemed like it didn't matter to them. Now, when I come home after work, they don't even ask me to do much, acknowledging that I might be tired from outside work. If I talk about society in society, there is a prevailing perception that someone in a higher position or someone holding a good job is given a lot of importance. In every decision in society, when someone takes a positive step, it is acknowledged, and those who are influential in society are included in it and are considered important.

### **Changes in Household Chores and Responsibilities**

Most respondents mentioned that all the housework depends on a woman when we talk about household chores. In the past, people used coal irons, which took a lot of time, but now, thanks to electricity, women use electric irons that save time. Women used to wash clothes by hand, but now, due to electricity, machines like washing machines, which are used for washing and drying clothes, have been invented. In the absence of electricity, women used to spend hours cleaning their homes, but now with the help of machines like vacuum cleaners, women can clean their homes in minutes instead of hours. Additionally, various electrical appliances such as heaters and cookers are used for cooking and saving time. Juice extractors and machines like blenders and grinders are also used. We use an electric kettle. We have a geyser and a heater powered by electricity. This usage helps us fulfill the wood expenses because we don't have to bear the costs of using wood for these purposes. Additionally, we use a refrigerator, which is essential today due to rising costs. A common person cannot prepare a new dish every day, and that's where machines like refrigerators come in handy. They keep our food fresh and safe for a certain period. Along with this, we use television for a bit of entertainment. Alhamdulillah, we now have various machines like air conditioners that have been created. Alongside this, we also use the internet to run a more efficient system in our home.

One of the respondents argues that if we talk about the role of electricity in household chores or kitchen work in this modern era, I will say that no task is exclusively for fathers, sons, daughters, or mothers. Whatever task comes our way, we all have to do it because, in this era, we have electricity-powered machinery that makes every task easier. If there is no electricity one day, chaos ensues; the household system falls apart. When there is light, life becomes convenient; from cooking to cleaning, washing clothes to ironing, everything is done with machines. It's all thanks to electricity, which has created convenience. If I talk about my experience, I used to spend hours sewing clothes manually, but now I am using a motor-powered machine that runs on electricity, and I can complete the same task in half an hour. The time saved by electricity has allowed me to do much more. Therefore, we have reached a point where we can do a lot because of the availability of electricity. If we were to do all the work with our hands, we wouldn't reach this stage. We would still be in the old times, living with manual labor. They also say that, for example, in the past, people used to do tasks manually, and hours would pass by doing a single job. But in today's era, people can complete a task in minutes. For instance, in our grandparents' time, a wooden utensil was used to make a quilt, and it took hours to create a quilt. This required skill and physical effort, and people would get tired due to the effort.

Now, in our homes, we use an electrically powered machine to make quilts, and it can produce a quilt in half an hour without requiring human labor or physical strength. In the past, people engaged in manual labor that consumed hours for a single task, but in today's era, tasks are accomplished in minutes using electrically powered machines. Due to various electrical machines, especially for women who used to feel pressure from household chores, the burden has been significantly reduced. I use the internet for cooking at home. I learned to make various dishes and, along with using machines, I also made my work easier. And for decorating my home or if I need a design for sewing my clothes, I use the internet. Similarly, the internet has transformed our household system significantly, whether in decoration or in utilizing various things. In the same way, I benefit from social media through my mobile phone, where electricity plays a significant role. If we talk about the old times, people were not aware that clothes could be ironed. But today, people don't wear clothes without ironing them. These days, men also contribute to household chores using machines, such as ironing their clothes and assisting in kitchen tasks. Electricity plays a role in every aspect.

### **Income-Generating Activities and Economic Opportunities**

Due to electricity, numerous opportunities have been created for women, especially rural women, to acquire skills and earn a livelihood. The availability of electricity has empowered women to learn various skills and engage in online businesses from the comfort of their homes. In the past, it was challenging for women to leave their homes to learn a skill or earn a living, but electricity has transformed that scenario. The majority of respondents argue that Women can now learn various skills and engage in online businesses using the internet. They connect with people worldwide utilizing technology powered by electricity. Electricity powers machines like mobile phones, laptops, and computers and facilitates their charging. The availability of electricity has enabled women to work from home, contributing positively to their households.

Women who have acquired various skills are now actively participating in agriculture, running small businesses, and selling agricultural products and fruits. A girl can do a lot to achieve something in this era. For example, she can work part-time jobs, set targets for herself, and earn money by working hard. Many girls with determination work towards their goals and make themselves financially independent by taking up part-time jobs. They take care of their lives and create a sense of autonomy within their homes. Women now make and sell products like yogurt and butter from home. Many respondents argue that if we draw a comparison between the past and the present, now even an uneducated woman has so many opportunities where she can improve her financial

situation. Nowadays, if I provide an example from my surroundings, a woman makes chapattis and earns a livelihood by selling them, and she also sews clothes to support herself.

One of the respondents mentioned that Alhamdulillah, thanks to Allah, our businesses are running smoothly in our home. If we talk about the role of electricity in our business, in our dairy farm, fans are also installed for the cows, and electricity is essential. For them, a system of electricity supply has been established. Electricity plays a significant role in our businesses, contributing to increased earnings. Additionally, warm water is provided for the cows through electricity. In the poultry farm, a system of electricity is also in place for the chickens, providing them with warm water. In poultry farming, we use electricity to heat water for the chickens. In summary, electricity plays a crucial role in our businesses, keeping them functioning and running smoothly. Similarly, by using electricity-powered machines in the dairy farm, we produce cream from milk, and through this process, we obtain butter. This is another source of income for us. In the past, making butter was a challenging task that required human effort, but now, with machines powered by electricity, the process has become much more efficient. We are grateful for the convenience that electricity brings to our businesses, making them operational and successful.

There was a time when it was surprising for everyone to hear that women were carpenters. However, due to electricity, we now have machines enabling women to work in factories and earn a living. There was a time when women could not even find enough food to eat, but now, women work and earn for themselves. There was an aunt in our neighborhood, and her financial situation was not initially perfect. She could have sought help from relatives, but she considered earning it better through hard work. So, she started working to create blankets with her mother by using a machine. She began making and selling (chapattis) using electric heaters, and now she deserves well, fulfilling the essential needs of her household. In this way, her financial situation improved significantly. She started managing her home better, and it all began with the help of a machine. This allowed her to generate income and contribute to the family's well-being. Through her hard work and the device's assistance, she improved her household and played a role in the business. Similarly, electricity has empowered many women around us. Numerous women in our surroundings run small businesses, improving their financial situations. So that our mother and those working with her never had to go to the market and attend events or occasions if there was a demand, as they were self-sufficient. Proud of such women, there has been significant progress in society. This has enabled them to fulfill their needs, and nowadays, most women are managing their household systems.

Similarly, women nowadays are enhancing their financial situations through various means. Speaking for myself, I am involved in education and also work as a landowner in the field of agriculture. Agriculture plays a significant role in my life, and when it comes to the role of electricity in agriculture, we earn through various greenhouses. We grow different vegetables and sell them, contributing to our income. In terms of electricity, during winter, we use the heating system in our greenhouses, which requires electricity for heaters and heating systems. Additionally, we use motors for irrigation, and electricity plays a crucial role in powering these motors. This way, she has increased her income, showcased products, and generated income without leaving her home. Around us, many exemplary women have elevated their sources of income. Another respondent mentioned that when I talk about myself, I work in a beauty parlor, and electricity plays a significant role. Regardless of the type of machine, be it hair straighteners or hair dryers, I use these machines through electricity. I have various devices used in the parlor, such as hair straighteners and hair dryers. With the help of electricity, I earn a substantial income for myself. Similarly, we use lights and fans in the parlors. The use of fans helps to attract customers, and if I talk about my parlor, I have learned a lot by taking various courses and training through the Internet, using electricity.



Some have opened beauty salons, some have opened dairy farms in their homes, and others have started poultry farms. Similarly, by learning different skills, women have empowered themselves.

### **Improvements in Health and Well-being**

Electricity has played a significant role in transforming the healthcare sector, particularly in improving women's health. In the past, when electricity was not readily available, women faced numerous challenges. With the advent of electricity, various machines have been introduced that enable rapid diagnosis of every illness. Talking about midwifery, in the past, when someone was ill or a woman was pregnant, they were often brought from Hunza to Gilgit. Many would take risks with their lives, especially on the way to the clinic. In the past, doctors used to treat a patient based on their condition.

However, nowadays, when patients visit a doctor, their illnesses are examined through various machines, which are possible only due to electricity. Today, some diseases cannot be diagnosed by a doctor without using machines. Even if a doctor performs an examination or conducts a blood test, it is done through the laboratory, where different machines, powered by electricity, are used. One of my respondents told a real story of her grandmother that when my grandmother became pregnant and faced difficulties due to pregnancy, she was taken to Gilgit. In those times, transportation facilities were scarce, and the lack of electricity made the journey even more challenging. Due to the severe difficulties, her delivery had to take place in a remote area within Iskandarabad Nagar, where there was no access to modern medical facilities. During that era, although there were hospitals in places like Iskandarabad Nagar, the lack of machines powered by electricity meant that deliveries in remote areas like this had to rely on traditional methods. One of them argues that our grandmothers used to mention that they worked in fields and jungles, and their deliveries would take place there as well; however, today treatment is available for even the smallest diseases.

A mother can easily receive news about the well-being of her unborn child, whether the child is healthy or weak. One of the respondents argues that due to electricity, there has been a significant transformation in the field of health to the extent that if we encounter any health issues, we can seek treatment online. Through the internet, we can consult with doctors to receive advice on how to treat our illnesses, rather than going to a hospital and spending money. Let's talk about our mental health. If there is no electricity in the house for even an hour, we become very distressed. This prevents us from carrying out our daily activities, and we resort to using alternatives to electricity in our homes. Living without electricity is very difficult for us. We face a lot of mental conflict, not only when there is a disruption in our daily activities, but also when there is no electricity for us to wear ironed clothes or when our homes lack a functioning freezer, as a result, the food, fruits, and vegetables stored in our homes go bad. When there is no electricity, our children engage in outdoor play and activities in the streets and jungles.

However, when electricity is available, they learn something through the internet. Similarly, speaking for myself, I work at a beauty parlor which operates on electricity. If there is no electricity, my work becomes incomplete, and I have to wait for the electricity to resume so which disturbs us mentally. When there is no electricity and their devices are not charged, they are ready to go crazy. Similarly, living without electricity has become very difficult for human life. In the past, cow dung and smoke-producing substances were used, leading to the emergence of many diseases. Now, with the advent of electricity, such dangerous diseases caused by these types of fumes have been eliminated. While diseases still exist today, the role of electricity in hospitals is significant. Various machines are used to diagnose every illness, and unlike in the past, when a patient would suffer more without quick communication, now mobile phones and the internet play a crucial role. In case of any emergency, an ambulance is quickly summoned, and relatives are informed promptly.

This has significantly reduced the number of deaths that used to occur in the past due to a lack of immediate medical attention. In the present day, when someone is involved in an accident, they are quickly admitted to the hospital.

### **Time Savings and Increased Productivity**

Many respondents argue that if we talk about saving time, electricity has made human life much easier, whether it's household chores or professional work. We use technology in every aspect of life, made possible only by electricity. Before the advent of electricity, people were limited to their homes due to the absence of multiple means powered by electricity. They used to quickly finish their household chores and go to sleep because there were no machines powered by electricity to make their work easier. Now, people play their role day and night with electricity, making their lives brighter. Women in rural areas, in particular, are learning different skills by using various electricity-powered machines. This allows them to work tirelessly day and night, improving their lives and gaining new skills.

Our time is saved, as we have a machine for every household chore, allowing us to consolidate all tasks and save valuable time. We spend most of this saved time with our family members, especially our parents, where we get the opportunity to sit with them. If these machines were not available, we would spend our days working in our fields or engaged in the hustle of livestock management. One of the respondents mentioned that if we talk about saving time due to electricity, we have benefited significantly by using various machines. In this way, I either take some rest or engage in another pending task, I cut grass for the cows in the fields, or perform any necessary agricultural tasks. Sometimes, I handle the craft of working, preparing meals for myself, and so on. This is how I make the most of my time saved. When talking about our home, we use many electrical appliances that help us save time. We often try to engage in extra activities using various machines when utilizing our saved time. We try to participate in additional activities when our time is protected through different devices during the reserved time, either I teach my siblings, or if I have something to study, I focus on my studies. For my professional life, I prepare myself. In such free time, we save the money we earn for ourselves. We organize these savings for ourselves, and when needed, we utilize them. Similarly, using various machines in our business saves significant time. When we have idle time due to the devices we use, we engage in activities that do not require machinery. When we have electricity, we use machines for specific tasks. However, when we have free time, we engage in manual work that requires our hands, such as planting seeds, weaving, and other activities. During embroidery, many things are done by hand, like attaching beads, so electricity has saved us time, especially for women.

### **Changes in Educational Access and Outcomes**

Electricity has played a significant role in women's education. Before the advent of electricity, there was widespread poverty, and women's education was not given much importance. Those who pursued education faced numerous challenges. In the era when our ancestors used coal and kerosene oil lamps, gas households were illuminated, but poverty was extensive. Lamps and oil were expensive, leading to early closures for the night. Many respondents argue that

Before electricity, when we studied, our parents urged us to finish quickly due to the cost of oil for lamps, making it challenging to learn late into the night. Our parents were occupied with daily household chores, limiting our study time. However, with the arrival of electricity, numerous conveniences were created for women's education. The Internet became a powerful tool for acquiring knowledge. Students can now access education and information from every corner of the world. Various means are available for obtaining

education, such as computers, mobile phones, and laptops. Today, every village in the rural region has at least one school.

As rural areas become educated, they also access facilities for learning various skills. Today, children are not only taught in schools, but due to electricity, different tuition centers and academies are being established, which are contributing to improving the field of education. Some have argued that if we look at education in our time, there are no laptops or mobile phones like today. When we studied with the help of lighting, we studied for a limited time, and our parents used to quickly switch off the lamp due to the fear of running out of oil and getting the required money. The money was scarce, and whatever was obtained from the land was used for sustenance. When we went to school, the fees were minimal, and we didn't worry much about it. When I attended primary classes, my fee was only five rupees. With the advent of electricity, we started studying comfortably. Nowadays, people look on the internet using various tools for learning.

The internet has played a crucial role in developing and interconnecting the world. There was a time when people did not fully comprehend the importance of education, especially women in our society, who were deprived of the blessings of education. However, with global connectivity, people have become aware of the significance of education. The internet has enabled individuals to explore the world from the comfort of their homes. Through connectivity with developed nations, people realized the importance of education, and a heightened emphasis was placed on educating everyone, particularly women. The internet has contributed to the progress of various regions worldwide, highlighting the rights of individuals, especially women, and promoting education. It has been essential in allowing people, especially women, to exercise their rights and fostering education. With these technological tools, children have developed a passion for studying, and as a result, they have excelled in education. Whether they are boys or girls, children's progress and enthusiasm for learning can be attributed to the presence of electricity.

Today, children can self-study, manage their assignments, and improve their academics independently. Similarly, by utilizing various channels on platforms like YouTube, they can advance their knowledge and benefit from a wide range of educational content. The prevailing notion in education prioritized men, and our ancestors believed that girls should stay home and not venture outside. Much pressure was exerted to confine them to the household, and numerous restrictions were imposed. However, in today's era, girls are equally capable of education. The current environment empowers girls to excel in education just like boys. Nowadays, girls have the opportunity to build their careers in education, and they are encouraged to think about their future independently. The advent of facilities such as the Internet, thanks to electricity, has played a significant role in this transformation. It has allowed our parents to see the world, and awareness has grown that education is essential for everyone. There was a time when knowledge was primarily acquired through books, which had their limitations. Today, the internet provides access to vast knowledge in every field. Today, our women have made significant progress in the field of education as well. A woman plays a vital role in preparing the next generation, and she is best equipped to understand the needs of her children and make decisions about their upbringing and education.

### **Participation in Development Skills and Learning Opportunities**

Electricity has created numerous opportunities for women to learn various skills that were once impossible. Nowadays, people can sit in one place using the internet and earn a significant income. Electricity has empowered women to the extent that they can make for themselves and fulfill their own needs. Our girls, alongside their education, are learning different online digital skills, earning for themselves, and meeting their requirements. They do not make themselves dependent on anyone. Likewise, electricity has illuminated various abilities in children, especially women, enabling them to acquire

different skills. By learning these skills, women enhance their economic status by managing household chores and improving their financial situation. In the same way, through the various means of electricity and the internet, women not only fulfill their basic needs but also benefit from facilities like banking. For example, just like freelancers avail themselves of facilities through freelancing, our women also engage in freelancing. Through freelancing, they earn money, and not only do they generate income through electricity, but facilities like banking have also empowered women. They can use their earnings according to their needs through savings.

## **Conclusion**

The analysis shows that access to electricity empowers women in all dimensions of empowerment, where it is about health, education, economic, social, and cultural aspects. In empowering rural women, electricity has played a significant role in improving the status of women in rural areas. Before the arrival of electricity, decision-making in households was primarily the responsibility of men. However, with the introduction of electricity, women gained access to various skills and employment opportunities, allowing them to establish a strong presence in decision-making within their homes. Women in rural areas started learning different skills. They initiated small businesses, such as making handicrafts, stitching, selling milk, yogurt, and butter, working at beauty parlors, working in factories like making quilts, blankets, uniform centers, running dairy farms, pottery forms, all just because of electricity, and where they are earning an income for themselves. This economic independence has empowered women and given them a significant role in household decision-making. About the role of electricity in household chores or kitchen work in this modern era, no task is exclusively for fathers, sons, daughters, or mothers. It has also played a vital role in women's education. Before the advent of electricity, widespread poverty existed, and women's education was unimportant; those who pursued education faced numerous challenges. Educational resources were limited. Learning from books was one of the few available options. However, with the advent of electricity, the Internet became a powerful tool for acquiring knowledge. Students can now access education and information from every corner of the world. Various means are available for obtaining education, such as computers, mobile phones, and laptops, which were not even known in the past. As rural areas become educated, they also access facilities for learning various skills through connectivity with developed nations. People realize the importance of education. Without electricity, women might be compelled to seek employment outside the home. Still, electricity has opened opportunities for them to work within the comfort of their homes.

## **Recommendations**

This study recommends the following areas:

- First, there should be the promotion of gender-sensitive energy policies. This can be achieved by fostering the implementation of electrification projects that would ensure the needs of women, such as access to household appliances, lighting for evening education, and electricity for home-based business ventures. Also, if women are included in the energy-based policy-making and planning, it would ensure the perspectives and priorities of women at a large level.
- Second, there is a need to endorse educational and vocational training. This can be done if there is more utilization of electrification to expand educational facilities by powering schools, digital learning centres, and vocational training institutes, with special focus on women and girls' enrollment and participation.
- Third, supporting women's empowerment is a necessary part of this initiative. Women in Gilgit Baltistan, especially in Nagar and Hunza, should be encouraged to the home-based businesses and provided them subsidies and loans to purchase and use electric

appliances such as sewing machines, food processors, and computers. This will enhance the micro-level employment and generate per capita income for women.

- Fourth, the government of Pakistan needs to improve women's access to basic healthcare facilities. The health conditions of women in remote areas of Gilgit-Baltistan, such as Hunza and Nagar, are vulnerable. There is a need to ensure reliable lighting, refrigeration of medicines, mobile health clinics, and telemedicine services, and the operation of essential medical equipment that would directly improve the healthcare needs of women, such as maternal health services.
- Last but not least, public awareness programmes should be encouraged and promoted in Nagar and Hunza. This can be achieved through the conduct of community-based awareness programs to educate families about the importance of electrification in reducing women's workload, improving productivity, and enhancement of their quality of life. Therefore, women in Nagar and Hunza should be given training sessions on the use and maintenance of electric technologies and their participation in managing energy resources.

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