Nepal – Sustainable Hydropower Development for Energy Security

Gender Assessment

I. Introduction

This assessment provides an overview of gender inequality in Nepal, identifies gender issues that may be relevant to the proposed program, as well as ensure and examine potential gender mainstreaming opportunities. The assessment is based on data and studies conducted by the Government of Nepal, donor agencies, and multilateral development banks, including the World Bank and International Finance Corporation (IFC).

Overall, global research has shown that existing gender disparities are commonly aggravated by dam construction, meaning that benefits of hydropower accrue disproportionately to men, and the negative impacts to women. A variety of international tools exist to assist in the assessment and planning of hydropower projects, which recognise gender differentiated impacts to varying degrees:

• The 2010 Hydropower Sustainability Assessment Protocol (HSAP) regards gender as a cross cutting at all stages of hydropower development and operation. It does not, however, provide guidelines for rigorous gender impact assessment, mitigation or monitoring.

• The Rapid Basin-wide Hydropower Sustainability Assessment Tool (RSAT) was developed in 2010 for application in the Mekong region by USAID, the Mekong River Commission, and the World Wide Fund for Nature and the Asian Development Bank. The Tool provides guidance to the ‘particular attention’ of vulnerable groups including women, Indigenous Peoples and those without legal title to land, but does not include guidelines on considering gender differentiated impacts.


• In 2013, Oxfam Australia released “Balancing the Scale: Using Gender Impact Assessment in Hydropower Development” to assist governments and developers in the Mekong region incorporate gender impact assessments more comprehensively into their project cycles. The Manual provides guiding questions and a six step framework.

II. Nepal – National Development

According to the World Bank, the Asian Development Bank (ADB), the Department for International Development (DFID)’s Gender and Social Exclusion Assessments, Sectoral Series: Monographs study, the Gender Review of National Energy Policies and Programmes in Nepal and World Bank’s and ADB’s most recent Country Partnership Strategy for Nepal, the country has made progress in poverty reduction overall.
The percentage of the population below the national poverty line decreased from 30.9% in 2004 to 25.2% in 2011. The country’s Gini index of income equity improved from 43.8 in 2004 to 32.8 in 2011. The United Nations Human Development Index (HDI) improved to 0.463 in 2012 from 0.398 in 2000. Reduced poverty and inequality are largely due to increased income in rural households from remittances of workers abroad, as well as better access to social services such as education and health. However, poverty levels and vulnerability continue to be highly correlated with gender, caste, ethnicity, regional identity, and geographic location.

While Nepal has made progress in property ownership for women and in fighting gender-based violence, for example, women’s participation in the constituent assembly is about 30 percent, yet there is very little participation of women in the higher echelons of the executive positions.

As discussed in the World Bank’s Country Partnership Strategy for Nepal 2014, Nepal has made progress in enhancing gender equality and women’s empowerment. Gender parity in primary education has been achieved, with completion rates for girls at primary level being slightly higher (82.1 percent) than for boys (81.8 percent). The percentage of births attended by skilled birth attendants has almost doubled, from 19 percent in 2006 to 36 percent in 2011. But women’s access to these services is much higher in urban than rural areas and more prevalent in Terai than in mountain districts. Contraceptive prevalence rates have been constant at about 48-50 percent for the last five years, yet the overall fertility rate declined from 3.1 (2006) to 2.6 (2011), far better than in similar-income countries.

III. Nepal and Climate Change

Nepal, as a Least Developed Country (LDCs), is highly vulnerable to climate change. It is ranked fourth amongst sixteen countries categorized to be at “extreme risk” from climate change impacts over the next thirty years.¹ As illustrated by the International Institute for Environment and Development (IIED)², in LDCs women are more vulnerable to the impacts of climate change than men. This is because women’s adaptive capacity is determined by the availability and accessibility of natural resources, which are adversely affected by climate change. Given that men and women have different adaptive capabilities, climate change has an impact on the relationships between them. According to the IIED examination of existing climate policy in Nepal, including the 2011 Climate Change Policy, the National Adaptation Plan of Action (NAPA), the Local Adaptation Plan of Action (LAPA), among others, IIED finds that despite there being an understanding of the relationship between gender, poverty and vulnerability in relation to climate change, there has been insufficient focus on the incorporation of a gender analysis into the development and implementation of climate change laws.

The earthquakes in 2015 had a particularly devastating effect on women. The pre-existing socio-cultural and economic factors meant that women were particularly vulnerable following the earthquakes in Nepal. Disruption to systems and services during a disaster mean that the often already limited access to resources and assets decreases further and some women find themselves forced to turn to risky behaviour such as transactional sex as a means of survival. The increased prevalence of risky sexual behaviour, increased rates of rape, sexual exploitation and trafficking following a natural disaster can increase women’s risk of unwanted pregnancies, sexually transmitted infections and complications regarding reproductive and sexual health.

² Climate Change Working Paper No 2, November 2012; Mainstreaming gender and climate change in Nepal
IV. Energy Sector in Nepal

Nepal is endowed with vast electricity generation capacity; thanks to an extensive river system originating from the Himalayas. With approximately 6,000 rivers, the country possesses one of the largest hydropower potential globally, about 43,000 MW worth of hydropower is considered viable. Despite this, Nepal has developed only 700 MW of hydropower, or less than 2 per cent of the total economically and technically feasible potential.

The country suffers from gross electricity shortages and reels from an average of five hours of power cuts every day. The situation deteriorates during the dry winter months, where power cuts can reach as high as 14 hours daily. **Energy shortage has not only affected the quality of life, but also become a major constraint to economic development and poverty alleviation.**

At present, close to 90 per cent of the country’s total primary energy needs are being met by traditional forms of energy (i.e., firewood, agricultural waste, and animal residue). Electricity accounts for only 2 per cent of total energy consumption in the country and only 40 per cent of the population have access to electricity through the national grid or off-grid applications as opposed to less than 30 per cent of the rural population. About two-thirds of the total households in Nepal use firewood as the primary source of cooking fuel. **The lack of access, quality of service and affordability of power is hindering the country’s development.**³ It also has impact on achieving gender equality as we will review below.

V. Gender in Nepal

The Gender Review highlights that Nepal has made a number of formal commitments towards gender equality, and efforts have been made to mainstream gender in national planning processes as well as in development programmes, and to adopt gender responsive budgeting. While a legal, political and institutional framework for gender equality is in place, implementation is often weak due to lack of financial and human resources.

Despite the above mentioned progress, **women continue to lag behind men in socio-economic condition.** Gender Inequality Index (GII)⁴ is at 0.479, keeping Nepal in the category of countries with low human development in terms of gender.⁵ According to a recent study commissioned by the World Bank on gender and energy in Nepal, **female economic empowerment continues to be a challenge;** female involvement in non-agricultural sectors is minimal, and over 60 per cent of the female workforce is engaged in self-employment activities and/or unpaid family labour. Few have skilled manual jobs, and women are less likely than men to be engaged in professional, technical, and managerial fields. There are also sharp differences in women’s status depending on their class, caste, ethnicity, religion and age.

In sum, Nepalese women have fewer economic assets, less access to finance, higher rates of illiteracy, and little knowledge of their legal rights. They are generally bound to their responsibilities

³ http://www.spotlightnepal.com/News/Article/ENERGY-TO-POOR-Practical-Approach

⁴ The GII can be interpreted as a combined loss to achievements in reproductive health, empowerment and labor market participation due to gender inequalities. Higher GII values indicate higher inequalities and thus higher loss to human development. http://hdr.undp.org/en/faq-page/gender-inequality-index-gii#t294w117

⁵ Human Development Reports: Gender Equality Index
at home and have fewer opportunities than men for earning income and participating in decision making and governance.

Further, while women have an important role in household management, including energy, their contributions continue to remain undervalued.

VI. Policy Framework on Gender in Energy

Based further on the aforementioned study commissioned by the World Bank, Nepal has made significant efforts to strengthen its policy and institutional framework on promoting gender equality.

The Interim Constitution of Nepal 2007 states: “No discrimination shall be made against any citizen in the application of general laws on grounds of religion, colour, sex, caste, tribe, origin, language or ideological conviction or any of these.” The Gender Equality Act of 2006 was enacted (Act to Amend Some Nepal Acts for Maintaining Gender Equality, 2006). Nepal has made international commitments towards gender equality such as signing the Convention on the Elimination of All Forms of Discrimination against women (CEDAW) in 1991 and being party to the 1995 Beijing Platform for Action.

In 2006 Nepal updated its legislation with more gender-neutral language for its birth registration procedures. Previously, notice of a birth was given by the head of household, and in his absence, by the eldest male member of the family. Women as well as men can now be designated head of household, and the eldest male member no longer provides birth notification if the head of household is absent. (Women, Business and the Law report 2016).

In addition, in Nepal, the Supreme Court mandated the establishment of fast-track courts in addition to the in-camera hearings that the Domestic Violence Crime and Punishment Act provides for. However, no legislation, civil remedies or criminal penalties exist concerning sexual harassment in employment. (Women, Business and the Law report 2016).

Further, the energy sector has also seen significant policy-strengthening efforts. The Environmental Protection Act 1997 provides basis for the protection of physical and, to some extent, social environment; the Local Self-Governance Act 1999 was enacted to expedite the process of decentralisation and enhance the participation of all people, including socially and economically marginalised groups; the Land Acquisition Act 1977 entitles individuals to compensation in cases of land acquired for development activities; the Hydropower Development Policy 2001 places emphasis on environmental conservation and avoidance of any substantial adverse environmental impacts due to project implementation; and, in 2007, Nepal ratified the International Labor Organization Convention on Indigenous and Tribal Peoples 1989 (No 169). Furthermore, the requirement to conduct public hearings as part of the Environment Impact Assessment (EIA) or Initial Environment Examination (IEE) as per the Environment Protection Act 1997 has led to mandatory consultations with affected communities.

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7 ADB, 2010.
10 Land Acquisition Act, 1977.
11 DOED, 2005.
12 ADB, 2010.
Despite these improvements, there is still ample room to improve upon gender issues during hydropower development, and in the area of access to energy.

VII. Gender Issues in Hydro sector

Improving gender equality and social inclusion remains critical to fully realizing the development impacts of energy programs. Electricity provision can be considered an essential means to support overall economic development, rather than an end in itself. Recent studies show empirical evidence on the cumulative impact of electricity on economic development – such as increased income, health, better education and reduced poverty (Barnes et al, 2013 and Kohlin et al 2011). Since the 1990s, energy and gender studies have focused on gender and energy access, specifically energy for cooking.\(^\text{13}\) There is also evidence on gender-disaggregated impacts of access to electricity. Lighting and TV are the most common uses of electricity, accounting for 80% of rural electricity consumption. Generally, electricity is not used for cooking in poorer countries. Women can benefit from reduced work time due to water pumps and improved quality of life due to better lighting conditions (Clancy et al, 2002). Indirectly, electricity access can benefit gender equality by improving women’s security and opportunity. Kohlin, et al (2011) document women’s and men’s different experiences of the risks, benefits and impacts of energy access projects – from access to benefits in terms of jobs, compensation and community investment; to decision making roles for new energy technologies; to access to finance to pay for electricity services.

As women often bear the primary responsibility for managing the household energy and water needs, the availability of electricity can help free up women’s time and enhance opportunities for other work. For example, women particularly in the rural areas are responsible for collecting water from rivers. As such, changes in water regimes due to hydropower development will have an impact on women’s ability and safety to collect water. But the availability of electricity can enable women and men to use water pumps to store and use water more efficiently.

On the other hand, energy infrastructure projects could potentially exacerbate existing gender biases. For instance, these projects could inadvertently increase gender inequality in some households if men were given employment in these projects over women. Access to benefits from an energy infrastructure project, namely, compensation, employment, access to land and water, etc., is affected by pre-existing social relationships and hierarchies.

Literature suggest also that energy infrastructure projects, have the potential to play a positive role in gender relations. The World Commission on Dams noted that: “... as gender is a relational concept, access by women to the benefits generated by a dam (such as electricity) is a necessary but not sufficient condition for positive gender impacts.” (WCD 2000, p.114-115). If done well, projects have the potential to play a transformative role in gender relations.

Research indicates that energy infrastructure projects have many positive impacts:

- Availability of electricity which supports all, including women and the excluded. Enables children, including girls to do homework (read) at home.

\(^{13}\) Such as J. Clancy, M. Skutch among others
• Impact on local economic dynamics because of "construction boom" activities with employment opportunities for supply chain opportunities for local suppliers including women.
• Capacity building - skills strengthening, and exposure to different standards of development,
• Compensatory benefits and long term change in the whole community due to the presence of such a project for a considerable period of time.
• Community development projects that alleviate poverty and increases choices for women
• Street and public space lighting is linked to crime rate reductions and may help reduce violent sexual crimes that are affecting women.

Adverse impacts could also occur such as:
• Minimal engagement of women, poor and the excluded resulting in no or nominal engagement in the project processes leading to frustration and disenchchantment
• Employment opportunities for a select few only, excluding women to a large extent, thus increasing women dependency on men as household income providers.
• Post-boom frustration due to inability to continue with an improved lifestyle experienced during the construction period.
• Community stakeholder consultation and local development plans made without the voice of women. This issue is particularly relevant for hydropower development. Women may be excluded because they are out collecting water or in the fields.
• Increase in sexual harassment around construction sites as well as human trafficking
• Increase in sexually transmitted disease such as HIV/AIDS

It is becoming increasingly recognized globally that it is important to account for gender aspects and different socio-economic implications of energy infrastructure projects. At the same time, much still needs to be done to analyse the implications of energy access across gender in Nepal.

VIII. Recommendations

Generally speaking, during the project planning phase of hydropower development, women are especially vulnerable when gender sensitivities are ignored. These vulnerabilities range from housing relocation, access to land for livelihoods, food security, water access and climate change. Gender-sensitive planning, including impact assessments and appropriate stakeholder engagement and consultation, or planning that responds to gender differences and identifies opportunities and needs, can help reduce and place emphasis on women’s vulnerability and at the same time increase project sustainability. Gender-sensitive planning may include public consultations with women to better understand power dynamics, and the different needs they have than men, and assessing sex-disaggregated data to develop a gendered project baseline.

IFC’s 8 Performance Standards provide guidance to companies on how to better manage their environmental and social risk. This includes insights into how to engage affected communities and other stakeholders throughout the entire project cycle. Women affected by hydropower development may also benefit from developers adhering to the standards, as they promote equitable project planning and implementation, as culturally adequate grievance mechanisms.

Developers that follow these standards from early in the project cycle benefit from improved management strategies that help offset risks. If the IFC Performance Standards are applied from the start, hydropower projects will achieve good international and industry practice (GIIP). Further,
gender-inclusive planning not only has an impact on project sustainability, it could also pave the way toward better job opportunities for women.

Often labelled as ‘a man’s job’, women comprise less than one percent of the hydropower workforce. The challenge is to consider how gender-inclusive planning can provide job opportunities for women throughout the entire project life-cycle.

**During program implementation, qualitative assessments can be conducted on gender-specific benefits that can be directly associated to the program.** Indicators to quantify the achievement of program objectives in relation to gender equality may include men and women who have new **access to power**, number of men and women **employed from the jobs** created by hydropower projects, training opportunities, knowledge management and information dissemination.

- Ensure equal participation of women and men in the design of local share distribution criteria
- Ensure equal participation of women and men in livelihood restoration plans with project developers and local government authorities, specially facing the increased vulnerability of women and girls as a result of the earthquake aftermath.
- Ensure that resilience training and disaster risk mitigation mechanism include both men and women

To address and mitigate some of the adverse impacts that hydropower projects can have on women, the Nepal – Sustainable Hydropower Development for Energy Security program will implement the Gender Action Plan discussed below.
### Proposed Action Plan

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<th>Objective</th>
<th>Action</th>
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<th>Responsible Institution</th>
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<tbody>
<tr>
<td>Impact: Women have reduced their time and labor for household tasks in the long-term through improved energy access and women have more economic opportunities through enhanced representation, quality employment opportunities and increased access to assets in the medium-term.</td>
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<td>Outcome: Women will have the ability to influence their livelihood strategies by a) increasing women in decision making around natural resource management; b) increasing women on livelihood selections; c) ensuring access to skills building for selected livelihoods; and d) raising awareness in the hydropower sector about policies and practices to employment of women in the sector.</td>
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<td>Output 1:</td>
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<tr>
<td>Women are considered in the design of local share practice criteria</td>
<td>Undertake a landscape assessment and a collective analysis on how decisions have been made on local share models to date, and consider specific needs of women and men in these.</td>
<td>1 landscape assessment produced that includes a gender analysis and is widely shared with key stakeholders.</td>
<td>IFC and partners such as hydropower companies, USAID, local and international NGOs, government agencies/ministries and local councils</td>
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<td>Understand and analyze the process with local communities - ensure women are well represented from different castes and across different income levels in the consultative panel.</td>
<td>Proposed Local Share eligibility criteria and distribution mechanisms that explicitly articulate gender considerations.</td>
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<td>Xx number of women participants in the consultative panel.</td>
<td>Xx number of women participants in the consultative panel.</td>
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<td>Output 2:</td>
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<td>Women are participating equally in post-earthquake relief efforts.</td>
<td>Ensure women’s participation in the design and construction of an earthquake proof multi-purpose community center reflecting inclusive design practices.</td>
<td>Xx number of women participating in preparation meetings and in constructing the school and/or health center. The school and/or health center reflects inclusive design thinking taking into account the different hygiene, accessibility and safety needs of women and men across various age groups.</td>
<td>IFC and partners</td>
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<td></td>
<td>Identify female leaders highlighting their role in maintaining resilience and community cohesiveness in the aftermath of the earthquake.</td>
<td>Xx case studies/radio programs/etc. of female roles models identified and highlighted / honored in their own communities and beyond.</td>
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<td>Ensure gender sensitive training delivery (time/content/facilitators) on earthquake recovery and reconstruction and ensure female participation is at least 40%.</td>
<td>[2] trainings developed that are sensitive to different needs of men and women in earthquake recovery phase and in livelihood creation.</td>
<td>IFC and partners</td>
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<td>Output 3: Women participate in and benefit from the implementation of livelihood restoration programs.</td>
<td>Ensure that restoration programs are designed with input from women in different locations. The program’s content, implementation as well as delivery channels will be sensitive to women’s time constraints, care burden and social/economic constraints.</td>
<td>[1] program designed that reflects gender specific needs and seek to close gaps between men and women around livelihood selection and and decision-making. Enhanced capacities of women to access assets through their participation in livelihood restoration programs. Xx number of women participants in livelihood training.</td>
<td>IFC and partners</td>
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<td>Output 4: Women’s roles are improved through the development of new hydropower related policy and regulations</td>
<td>Include the differentiated role of women in men in how they are impacted by hydropower development, Ensure their voices are heard and environmental or cumulative impact assessments clarify the different impacts to men and women</td>
<td>EIA guidelines for hydropower sector include gender considerations CIA guidelines for hydropower sector include gender considerations</td>
<td>IFC, Government of Nepal, and partners</td>
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<td>Output 5: Good practice case studies/guidance notes and toolkits showcase how to reduce gender gaps in hydropower projects around access to and management of natural resources.</td>
<td>Include gender specific examples in communications materials illustrating a gender sensitive approach to project design and implementation as well as the local share mechanism. Xx toolkits/guidance, lessons learned notes, and videos developed where different needs of men and women are reflected</td>
<td>IFC and partners</td>
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<td>Ensure that women’s voices are being captured in collateral material, particularly highlighting female role models such as community leaders where possible.</td>
<td>Xx of articles, blogs, examples that highlight women’s leadership roles and are written by female leaders.</td>
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**Output 6:**

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<tr>
<th>Women’s capacity is increased through participation in technical trainings on environmental and social issues in the hydropower sector</th>
<th>Include gender specific examples in training materials and gender-sensitive methodologies that enable active participation and learning by women in training workshops</th>
<th>40% participation by women in training workshops</th>
<th>IFC and partners</th>
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<tr>
<td>Assess barriers and opportunities for women’s employment throughout the construction phases in the hydropower sector</td>
<td>Conduct a study to assess barriers and potential opportunities for the employment of women with equal pay for equal amount of work in the construction phase of hydropower. Create a peer network of construction companies for knowledge and experience sharing regarding enhanced and equal employment opportunities for women in the construction phase of hydropower.</td>
<td>Study completed on employment opportunities with equal pay for equal amount of work for women in the construction phase of hydropower. 2 peer network meetings convened on best practice of women’s recruitment, retention and promotion in the sector. Companies identified to take measures for women’s employment with remuneration parity in the construction phase of hydropower projects.</td>
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**Output 7:**

| Minimize adverse social and economic impacts for men and women from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed. | Improve, or restore, the livelihoods and standards of living of displaced persons specifically addressing the needs of women. Improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites taking into consideration specific | Resettlement plans and grievance mechanisms take into consideration the needs of both men and women. Adequate housing will be developed and provided by ensuring that women’s voices are heard and their needs reflected in terms of location, pricing, access etc. | Partners |

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<tr>
<td>participation of those affected, in particular women.</td>
<td>needs that women might have around safety and family.</td>
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</table>