

Feminist Analysis of the Socioeconomic Impact of COVID-19 in Nepal



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1. Introduction and Background

COVID-19 has been ravaging the world. Although, it started as a health crisis, soon it transformed into massive socio-economic crisis. The COVID-19 outbreak has inflicted dramatic global impacts on trade, production and other economic activities. As the types and extents of impact channel of COVID-19 are still being ascertained, it is difficult to assess the exact cost of it. Statista (2021) summarised this outlook aptly by stating that “while there is no way to tell exactly what the economic damage from the global COVID-19 pandemic will be, there is widespread agreement among economists that it will have severe negative impacts on the global economy and the severity of the shocks at national level will depend on how resilient its economy is. Early estimates predicated that, should the virus become a global pandemic, most major economies will lose at least **2.9 per cent** of their gross domestic product (GDP) over 2020. This forecast was already restated to a GDP loss of 4.5 per cent UN (2021)¹. To put this number in perspective, **global GDP** was estimated at around 87.55 trillion U.S. dollars in 2019 – meaning that a 4.5 per cent drop in economic growth amounts to almost 3.94 trillion U.S. dollars in lost economic output.”² Moreover, it is being increasingly realized around the globe that the pandemic has been imposing disproportionately higher impacts of women and other excluded groups. This development calls for re-assessing the socio-economic impacts of the COVID 19 crisis from gender lens or perspective.

Like many countries, COVID-19 also has very substantial impacts on the Nepalese economy. Crucially, the crisis operated through both demand and supply channels. Nepal is exposed as it relies on a narrow economic base (comprising remittance, tourism, agriculture and construction). On the supply side, the country is also reliant on rest of the world for raw material inputs and as a source of tourists, investments and recipients of her products. Moreover, it may be relevant to recognize at the outset, that a set of pre-existing high socioeconomic vulnerabilities in the Nepalese context, which would exacerbate the welfare and distributional impacts of the gathering crisis – among her wider citizen and especially women and other marginalized groups. These include – clustering around the poverty line and the potential for large increases in the poverty headcount; high levels of household indebtedness; and weak channels of social protection (UNICEF, 2021)³.

Against these backdrops, UN Women Nepal Country Office (NCO) undertook this feminist analysis of the socio-economic impacts of COVID-19. The aim is to understand how the current crisis is deepening pre-existing inequalities among women and other excluded groups focusing on:

1. *To map and analyse select macro-economic and sectoral policies from a feminist lens*
2. *To identify the factors that have exacerbated the socio-economic impacts of COVID- 19 on specific groups such as women*
3. *To make short-medium-long term recommendations*

The conceptual framework for this analysis has built around ‘gender lens’ as well as ‘feminist lens’. Given the diversity of scope of the analyses, approaches to the assessment by selected topics under the gender

¹ UN (2021), “World Economic Situation and Prospects”, United Nations, New York, 2021.

² Statista (March 24, 2021), Impact of the coronavirus pandemic on the global economy - Statistics & Facts. <https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/>.

³Macro – micro-simulation on COVID-19 impact on child wellbeing in Haiti, June 30, 2021.

and feminist lenses have been identified and elaborated below. Accordingly, various types of methodologies and approaches has been adopted for this assignment.

Framework for Analysis by Topics

| Topics/Areas | Gender Lens | Feminist Lens |
|---|---|---|
| 1. Macro and sectoral impacts | <u>Economywide model:</u> Women incentive sector female headed households women workers Nepal SAM and CGE | <u>Unpaid and Invisible Valuation model:</u> Value of female work ⁴ Nepal Unpaid Valuation Model |
| 2. Labour Market | <u>Deeper Micro Data Assessment:</u> Labour market profiles by gender Nepal Labour Force Survey, 2018 | <u>Deeper Micro Data Assessment:</u> Unpaid work by gender Nepal Labour Force Survey, 2018 |
| 3. Household Profile and Intra-household resource | <u>Deeper Micro Data Assessment:</u> Household income and expenditure by gender Nepal Consumption Survey, 2017 | <u>Review of Literature:</u> Intra-Household resource distribution Since no intra-household survey in Nepal, based on available data from similar countries |
| 4. Intra-household resource | | <u>Review of Literature:</u> Intra-Household resource distribution Since no intra-household survey in Nepal, based on available data from similar countries |
| 5. Time Use Profile | | <u>Review of Literature:</u> Time use by care and household activities Since there is no time use survey in Nepal- proxy for Bhutan, Sri Lanka or Bangladesh may be used as an alternative) |
| 6. Security | | <u>Economic cost of VAWG:</u> Beyond scope of the current study Conjecture based on available data from similar countries |
| 7. Policy | <u>Review of Policy:</u> Acknowledgement and enforcement of gendered focused policies/strategies Relevant policies: credit fiscal – tax and expenditure | <u>Review of Policy:</u> Acknowledgement and enforcement of feminist focused policies/strategies Budget, Social Protection and Health Care: Childcare, Day care Elderly Care |

Source: author's creation

The report consists of seven more sections in addition to the introduction. Methodology and data are presented in Section Two. Section Three focuses on desk review and data analysis. The fourth section

⁴ In line with range activities considered as unpaid work in the global south, in this analysis unpaid work include four broad categories: (a) unremunerated activities resulting in the production of goods and services for the market or for subsistence; (b) processing of agricultural products for self-consumption; (c) activities such as collection of free goods like water and fuel etc.; and (d) unpaid production of services that go into the maintenance and care of households hereafter, unpaid care work. For details please refer to '[Invisible-Work-Invisible-Workers-correction e-book.pdf \(actionaidindia.org\)](http://actionaidindia.org)'.

discusses the socio-economic impacts of COVID-19. Section five discusses the impacts of COVID-19 on unpaid and invisible work. The recommendations have been elaborated in Section Six. References are reported in section Seven. The last section is an Annex.

2. Methodology and Data

Diverse methods utilizing different data sets have been used in this study. The methods include: (i) review of published/unpublished papers, reports, policies and strategies; (ii) analysis of data; and (iii) development and use of quantitative Framework.

Desk Review:

A thorough desk review of available documents has been conducted to understand pre-COVID-19 socio-economic situation in Nepal as well as post COVID-19 impacts and responses. Thus, the desk review has focused on two sets of materials/documents: (i) materials/documents that are pertaining to pre COVID-19; and (ii) materials/documents that are relating to post COVID-19.

The desk review of the pre COVID-19 materials and documents has been conducted to understand situation as well as preparation of profiles in terms of fiscal policy (tax and expenditure), monetary policy (credit) and trade preferences attached to women in Nepal; major gaps in policies and strategies; future vision of the Nepal with respect to promoting gender issues in Nepal. The materials and documents those have been reviewed include:

- a) Plan documents (medium- and long-term plans); and
- b) Sector Policies/Strategies (e.g. monetary/fiscal/trade/gender/social protection etc.)

The desk review of the post COVID-19 materials and documents has concentrated to identify the impact channels, the extent of impacts, duration of impacts, responses unveiled, lesson learnt, and the future course of actions. The review of the post COVID-19 documents include:

- a) COVID-19 focused reports (local, regional and global); and
- b) Consultation reports (especially the consultation reports prepared by UN Women)

Data Analysis:

Data analysis has been carried out with the micro data of the following important nationally representative surveys carried out by Central Bureau of Statistics (CBS)⁵:

- a) Labour Force Survey 2017/18
- b) Annual Household Consumption Survey of 2010/11 and 2016/17

⁵ An obvious omission is the intra-household survey conducted to capture the intra-household disparities. Intra-household surveys are not frequent, and no such survey is available for Nepal. In this context of the current study evidence from other countries (if available for recent years) may be tried. Another important omission is the lack of gender-based violence data (i.e. number of victims and associate services) in pre and post COVID-19 situation. This gap may be addressed with evidence from other countries and economic cost of violence studies conducted for similar countries.

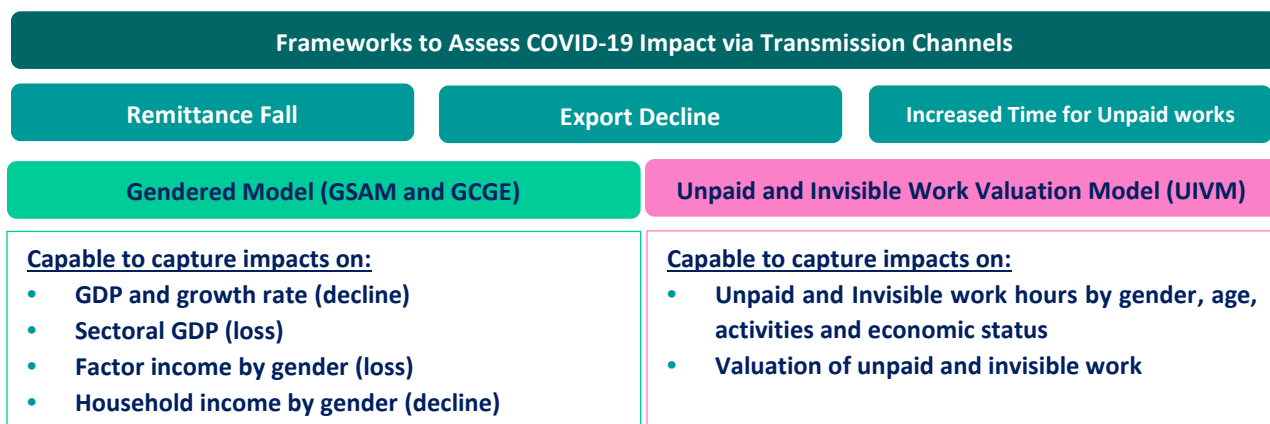
These data sets have been used to conduct detailed poverty and vulnerability analysis. They have also been used to develop: (i) male and female headed households classification and their income, consumption and savings profiles for incorporation into the ‘gendered’ SAM; (ii) employment profiles by male and female workers for incorporation into the ‘gendered’ SAM; and (iii) a ‘gendered’ poverty module to carry out micro-simulations to simulate poverty impacts by gender due to COVID-19.

Quantitative Framework:

Review of literature suggests that women’s ‘economic contribution’ can broadly be classified through the three avenues:

- Paid (Wage and Self) Employment: included in National Accounts (NA) and counted in Labour Force (LF).
- Unpaid Family Work: part of the Labour Force and included in the National Accounts but are not remunerated.
- Unpaid, and Unaccounted Domestic Work : not marketed, , not in national accounts (or GDP) and not in Labour Force.

Standard macroeconomic framework does not include last two categories and hence is not appropriate (or deficient) to capture the contribution on women in national income generation and (and hence impacts of shocks on their contribution). To address the deficiencies, the following framework has been proposed. The framework composed of two well accepted methods: (i) one based on gendered social accounting matrix and computable general equilibrium models to capture the impacts of reductions in remittance and exports as well as lockdown etc. and (ii) other using the unpaid valuation model, assess the increase the valuation of the unpaid work due to observed (or reported) rise in unpaid care activities. Combining the two methods likely to provide a comprehensive assessment of the impacts of COVID-19 in Nepal.



Source: author’s creation

Gendered Computable General Equilibrium Model (GCGE)

Experiences of socio-economic (i.e. specifically macro-economic) impacts of COVID-19 at global as well as country level appear ‘gender neutral’ in most cases – perhaps due to lack data and ready availability of an appropriate tool.

Most widely used and accepted economy wide framework to assess economic impact of policy interventions and shocks (such as COVID-19), is either an Input-output table (IOT) model, a social accounting matrix (SAM) model; and computable general equilibrium (CGE)⁶ model (Please refer to World Bank's '*Envisage model*' CGE Model)⁷. Although a SAM or CGE model is an appropriate tool to assess economywide impacts, it remain gender neutral if it fails to incorporate gender classification. It has been argued that 'gendered' Social Accounting Matrix (GSAM) and a 'gendered' Computable General Equilibrium (GCGE) model calibrated to the 'gendered' SAM are a suitable tools to assess impacts of COVID-19 from gender perspective.

Accordingly a 'gendered' Social Accounting Matrix (GSAM) for Nepal has been developed for 2019 using the data of 2011 Supply and Use Table (prepared by CBS), Input-Output Table of 2017 (prepared by ADB), Household Income and Expenditure Surveys of 2011 and 2017, and National Accounts data of 2018 to 2020. The 'gendered' CGE model for Nepal for 2019 has been developed using the 2019 'gendered' SAM.

Unpaid and Invisible Work Valuation Model (UIVM)

CGE model which is based on SNA data (i.e. SUT, IOT and SAM), does not include unpaid and invisible work carried out mainly by women. Thus, the CGE model has been supplemented by an *unpaid and invisible work model* to get full valuation of the Nepal's national income from feminist lenses. To quantify the unpaid activities researchers generally rely on satellite accounts. Satellite account captures the unaccounted works of women and allows to go beyond the strictly limited boundaries of System of National Accounts (SNA). One of the most popular approaches to construct a satellite account is "**Production Approach**" which involves estimating two major values: (i) time spent in unpaid works; and (ii) monetary valuation of the time spent in unpaid works.

The implementation of the '*unpaid and invisible work valuation*' model requires *time use survey and labour force survey*. Labour force participation and related controls, as well as proxies for the time use are obtained from Nepal Labour Force Survey 2018.

3. Desk Review and Data Analysis

A thorough review of impact assessment reports, rapid assessment reports, complied consultation reports was carried out as part of the second deliverable under this study. The detailed findings of the review have been presented in the report titled 'secondary review' report. Following sections summarises the key findings of the secondary review report.

⁶ Usually neo-classical economics do not differentiate impacts by male and female. To capture the impact on female – the SAM/CGE model need to be tailored by incorporating male and female workers in the labour market and male and female headed households to represent the household account.

⁷ World Bank used their 'Envisage model' CGE Model. A full description of the Envisage model is available at https://mygeohub.org/groups/gtap/File:/uploads/ENVISAGE10.01_Documentation.pdf.

3.1. Poverty and Vulnerability

No impact of any crisis was ever gender-neutral – COVID-19 was no exception. The effect of Covid-19 is magnified for women and girls simply due to their intersectional status or orientation as well their location in the labour market and position in the economy. According to studies conducted by WHO and OECD, COVID-19 has a more substantial impact on women in terms of increased unpaid care duties, domestic abuse, job loss, lack of access to sexual and reproductive health care services and limited public mobility. Women are already in more precarious positions in the labour market on average, so they are more likely to face the brunt of the economic downturn. (COVID-19: A Step Back for Women's Empowerment in Bangladesh? | UNDP in Bangladesh, 2020).

Increase in poverty due to COVID 19 likely to widen gender disparities, particularly among those aged 25 to 34, a critical era for both women and men regarding the family formation and productivity. Sixty million women aged 25 to 34 compared to 54 million men are expected to live on less than \$1.90 per day in 2021. Globally, 118 women are anticipated to be poor for every 100 poor males in 2021, and this ratio could climb to 121 poor women for every 100 poor men by 2030 (Source: UN Women (2020)⁸). However, the situation may vary from area to area. For example, while Sub-Saharan Africa and South Asia would be the most brutal hit, women in South Asia will be affected far more than men. Forms of inequalities faced by women have been summarised below.

Box 1: Inequalities faced by Women

- The shift of funds to pandemic response is hampering women's access to sexual and reproductive health.
- Violence against women reports has increased around the world.
- The burden of unpaid care and domestic work has increased for women and girls.
- Women face higher COVID-19 transmission and fatalities rates and are most exposed to the secondary impacts, including loss of earnings and livelihood.
- The pandemic highlights women's terrible financial situation.
- Infection risks are higher for essential female employees.
- Female poverty is anticipated to rise as a result of the COVID-19 situation.
- By 2030, gender disparities in poverty will widen.

Source: ("From Insights to Action Gen. Equal. Wake COVID-19," 2020)

3.2. Socio-economic Impacts on Women Nepal during COVID 19

Review identified three main conduits through which COVID-19 have disproportionately affected Nepali women. They include: loss of employment; loss of income or earnings; and increase in time used for unpaid and care works.

Job and Income loss: according to the 'UNDPP-IIDS Nepal Rapid Assessment', the most visible and immediate impacts of the COVID-19 pandemic on Nepal were likely to be felt in two key areas – a decline in remittances to Nepal, and a return of Nepali migrant workers from key destination countries (i.e. due to job losses – even if temporary).

⁸ UN Women (2020), 'COVID-19 and its economic toll on women: The story behind the numbers' September 16, 2021. <https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women>

As early as 7 March 2020, two weeks before Nepal imposed a lockdown, Nepal witnessed a fall in outgoing migrant workers by almost 75 per cent, lower than the decline the country witnessed immediately after the 2015 earthquake (Khadka, March 2020). Further developments suggest that Saudi Arabia, UAE and Qatar have indirectly pressurized Nepal to bring back about 70,000 Nepalis working in those three countries due to lockdowns and the global fall in oil price during COVID-19.

The COVID-19 crisis affects women differently than men. In global downturns, such as the recession of 2008, job losses were more pronounced for men than women. One reason is that men typically work in industries that are affected by standard downturns, such as construction and manufacturing, while women mainly work in areas that are considered less cyclical, for instance education and health care. But unlike a typical recession, the COVID-19 crisis has affected all sectors, including services, hospitality and restaurants – sectors where women’s employment share is similar to that of men. Women have been affected more, because they tend to work in areas that are less tele-commutable, such as hospitality, wholesale and retail.

Survey published in July 2020 indicate that 28 per cent of men lost their jobs during the lockdown, compared to 41 per cent of women (UNDP Nepal, 2020). It can be assumed that women who have lost their jobs are now less likely to find new employment than men. Increased responsibilities at home due to the closure of schools and children’s day care centers affect women and adolescent girls more than men and boys, thus limiting female participation in paid work and shrinking their longer-term education and economic opportunities.

According to a survey by the ILO (2020), Nepal’s labour force has lost anywhere between 1.6 and 2 million in the current crisis, either with complete job losses or reduced working hours resulting in decreased wages. Moreover, a total of 631,000 female jobs (i.e. 24.3% of the 2018 female workforce) are estimated to be at risk in the higher impact scenario, compared to 1.3 million jobs for men (also 30.3% of the 2018 male workforce) (ILO, 2020)⁹.

Results of the survey found that 37 per cent of businesses imposed a pay cut on their female employees, out of which 58 per cent had inflicted a 50 per cent deduction in salary. Five per cent of businesses had even inflicted a full 100 per cent pay cut on their female employees. Similarly, 37 per cent of the surveyed businesses had laid off a proportion of their female staff. Similarly, 58 per cent of these businesses laid off 50 per cent to 100 per cent women employees.

Domestic workers were especially vulnerable. While there has been an increase in the need for caregiving and cleaning services, lockdowns and quarantine measures have made it challenging to preserve pre-pandemic working patterns, resulting in a loss of revenue and employment among this primarily female workforce. In other cases, employers have refused to pay wages during lockdowns unless staff agreed to shelter in place with them. Around 72 per cent of domestic workers have lost their jobs due to COVID-19 whereas 80 per cent of the sector employees are women, making it one of the foremost feminized sector¹⁰ (“From Insights to Action Gend. Equal. Wake COVID-19,” 2020).

⁹ ILO. (2020). COVID-19 labor market impact in Nepal. Publication. https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilokathmandu/documents/briefingnote/wcms_745439.pdf

¹⁰<https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/gender-equality-in-the-wake-of-covid-19-en.pdf?la=en&vs=5142>

In Nepal, nearly 73,000, of which two-thirds are women, are employed by private households as domestic help. (CBS, 2018)¹¹. A significant proportion of them are single women and the sole breadwinner for their families. With the prolonged lockdown, more than 85 per cent of the domestic help workers lost their jobs, and many were still waiting for their salaries as of June 2020 (Mandal, 2020)¹².

Women-led enterprises have witnessed reduced demand and sales of their products or services, debilitating loss of revenue and problems accessing cash or financial assistance. Because of the fear of the coronavirus and mobility restrictions imposed by the Government of Nepal, customer visits to these MSMEs have drastically decreased, impacting the source of revenue for these enterprises. These distinct aspects of women-led MSMEs indicate that they might be relatively more vulnerable to the impacts of the COVID-19 pandemic.

Considering the fact that a large majority of women entrepreneurs are engaged in the field of fashion, cosmetics and hair dressing along with wholesale and retail trade, decrease in demand and low market transactions have resulted in the complete loss of sales and revenue (Scott Wilson Nepal, 2021). In addition, many women entrepreneurs have failed to prepare an appropriate business continuity plan to survive the pandemic, which could lead to total business failure and loss of livelihood in the coming months.

A Large number of women are engaged in agriculture activities (i.e. mostly unpaid) in Nepal. Deleterious impact on agriculture likely affect food security as well as female employment. The rapid assessment carried out by UNDP in 2020 argued that overall impact on agriculture sector has been labeled medium without specifying the employment impact. However, given the positive association between output and employment, the employment (as well female employment) impact should have been medium.

Like many countries, Nepal also witnessed surge in digital connectivity in spite of digital divide and lack of financial literacy. UNCDF¹³ looked into the digital literacy and financial literacy in Nepal to understand whether the level of digital and financial literacy is enough for people to use the digital services. According to UNCDF Nepal's digital economy score is less than 50 per cent. The inclusiveness score is just 22 per cent and the digital divide is 25 per cent. These statistics suggest that women will continue to lag behind the use as well as adoption of digital technology unless the inequality and divide are improved.

Accordingly UNDESA (2020)¹⁴ argued that digital divide and inadequate inclusion also suggest that improving digital inclusion and expanding coverage of dependable connectivity are priority areas for short and medium term for countries where many citizens lack the digital environment and where the Internet and other digital services lag behind population needs.

¹¹ Central Bureau of Statistics. (2018). Report on the Nepal Labour Force Survey 2017/18. NPL-CBS-NLFS-2018-v01

¹² Manal.C. (June 21, 2020). Out-of-job domestic workers are struggling for survival even as lockdown is relaxed. The Kathmandu Post. <https://kathmandupost.com/national/2020/06/21/out-of-job-domestic-workers-arestruggling-for-survival-even-as-lockdown-is-relaxed>

¹³Gender in Humanitarian Action Task Team (GiHA TT) Meeting on Bridging the Digital Divide, 26 January 2021, Online (Zoom)

¹⁴ UNDESA (2020), "United Nations E-Government Survey 2020: Digital government in the decade of action for sustainable development," New York, NY, United Nations – Department of Economic and Social Affairs.

Unpaid and Care work: during the COVID-19 school closures, UNESCO estimates that 1.52 billion children (87%) and over 60 million teachers have returned home and compel to stay at home. Because of the present structure of the labour and social conventions, the demand for unpaid childcare is falling mainly on women as the formal and informal source of childcare falls. Women spend over 4 hours on housework, while men only spend barely one hour (58 minutes)¹⁵.

According to research, adolescent girls spend much more time on chores than their male counterparts. School closures may result in millions of females dropping out of school before completing their education, particularly those who live in poverty, have disabilities, or live in remote, isolated areas.

An estimated 4 billion people worldwide do not have access to adequately maintained sanitary facilities. Furthermore, 3 billion do not have access to clean water and soap at home (*1 in 3 people globally do not have safe drinking water – UNICEF, WHO, n.d.*). Women's unpaid workload escalates as a result of a lack of these essential services. Women are pressured to collect water from congested communal pumps in slums and slum-like situations with high population density, which increase their exposure to the virus¹⁶. This situation is also common in rural areas¹⁷. As the crisis in developing countries worsens, millions of people abandon cities and return to their hometowns, adding to women's unpaid care and domestic workload (*Millions of Indians Are Fleeing Cities, Raising Fears of a Coronavirus 'Land Mine' in Villages - WSJ, n.d.*). For instance, in Nepal, a mere 19 per cent of Nepal's population has access to safe water¹⁸. In absolute numbers, 10.8 million people in Nepal do not have access to improved sanitation, and 3.5 million do not have access to basic water services¹⁹.

A total of 317 responses from 29 districts of all 7 Provinces have been surveyed to understand the status of work from home or work for home. The average age range of the survey respondents was 21 to 35 years. Among others, a key finding is that 79.5 per cent respondents stated that the working hours have increased *from 1 hour to more than 4 hours*²⁰.

The closure of schools and day care has also increased childcare needs, which largely affects working mothers. Gender pay gaps compound this inequality – not only are women losing jobs and have increased responsibility at home, but they are also paid less to begin with. In Nepal, for every 100 rupees that a man can spend on daily necessities during this crisis, women can spend only 70 rupees. According to NLFS 2017/2018, 90.5 per cent of working women in Nepal are engaged in informal employment. A significant proportion of women (85 to 100 percent) are informally employed across construction works, agriculture, forestry and fishing, wholesale and retail trades, education, non-essential service industries such as food chains, accommodation and hospitality. Thus, the economic impact of the pandemic has been more

¹⁵ <https://www.ohchr.org/Documents/Issues/Poverty/UnpaidWork/CaritasNepal.pdf>

¹⁶ <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/gender-equality-in-the-wake-of-covid-19-en.pdf?la=en&vs=5142>

¹⁷

<https://washmatters.wateraid.org/sites/g/files/jkxooof256/files/Women%20in%20Nepal%20leading%20communities%20changing%20lives.pdf>

¹⁸ <https://washmatters.wateraid.org/sites/g/files/jkxooof256/files/climate-change-and-resilient-wash-in-south-asia.pdf>

¹⁹ <https://www.unicef.org/nepal/water-and-sanitation-wash>

²⁰ WOREC. (2020, June 15). Research findings dissemination program of online survey on 'women's workload during COVID-19 19 Lockdown. *Departmental Publication*. https://www.worecnepal.org/uploads/publication/document/2144484226Women%20Workload%20survey%20PPT_June%202020.pdf

pronounced for women. Self-employed, domestic workers and those in temporary agency employment lost work due to COVID-19. The extended lockdown has overburdened women and adolescent girls with disproportionate informal care, consequently limiting their work and shrinking economic and education opportunities.

3.3. Key challenges faced by the vulnerable and minority groups in Nepal during COVID 19

A Rapid Gender Analysis (RGA) was conducted to understand the gender differential impact of COVID-19 on vulnerable and excluded groups. The RGA was also conducted to comprehend how existing gender and social inequalities have been exacerbated by the pandemic in the community and in quarantine situations in Nepal.

There has been a considerable increase in Intimate Partner Violence (IPV) including marital rape, domestic violence and Gender-Based Violence (GBV). Women who were already facing difficult family relationships are trapped with their perpetrators during the lockdown, exposing them to increased control and restriction on mobility by their abusers. In the first 54 days of the nationwide lockdown in Nepal, 502 women and children reported experiencing violence, including sexual and gender-based violence²¹. Furthermore, at least 1,684 women faced violence and abuse in Covid-19 quarantine facilities in Nepal. Emerging data in Nepal shows that domestic violence increased almost twofold after the pandemic hit the nation (National Women Commission, 2020). According to WOREC, among the reported 624 cases, 61 per cent had experienced domestic violence of both physical and mental nature while the remaining 39 per cent reported experiencing rape, attempts to rape, deprivation of basic necessities, or socioeconomic violence (WOREC, 2020)²².

Child marriage has been increasing at alarming levels in many countries across the globe (including Nepal). According to a report by Nepali Time²³, 30 child marriages took place in one municipality in Sarlahi District during the lockdown earlier in 2020. Rising child marriages is one of the outcomes of socio-economic fall out of COVID-19 crisis in Nepal. According to pandemic researchers, COVID has exacerbated the factors that drive child marriage, such as a lack of schooling, economic deprivation, parental death, and teen pregnancy. Since Nepal relies on both tourism and financial aid, the global pandemic has destroyed both. Rising child marriages due to COVID-19 has exacerbated existing perilous situation where 40 per cent of girls under the age of 18 are married in Nepal²⁴.

The economic cost of violence against women and girls (VAWG) has been estimated to be high. No recent estimate of economic cost of VAWG is available for Nepal. However, recent studies by the Commonwealth Secretariat on Seychelles (Khondker, B. (2019) and Kingdom of Lesotho (Commonwealth Secretariat

²¹ <https://nepal.actionaid.org/sites/nepal/files/publications/AA%20Fact%20sheet%20-%20Nepal.pdf>.

²² WOREC. (2020, June 9). 624 Cases Of Violence Against Women And Girls Committed During Lockdown, 61% Violence Inside Home. *Departmental News*. <https://www.worecnepal.org/content/158/2020-06-09>

²³ Nepali Time December 20,2020, <https://www.nepalitimes.com/latest/nepal-child-marriages-spike-during-pandemic/>

²⁴ Legal age for marriage is 20 in Nepal.

(2020), and by Copenhagen Consensus (Fearon, J, and A Hoeffler (2014) estimated high economic cost of VAWG.



- The above estimates on VAWG suggest the economic cost of VAWG may also be high for Nepal. Moreover, on the basis of such cost, the economic cost of VAWG in Nepal may also be in vicinity of 4 to 5 per cent of GDP.
- The economic cost of VAWG in Seychelles, Kingdom of Lesotho, and World has been estimated using data of pre COVID-19 period. The exorbitant rise in VAWG thus tend suggest large increase in economic cost of VAWG for most countries including Nepal.

The rapid assessment also argued that current condition of joblessness and reduction in income²⁵ has likely to further impoverished vulnerable groups and push them to accept more risky jobs including working in a situation that may expose them to trafficking. The stress of losing income, added household work and expenditure, depletion of savings, along with physical violence, have resulted in increasing mental health issues for both women and men, including suicide.

Women from vulnerable groups here including women in the entertainment sector, gender and sexual minorities, women whose husbands are abroad, displaced women and adolescent girls are most affected. The pandemic has made it difficult for marginalized communities to access basic services.

Box 2: Impacts on Single Women

The report form Socioeconomic Framework Consultations with Single Women organised by UN Women revealed that lockdown has posed a serious threat to mental health and the well-being of the single women. Single women faced problem accessing the medicines during lockdown. Single women suffered pressure received from house owner for rent payment post COVID lockdown. Single women are often the main caregivers in their homes, communities, and health facilities, which puts them at an increased risk of contracting COVID-19. Moreover, single women (also their family members and community members) raised a concern they have been suffering from intense psychological, physical and social trauma due to the core alcohol drinking problem of the family member. Also, single women reported their fight against social stigma attached to singlehood and their just status in society. The government has distributed less quantity of relief package for all the households in equal basis, without taking into consideration the family size. However, single women have not been included in the relief package distribution list despite their need. Local government has failed to understand and address the socio-economic conditions of Single women group to understand their challenges in accessing basic essential services post lock down.

Insecurity and unsafe environment in quarantines, incidences of rape, discrimination and stigma against returnee migrant workers owing to perception that they have the Coronavirus, lack of clean and potable drinking water leading to health problems. Psycho-social problems leading to increased number of suicides. Alcoholism leading to domestic violence. The pandemic followed by the lockdown has forced many women to lose their jobs and its

²⁵ According to the RGA, 83 per cent of the sample women lost their Jobs and income. The share of the formal employment has decreased by about 53 per cent. Moreover, there was 37 per cent rise in the number of people not involved in any paid work.

effect on women from the lower income groups is even higher. Lockdown posed extreme financial hardship due to lack of employment to the single women group.

Source: based on Socio-Economic Framework Consultations organised by UN Women (7 July 2020)

Box 3: Impacts on Sex Workers

The report from Socioeconomic Framework Consultations with Women engaged in sex work organised by UN Women revealed the impact of COVID on the sex workers which is found immense as they have lost clients who are the source of their income. Without income and saving money, many sex workers are facing problem of food security and medical assistance for them and their children. Paying rent is another problem which has escalated mental problem. Many sex workers and third genders have committed/ attempted suicide during the lockdown period due to mental stress in Nepal and especially in Sunsari district. As sex work is criminalized in Nepal, they do not have formal access to the relief package distributed by the government except in places like Jhapa and Sunsari where sex workers have taken the initiative to lobby with the local government for support during the time of crisis. Some Trans gender sex-workers have started "online-sex" to cope with the current COVID situation, taking risk of cyber-attack on their dignity and privacy. Many sex workers who migrated to Kathmandu at young age, involved in this work and lost connection with the family are facing livelihood problems from loss of income during lockdown.

One of the key recommendations received from the participants for UN agencies to undertake in the next 18 months is to provide professional livelihood trainings for the sex workers along with seed money for them to start the business, while also linking them with the market.

Source: based on Socio-Economic Framework Consultations organised by UN Women (8 July 2020)

Analogously, the "UN Framework (2020)" report also highlighted that the exacerbation of acute discrimination among those who were already vulnerable and marginalized during COVID-19. GBV has increased dramatically across the country. Dalits face caste-based discrimination in quarantine centres and Muslims were further stigmatized. New prejudices have emerged, with healthcare workers and community volunteers – who are most often women – facing stigma and exclusion. The report identified four areas to respond to the crisis: **(a)** Implementation of programmes that empower women with voice, agency and position; **(b)** Access to interventions that increase digital technology awareness and women's knowledge; **(c)** Empowerment of ordinary women; and **(d)** Sustainable programmes focused on agriculture which results in self-sufficiency and independence.

3.4. Assessment of fiscal, monetary and trade policy

Important government policies that are designed to attain goals and targets include fiscal and monetary policies. Trade policy is also important instrument to guide expansion and diversification of exports and imports. Social protection although a component of the fiscal policy considered important for smoothing consumption, and redressing risks.

In the wake of COVID, Government of Nepal announced new budget for Fiscal Year 2021-22 on May 29, 2021. Monetary policy was announced on 13 August, 2021. These two policies have been reviewed to understand the scope, nature and extent of women focused measures adopted in these two policies.

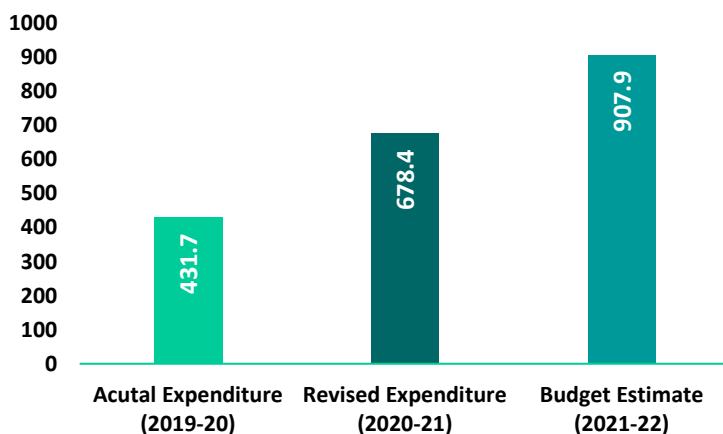
Fiscal Policy

Fiscal Measures

- The budget allocation has increased the existing travel expenses by 100 percent to Rs. 12 thousand for women health workers across the country.
- The range and scope of concessional loans provided to micro, small and medium enterprises, commercial agriculture, youth enterprises, women enterprises and persons returning from foreign employment would be expanded. The budget has allocated Rs. 13 billion for this purpose to provide interest subsidy of 5 percent.
- The gender equality policy would be adopted in all the wings of the nation. Minimum 33 per cent women's participation would be ensured in the executive level of the body to be operated with the grant from the Government of Nepal.
- Women entrepreneurship would be developed through the President Women Upliftment Programme. Women from indigent group would be involved in income-generating activities by providing skill-oriented training. Women entrepreneurship facilitation center would be established at all local levels. The aerial rescue for pregnant and postpartum women from remote areas would be made more effective.
- The dowry system as a social stigma would be abolished. Social awareness, empowerment and women education programmes will be conducted to eliminate ill practice, discrimination and violence against women. Strict legal provisions will be made against women's violence. Mangala-Sahana Rehabilitation Centre would be constructed at Suryabinayak, Bhaktapur to protect the displaced women due to domestic violence.
- Programmes would be launched for income generation, capacity building and empowerment of women and adolescents of all deprived communities including disadvantage, *dalit*, indigenous, single women, women with disabilities, *Badi*, *kamhalari*, *kamaiya*, *Chepang*, *Raute*, endangered and marginalized.
- The free legal assistance programme being operated in 47 districts for those having no access to justice including single women, *dalits*, persons with disabilities, victims of gender-based violence, children, senior citizens and helpless citizens will be extended to all districts in the coming fiscal year. The budget has arranged to perform advocacy by officer level lawyers on behalf of the victims in all the districts of the country.

Analysis of Budget Allocation for Women

Figure 1: Allocations to Ministry of Women, Children and Senior Citizens

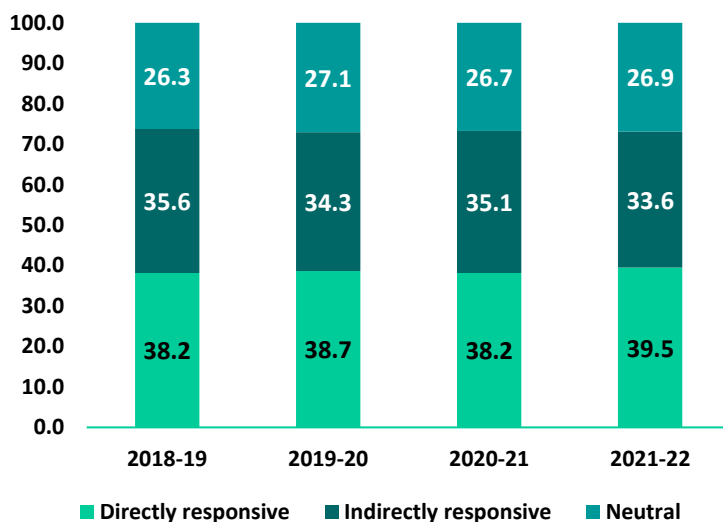


Source. Redbook, Federal Budget 2078/79 (2021-22).

Budget allocations to the Ministry of Women, Children and Senior Citizen is one of the lowest amongst the social sector allocations. Budget allocation for FY 2021-22 has been estimated at 908 million NPR suggesting marginal increase of 34 per cent over the revised estimates of FY 2020-21.

In terms of GDP, the allocation is less than 0.02 per cent of GDP. For instance, actual expenditure in FY 2019-20 is only 0.012 per cent of 2020 GDP.

Figure 2: Trends and Distribution of GRB in Nepal (% of total GRB)

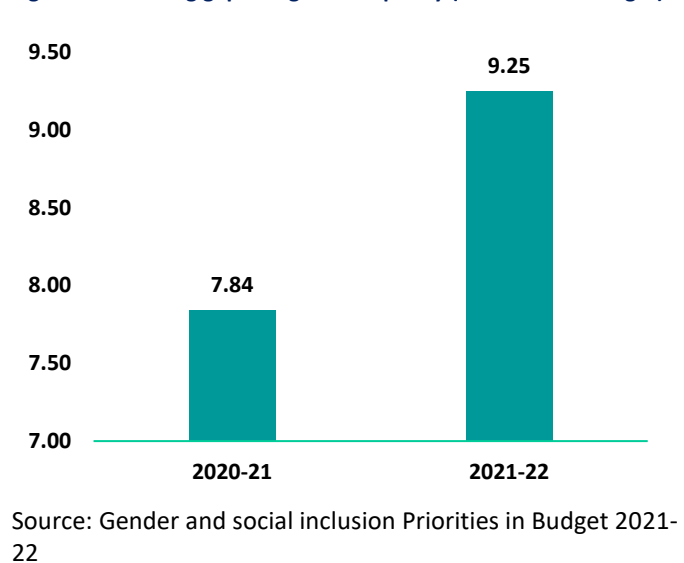


Source. Redbook, Federal Budget 2078/79 (2021-22).

The analysis of the Gender Responsive Budget (GRB) outlays by three categories during the last four fiscal years suggest keeping consistent proportional share of gender-based investments with minor variations (see adjacent figure). The first category – directly responsive allocations accounts for about 38 – 39 per cent of the total outlays. Largest allocations attached to this category also suggests its importance in achieving gender equality goals across sectors. The trends across the same category indicate that the proportional share of directly

responsive programs is also highest in the four financial years. The data for the other two categories show that there is a slight drop in the share of indirectly responsive investments by 1.5 percent in FY 2021-22 compared to the allocation in the previous fiscal year (i.e. 2020-21). The share of the 'neutral' category has recorded an upward trend in FY 2021-22 with a minor increase of 0.1 percent, indicating that either allocations were increased in the already existing 'neutral' category programs or new schemes were introduced with a 'neutral' tag.

Figure 3: Financing gaps for gender equality (% of Federal budget)



Financing gaps to ensure equality is large in Nepal. Analyses with federal budget data for FY 2020-21 and FY 2021-22 suggest that allocations for addressing the estimated financing gaps to ensure gender equality were only 8 and 9 per cent. Accordingly, the twenty-year reviews of the 'Beijing Platform for Action' argued that the financing gap for the implementation of national gender equality policies is as high as 90 per cent of assessed requirement (i.e. more specifically for FY 2021-22). The National women machineries of 15 member states across Asia-Pacific region have allocated less than one per cent (i.e. 0.5 to 21.9 per cent) of the national budget and the government

spending on gender equality measures – despite strong gender equality policies. In Nepal too the financial gap is apparent though the proportional share of the gender and social inclusion machinery (Ministry of Women, Child and Senior Citizens and all commissions combined) even when the Federal Budget has witnessed a jump from 0.07 per cent in 2020-21 (i.e. 2077/78) to 0.09 per cent in 2021-22 (i.e. 2078/79). But this jump, it still falls short of one per cent of the Federal Budget.

Monetary Policy and Measures

- Under the concessional credit programme, which aims to enhance production, employment, and entrepreneurship through credit facilitation in agriculture and SMEs, a total of Rs. 161.44 billion credit has been extended to 1,04,109 borrowers as of mid-July 2021. Of which, Rs. 106.98 billion has been extended to 46,057 borrowers for selected agriculture and livestock businesses. *Likewise, Rs. 50.98 billion concessional loan has been extended to 55,551 women entrepreneurs and Rs. 3.48 billion has been extended to 2,501 borrowers from other remaining sectors.*
- Provision of 6 percent and 5 percent interest subsidy on women entrepreneurship credit and other concessional credits respectively has been made.
- A provision will be made to count the project-based loans, provided to women entrepreneurs up to Rs. 2 million to operate micro-enterprise and self-employed businesses, under the deprived sector lending. An arrangement will be made for the mandatory insurance of such loans.

In addition to make provisions in the monetary policy, it has been found equally important to address the systemic disadvantages and institutional barriers faced by women and women entrepreneurs to access financial resources. Some of them include: excessive paper works and documentations, requirement of personal guarantee and collateral, and lack of knowledge on loan proposal preparation. It was not clear whether adequate attention has been accorded in the monetary policy in Nepal²⁶.

²⁶ In recent study on Bangladesh – which may have relevance to Nepal – it has argued by Shoma (2019) that access to finance is found to be the greatest challenge faced by women in starting and operating SMEs in Bangladesh. The

Social Protection Policy and Measures

The social protection system of Nepal composed of about 76 programmes. Francesca (2019) identified seven non-contributory social assistance programmes targeting women and girls. These programmes are being implemented by four different ministries. It was not possible to estimate the budget allocations to the seven programmes. However, UNICEF (2020) provides some estimates of allocations on women focused social protection programmes. According to UNICEF (2020), expenditure on social protection account for 4 per cent of GDP in FY 2019/20. UNICEF report also provided allocations for few programmes such as Scholarships and School Lunch; and Safe Motherhood and Mother Child Nutrition Support programme. The combined allocations for these above four programmes in FY 2019/20 was only 0.05 per cent of GDP.

Table 1: Description of women focused social assistance programmes

| Programme | Beneficiaries | Benefits | Agency |
|---|--|---|--------|
| 1. Single women's allowance | Single women 60 years or above and widows of any age | NPR 500/month | MOFALD |
| 2. Maternity incentive scheme | Pregnant women and mothers of new-born children living in remote areas | Up to NPR 1,500 to cover transportation costs depending on location, free check-ups and care during labour in local government and community health institutes, no cost for treatment of the newly born baby in the first 28 days, free care during labour in 25 low Human Development Index districts. | MOHP |
| 3. Nutritional supplement for pregnant women and children | Pregnant women and children under 5 | Iron and folic acid tablets for pregnant women, vitamin A capsules for children aged 6-59 months and deworming tablets for children aged 12-59 months | MOHP |
| 4. Food for education and maternal-child health care | Children and mothers | Mid-day meals and take-home rations and food and nutritional supplements | MOE |
| 5. Basic education scholarships | Girls, Dalits, people with disabilities and marginalised communities | An amount allocated to students based on the geographical region | MOE |
| 6. Scholarship for secondary education | Girls, Dalits, persons with disabilities, the marginalised, the conflict-affected, children of martyrs, freed Kamalaris* and other targeted groups | An amount allocated to students based on disability | MOE |
| 7. Social care services | Children, senior citizens, people with disabilities and women | Social Welfare Centres with residential facilities for senior citizens and orphans, and other welfare programmes | MOWCSW |

article reported significant gender gap in access to formal credit, a gap that impacts negatively on the sector's growth and development.'

Note: Ministry of Health and Population (MOHP), Ministry of Education (MOE), Ministry of Federal Affairs and Local Development (MOFALD), Ministry of Finance (MOF), Ministry of Women, Children and Social Welfare (MOWCSW).

* Kamalari was a traditional system of bonded labour (i.e. debt slavery) practised in the western Terai (a region between southern Nepal and northern India) in Nepal. It was abolished in 2006.

A major shift in social protection policy in Nepal was the passing of Contribution-based Social Security Act 2074 (CSSA) in 2017. It aims to ensure the right to contributory social security for all workers in the country. The CSSA includes, among other provisions, a maternity scheme, a dependent survivors' security scheme and an old-age pension scheme, all of which are of key relevance to women. To be eligible for the schemes, workers have to pay contributions based on their earnings. It was decided that the CSSA would be implemented in two phases. In **Phase 1**, only contributing employees in formal employment in the formal sector are entitled to participate. In **phase 2**, CSSA will be extended to the self-employed and informal workers. However, the modality and amount of contributions have not yet been determined.

It has been argued that women may not benefit from this new act due to their low participation in the formal employment (only 6 % of women in employment) and uncertainty with to regard how informal and self-employed workers (i.e. 32 per cent of women of working age are self-employed and more than 90 per cent are in informal employment) may participate in CSSA. Francesca (2019) identified following benefits and risks for women from the implementation of CSSA.

Table 2: Benefits and Risks CSSA

| Benefits for women | Risks for women |
|---|--|
| <ul style="list-style-type: none"> • A maternity scheme, including pre- and post-natal maternal and child health care with no ceiling until the baby reaches three months of age. • A maternity allowance (a lump sum at birth) and up to 98 days of maternity leave (60 days fully covered, 38 days covered at 60% of the basic remuneration). • Spouses of contributing male workers are covered by the maternity scheme even if they do not contribute themselves. This guarantees the right to a maternity scheme for non-contributing women. • An old-age pension for contributing workers aged 60 and above. The entitlement is based on a minimum of 180 months of contributions (15 years). • A survivor's pension for the spouse of a contributing worker (60% of the basic remuneration) and a scholarship for their children aged below 18. | <ul style="list-style-type: none"> • Female employees are more at risk than male employees of not being registered for the social security system. This risk stems from social norms discriminating against women in the labour market and because women more commonly work in informal employment and in elementary occupations (e.g. cleaners and helpers, and street and related sales and service workers) in which compliance with the law is lower. • Female business owners may find it harder than male business owners to afford the contributions for their employees, as women's businesses are usually smaller and have limited access to finance, resources and markets. • Self-employed women may face barriers against registering their firms and their employees due to lower literacy, limited mobility and a culture that does not facilitate women's businesses. • Self-employed women, especially those in the informal sector, may opt to not join the social security scheme if they believe that the costs of formalising their businesses and paying the contributions are greater than the benefits. |

Source: Francesca (2019)

To ensure benefit from the implementation of CSSA for women, the inclusion of self-employed workers and workers in informal employment in the scheme is fundamental. Francesca (2019) opined that ‘even if both Phase 1 and Phase 2 are implemented with full coverage, only 74 per cent of women in employment (compared to 94 per cent of men) will be eligible for the scheme because many women work as contributing family workers without being paid for their work and so cannot pay social security contributions. Therefore, to be effective and beneficial for all, it is crucial for women's working situations, and especially the informality of their work, to be taken into consideration when implementing the CSSA.’

Participation of women in CSSA likely to reduce even further due to higher female unemployment (e.g. as well as higher rate of inactiveness) during COVID-19. Since participation in CSSA is positively associated with employment, female employment needs to be increased in post COVID-19 adopting host of new measures including social protection (e.g. for elaboration please refer to the recommendation section).

4. Socio-economic Impacts of COVID-19

Following accepted best practices, a socio-economic impact assessment of COVID-19 was conducted using an integrated modelling system involving a Nepal specific Gendered Social Accounting Matrix (GSAM), Gendered Computable General Equilibrium (GCGE)²⁷ model and Poverty model (please see annex 8.1 for details). The Nepal GCGE model has been calibrated to GSAM 2019.

4.1. Simulation Design

Two demand shock simulations have been considered – *low and high shock scenarios*. A thorough desk review (some of them include UNDP (2021), WB (2021), and Newspaper reports²⁸) has been carried out to identify the impact channels which have been used to design the following two scenarios. The simulation set ups under the two demand shock scenarios are summarised below.

| Impact Channel* | Low case scenario | High case scenario |
|-------------------------------|--------------------------------|----------------------------------|
| Tourism (receipts) | | |
| Accommodation and Foods | 30 % reduction in receipts | 60-65 % reduction in receipts |
| Transportation (land and air) | 20 % reduction in receipts | 25 % reduction in receipts |
| Exports demand (value) | | |
| Food processing | 7-8 % decline in Export demand | 10-12 % decline in Export demand |
| Textile | 10 % decline in Export demand | 15 % decline in Export demand |
| Remittance | 5 % reduction | 5% reduction |

Note: * reductions rate are with respect to 2019 values

²⁷ Computable General Equilibrium model is a numerical specification of an economy calibrated to a consistent macro-economic data set – usually a Social Accounting Matrix for a particular year. CGE generally specified via 5 blocks such as: production and supply, income and expenditure, international trade, prices and equilibrium conditions.

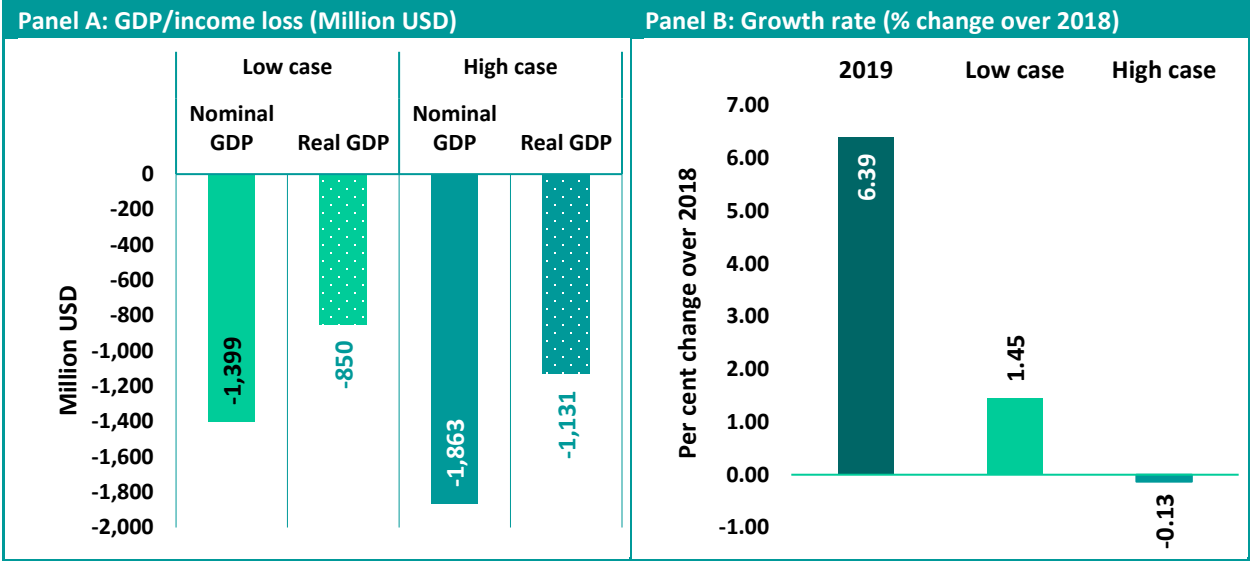
²⁸<https://kathmandupost.com/money/2020/10/30/remittance-to-nepal-may-drop-to-7-4-billion-in-2020-world-bank-says>

The simulation outcomes are presented for key indicators such as economic growth, job losses, household level income or consumption and poverty rate. The classification of the labour factors and households by gender (as represented in the SAM 2019), allows impact assessment by gender.

4.2. Socio-economic Impacts

The most widely used and accepted indicator to measure economic rate of growth is GDP. It is the sum of values of all goods and services produced in an economy in a particular time period (e.g. usually a quarter or a year). There are two valuations of GDP – nominal and real. Nominal GDP include the prices of the goods and services, while real GDP excludes the price factor. In addition to the impacts on GDP, employment and poverty effects are also captured.

Figure 4: Simulated GDP impacts under the demand shock scenarios



Source: Nepal GCGE Model 2019

Ceteris paribus, demand shocks of the scales discussed above, are likely to have a negative effect on the economy of Nepal. In the case of low demand shock, nominal GDP (or income) may decline by \$1,399 million in the post COVID-19 period (i.e. shock scenario) compared to the pre COVID-19 period. Decline in real GDP has been simulated at \$850 million over the pre COVID-19 period.

Nominal GDP (or income) loss is significantly higher due to the higher demand shocks in the high case scenario. Nominal GDP may decline by \$1,863 million under the high case scenario compared to the pre COVID-19 period. The simulated real GDP loss is \$1,131 million.

GDP growth rate have been found positive at 1.45 per cent²⁹ (over the 2018 GDP value) under the low case scenario. With a negative GDP growth rate of – 0.13 per cent, the impact is higher under the high

²⁹ The simulated GDP growth rate impacts found in this study are higher in Nepal than what has been reported (i.e. 2.09%). Use of an economywide model calibrated to a recently updated SAM (2019) – capturing the direct and indirect effects (i.e. secondary effects) may have resulted in a larger impact on the economy.

case scenario. When compared with the 6.39 per cent GDP growth rate posted in 2019, the GDP growth rates simulated under the low and high demand shock scenarios suggest significant loss of the national (or GDP) income.

GDP loss or the contraction of the economy is generally associated with reduction in tax revenue and fiscal space and hence public expenditure. In many developing economies budget allocation for social sector (e.g. education, health, and social protection) and gender follow the ‘left over’ principle – implying that resources are allocated to these sector after allocating resources to the priority and hard sectors (e.g. energy, infrastructure, interest payment, wages/salaries and good and services). In this case of contraction of the economy, already low (or inadequate) budget allocations for women may likely to have a deleterious impact.

Construction of the gendered SAM allowed the assessing the impacts of demand shocks on male labourers and female labourers. The impacts on female labourers are higher than the impacts on the male labourers. In the low case scenario, the income of female labourers has been simulated to drop by 11.9 per cent compared to the 2019 values (or base values), while the decline for male labourers has been simulated to drop by 10.4 per cent compared to the 2019 values. The percentage point difference between the decline of female labour income and male labour income is – 1.45. The size of the percentage point difference between the decline of female labour income and male labour income increased to – 2.51 under the high case scenario. Relatively higher impacts on the female labour income over the male labour income is in line with the hypothesis since demand shocks are more pronounced for the female labour- intensive activities (e.g. tourism, accommodation and foods, textile etc.).

Figure 5: Simulated labour income impacts



Source: Nepal GCGE Model 2019

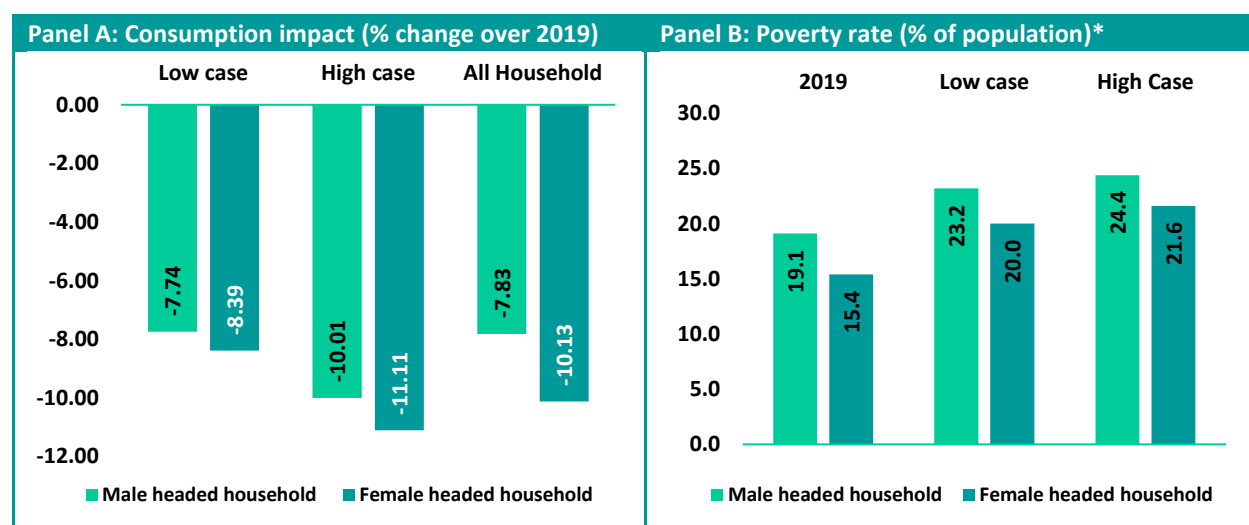
In addition to assessing the differential labour market impacts by gender, Nepalese households have also been classified by male and female headed households to simulate differential welfare impacts on them. Two widely used indicators have been used – impacts on household income and poverty rate.

Analogous to the simulated findings on the labour market, female headed households have also been disproportionately affected by the pandemic. In the low case scenario, the income of female headed households has been simulated to drop by 8.4 per cent compared to the 2019 values (or base values).

The decline for the male headed households has been simulated to drop by 7.7 per cent compared to the 2019 values. The percentage point difference between the decline of female headed households income and headed households income is – 0.65. The size of the percentage point difference between the decline of female headed households income and male headed households income increased to – 1.10 under the high case scenario.

Decline in household income led to rise in head count poverty rates. The head count poverty rate of the female headed households has been simulated to increase from 15.4 per cent in 2019 to around 20 per cent in the low case scenario. The percentage points increase in the head count poverty rates between 2019 and low case scenarios for the female headed households is 4.6 compared to 4.1 for the male headed households. The percentage points increase in the head count poverty rates between 2019 and high case scenarios is more pronounced for the female headed households compared to the male headed households. For the female headed households is 6.2 compared to 5.3 for male headed households.

Figure 6: Household consumption and poverty impact



Note: * poverty rates for 2019 have been estimated using the distribution of household survey 2010-11 and updated poverty lines for 2019³⁰.

Source: Nepal GCGE Model 2019 and Poverty Model 2019

5. Impacts on Unpaid and Invisible work

Valuation of unpaid and invisible works are not carried out on a regular basis. Accordingly, no valuation is available for a recent years to simulate impacts of the valuation of unpaid and invisible works. Following steps have been adopted to estimate the value of the unpaid and invisible works for 2019 (i.e. which may

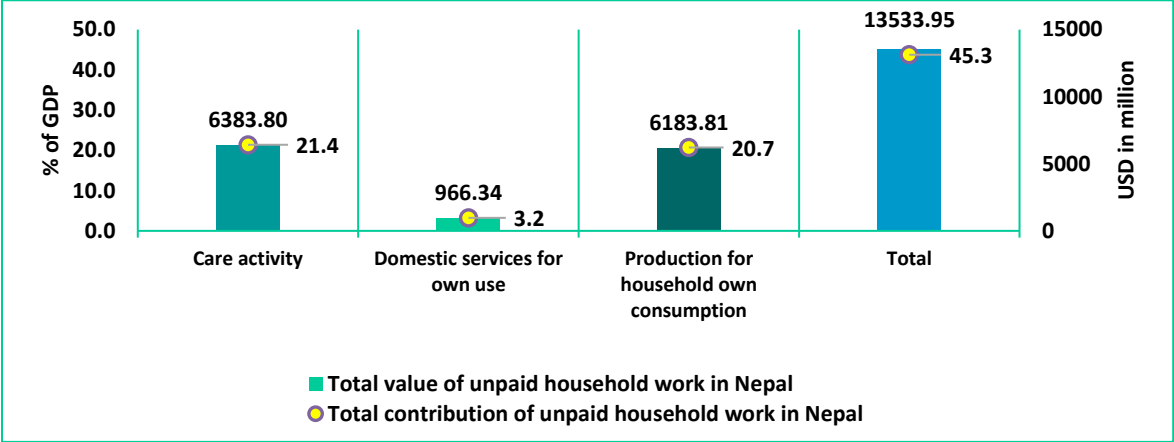
³⁰ Female headed households poverty rate has historically been lower than the male headed households. According to Hunzai and Gerlitz (2010), ‘there are various possible explanations for this finding, all of which must, however, remain speculative until further research is carried out. One possible reason is that on average female-headed households receive more remittances; the statistics did not differentiate between households where the male head was contributing through migration, and those in which there was no male head (e.g., as a result of death, disappearance, or incapacity). However, additional data indicate that in 2003/04, 65% of the female-headed households received remittances, in contrast to only 24% of male-headed households (CBS 2005).’

also be regarded as base valuation of the unpaid and invisible works). **First**, a model for valuation of the 'Unpaid and Invisible' (i.e. UIVM) has been developed using the Nepal Labour Force Survey (NLFS) 2017-18. NLFS 2017-18 has been used to generate activity and demographic classifications and time use proxies. **Second**, the base valuation of the unpaid and invisible works has been conducted using the Production Approach for 2017-18. **Third**, once the base valuation is estimated, the valuation has been updated for 2019 using 2019 GDP and 2018 shares of care activity, domestic services for own use, and production for own consumption. **Fourth**, increase in hours allocated for unpaid and invisible works reported in the various assessment reports has been incorporated in the UINM to simulate the impacts on the value of the unpaid and invisible works during COVID-19.

Valuation of Unpaid and Invisible Work

Figure below presents the summary of the values of unpaid domestic work as percent of GDP (2019). The total value of unpaid domestic work include valuation for the unpaid care activity, domestic services activity, and production of goods for own consumption activity. Total value of unpaid work has been estimated at USD 13534 million which is 45.3 per cent of the GDP of FY 2018-19. The values of the unpaid care activity, domestic services activity, and production of goods for own consumption activity as per cent of GDP 2019 have been found as 21.4 per cent, 3.2 per cent and 20.7 per cent respectively. The largest values have been for the care activity as well as the production of goods for household own food consumption.

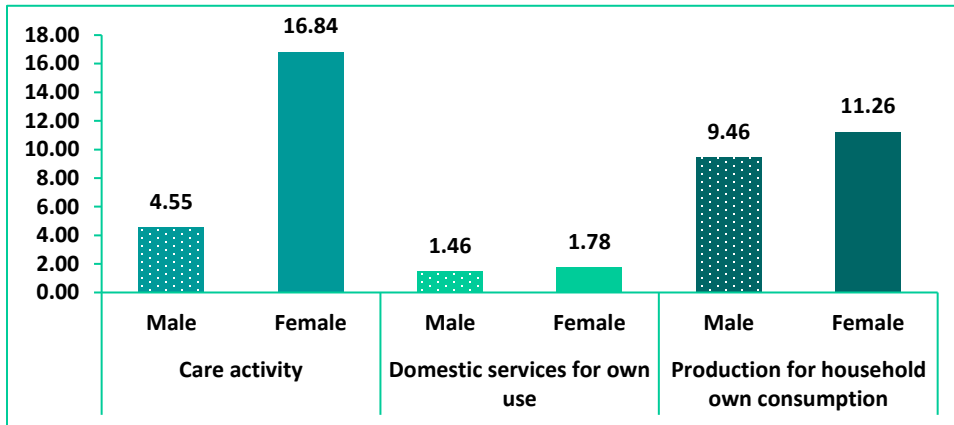
Figure 7: Summary of the Values of Unpaid Domestic Work (in \$ million and % of GDP)



Source: Nepal Unpaid and Invisible Framework (UIVM)

Further break down of the unpaid work by activity types and gender suggest that female contribution is significantly higher than their male counterparts. For instance, female contribution in care activity is 3.7 times higher than the male contribution. Similarly, female contribution in producing goods for household own consumption is 1.2 times than the male contribution.

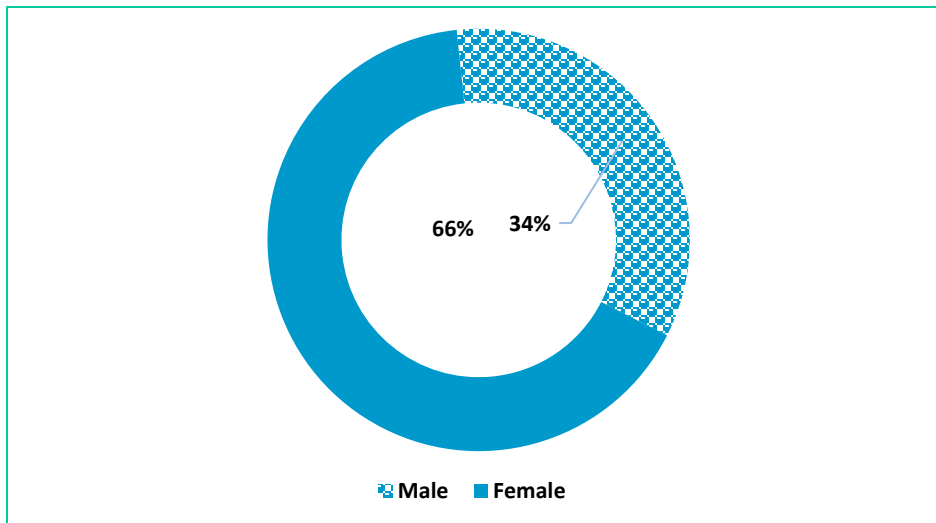
Figure 8: Contribution of unpaid domestic work by gender (% of GDP)



Source: Nepal Unpaid and Invisible Framework (UIVM)

Moreover, in Nepal male account for 34 percent of the total unpaid and invisible work and thus the share of female is 66 percent of the total value of unpaid domestic work.

Figure 9: Contribution of unpaid domestic work by gender (% of total value)



Source: Nepal Unpaid and Invisible Framework

Impacts on Valuation of Unpaid Work

Globally as well as in Nepal, time allocated to the care and unpaid works by female youth and women has increased substantially during COVID-19. Various reports and rapid assessments suggest that time allocated to the care and unpaid works by female youth and women may have increased from 1 to 3 hours in Nepal. The increase in time allocated to the care and unpaid works may have increased the value of the care and unpaid works. Thus, simulation has been carried out with the Nepal UIVM to assess the impact on valuation of the care and unpaid works by women in Nepal. Such an assessment provides a complete impacts of COVID-19 on Nepal' national income (or GDP) and Nepalese women. Simulation is set as:

unpaid works increased by 3 hours for women aged 15 to 29; and unpaid works increased by 2 hours for women aged 30 to 59.

Table 3: COVID-19 impacts on total value of unpaid works in Nepal (% of GDP)

| Economic Status | 2019 | | COVID-19 | | % point increase | |
|--|------|--------|----------|--------|------------------|--------|
| | (1) | | (2) | | (3 = 2 -1) | |
| | Male | Female | Male | Female | Male | Female |
| Employed | 5.3 | 5.4 | 5.3 | 8.7 | 0.0 | 3.3 |
| Unemployed | 1.3 | 1.1 | 1.3 | 1.6 | 0.0 | 0.6 |
| Not in Labour Force | 8.9 | 23.4 | 8.9 | 35.7 | 0.0 | 12.3 |
| Total | 15.5 | 29.9 | 15.5 | 46.0 | 0.0 | 16.1 |
| Total value of unpaid household work in Nepal in 2019 (USD in million) | | | | | 13,534.0 | |
| Total value of unpaid household work in Nepal in 2019 (% of GDP) | | | | | 45.34 % | |
| Total value of unpaid household work in Nepal in COVID-19 (USD in million) | | | | | 18,336.8 | |
| Total value of unpaid household work in Nepal in COVID-19 (% of GDP) | | | | | 61.44 % | |

Source: Nepal Unpaid and Invisible Framework

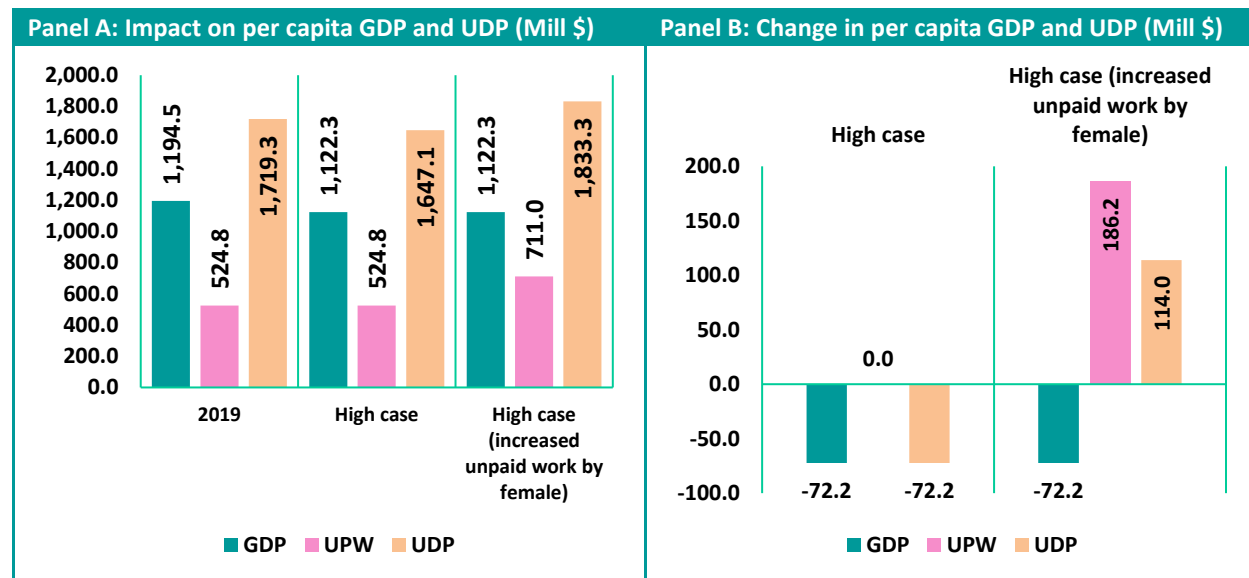
Incorporating increase in female work hours by age cohorts (i.e. between 1 to 3 hours) into the unpaid framework, it is simulated that:

- the total value of the unpaid and invisible works may increase to USD 18,336 million from USD 13,534 million;
- the total value of the unpaid and invisible works may increase from 45.3 per cent of GDP to 61.4 per cent of GDP; and
- female contribution to the value of the unpaid and invisible works may increase from 29.9 per cent of GDP to 46.0 per cent of GDP or by 16.1 percentage points.

5.1. Combined Impacts

Impact assessment of COVID-19 by combining the GCGE model (covering the conventional GDP measurement) and UIVM (incorporating the unpaid and invisible work) provides some important results from 'feminist' economic perspective.

Figure 10: Impact on per capita GDP



Note: UPW = value of unpaid and invisible work; UDP³¹ = unpaid and invisible work adjusted domestic product

Source: Nepal CGE Model and Nepal Unpaid and Invisible Framework

The key outcomes are:

- In 2019, the per capita GDP was \$ 1,195. Per capita value of unpaid work (i.e. UPW) has been estimated at \$ 525. Together, the value of the per capita GDP adjusted for the 'unpaid and invisible' work (i.e. UDP) has been estimated at \$ 1,719.
- Only the high case has been considered for illustration. Due to COVID-19 per capita GDP has been simulated to drop to \$ 1,122 or by \$ 72 per person. This would have been the impact of COVID-19 on Nepal's per capita GDP or national income.
- However, inclusion of the Unpaid and invisible work alters the above outcome. As women have been forced to increase time on care and unpaid work in Nepal during COVID-19 suggest that the value of unpaid and invisible work may increase to \$ 711 per capita from \$ 525 (i.e. pre COVID-19) or by \$ 186.2 per capita. The rise in the value of the unpaid and invisible work thus likely negate the decline in per capita (i.e. – \$ 72). *The overall impact is an increase in per capita UDP by \$ 114.*

³¹ The term UDP has close resemble to the term EDP (i.e. environmentally adjusted GDP) used to define the indicator for capturing the impacts of environment. The term EDP has been popularized by studies conducted in Australia, Indonesia and UNSTAT. Following the above instances, it has been decided to use UDP – a variant of GDP to capture the contribution of the unpaid and invisible work.

- The critical question is how are their increased contributions valued or recognized? One emerging instrument to support working-age women – especially during the crisis – is to provide them with temporary basic income (TBI-W).
- The above approach identifies the short coming of conventional method or standard macroeconomic framework based only on 2008 SNA (i.e. System of National Accounts)³² and thereby fails to measure the true economic contribution of female – in normal as well as in crisis periods.

³² The System of National Accounts 2008 (2008 SNA) is a statistical framework that provides a comprehensive, consistent and flexible set of macroeconomic accounts for policymaking, analysis and research purposes. <https://unstats.un.org/unsd/nationalaccount/docs/sna2008.pdf>

6. Recommendations

6.1. Official Recognition of Unpaid Work

The valuation of the unpaid and invisible work using a Nepal specific UIVM model for 2019 clearly suggest large contribution of the large number of Nepalese women – albeit their contribution is not officially recognised and published. The application of the UIVM also highlights the deficiency of the standard SNA approach where the care and unpaid work is substantial (please see below). It may also be relevant to note that operation (functioning) of the conventional economic activities also depends on the provision of the care and related activities performed – mainly by women.

| Valuation of Unpaid Works | | | |
|--|-------------|-------------------|---|
| Country or State (Time Use Survey Year) | Methodology | Value as % of GDP | Sources |
| Nepal (2019) | OB, GW, OC | 45 | Khondker, B |
| Nepal (1991) | OB, GW, OC | 47 | Acharya ^a |
| Bangladesh (2012) | OB, GW, OC | 49 | Action Aid and SANEM |
| Gujarat State, India (1988) | GW, RC | 26 | Hirway ^b |
| Finland (2006) | IB, GW, RC | 39 | NSO |
| People's Republic of China | OB, HW, RC | 33 | NSO |
| United States (1965) | IB, GW, SW | 31 | Landefeld, Fraumeni, and Vojtech ^c |
| El Salvador (1999) | GW, RC | 30 | Durán and Milosavljevic ^d |
| Hungary (2010) | SW, IB | 25 | NSO |
| Nicaragua (1999) | GW RC | 23 | Dúran and Milosavljevic ^d |
| France (2009–2010) | OB, GW, RC | 20 | OECD and NSO |
| United States (2004) | IB, GW, SW | 19 | Landefeld, Fraumeni, and Vojtech ^c |
| United Kingdom (2014–2015) | OB, GW, RC | 18 | OECD and NSO |
| United States (2016) | OB, GW, RC | 16 | TUS and BEA |
| Japan (2016) | OB, GW, RC | 16 | OECD and NSO |
| Canada (2015) | OB, GW, RC | 14 | OECD and Statistics Canada |
| South Africa (2010) | OB, GW, RC | 14 | OECD and NSO |
| Germany (2012–2013) | OB, GW, RC | 14 | OECD and NSO |

BEA = Bureau of Economic Analysis (United States), GDP = gross domestic product, GW = generalist wage, HW = average hourly wage (for domestic workers), IB = input based, NSO = national statistical office, OB = output based, OC = opportunity cost, OECD = Organisation for Economic Co-operation and Development, RC = replacement cost, SW = specialist wage, TUS = time use survey.

a. M. Acharya. 1993. *The Household Economy and Women's Work in Nepal*. In Saraswati Raju and Deipica Bagchi, eds. *Women and Work in South Asia: Regional Patterns and Perspectives*. New York and Abingdon, UK: Routledge.

b. Hirway, Indira. 2016. "Unpaid Work: An Obstacle to Gender Equality and Economic Empowerment including Women's Labour Force Participation." Expert Trigger Presentation at the "Sex-Disaggregated Data for the SDG Indicators in Asia and the Pacific: What and How?" workshop, organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Bangkok, May 25–27.

c. Landefeld, J. Steven, Barbara M. Fraumeni, and Cindy M. Vojtech. 2009. "Accounting for Household Production: A Prototype Satellite Account Using the American Time Use Survey." *Review of Income and Wealth* 55 (2): 205–25.

d. Durán, María Ángeles, and Vivian Milosavljevic. 2012. "Unpaid Work, Time Use Surveys, and Care Demand Forecasting in Latin America." BBVA Foundation Working Papers 7, BBVA Foundation, Bilbao, Spain, May.

The value added through the unpaid and invisible work in Nepal needs to be officially recognised not only to provide the full gamut of the value of the domestic product but also to acknowledge the contribution of the Nepalese women. It is this proposed that CBS may adopt a 'satellite' account approach to publish the value of the unpaid and invisible work in Nepal along side the publication of the GDP following the SNA approach. The combined approach may include:

- Entering into an agreement with CBS to pilot the measurement and publication of the unpaid and invisible work over the medium term (i.e. 3 to 5 years) on a pilot basis;
- UN Women should provide technical support to the measurement as well the refinement of the valuation of the unpaid and invisible work;
- The refinement should include a survey on time use in Nepal for a recent years and inclusion of the time use component in Labour Force Surveys; and
- Setting a technical committee to oversee the measurement of the GDP and UDP;

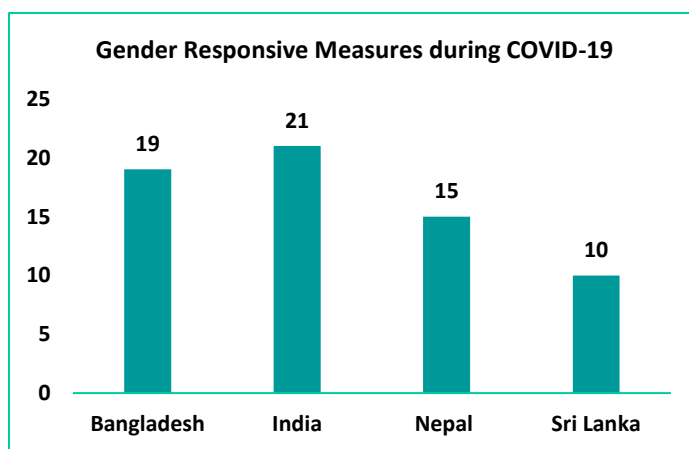
Following specification may be adopted to measure UDP (i.e. unpaid and invisible work adjusted domestic products).

| SNA Approach | | + | Satellite Account Approach (Unpaid Work Valuation) | | |
|--|--------------|---|---|----------------|-----------------|
| Current GDP | Constant GDP | | Care services | Own production | Own Consumption |
| By Nepal NA activities (18 activities) | | | By Nepal UIVM classification: Gender, Location, Age, Economic Status, and Education | | |
| Per Capita GDP | | | Per Capita UPW | | |
| Per Capita UDP | | | | | |

Source: author's creation

6.2. Adopt Additional Policies and Ensure Effectiveness

Nepal has formulated and enacted a number of women focus policies and strategies. Despite these initiatives, the review of fiscal (including social protection) and monetary policy measures suggest inadequacy compared to the need. Budget allocation for Ministry of Women, Children and Senior Citizen is still very small at around 0.09 per cent of GDP. Social protection interventions are powerful instrument for addressing risks, smoothing consumption, and as well as unlocking potentials. Social protection allocation to the women focused programmes are also small at around 0.05 per cent of GDP. The estimated financing gap to ensure and promote gender equity is large at around 90 per cent of the target.



According to the UNDP gender tracker, globally, almost 1,650 gender sensitive (GS) measures were undertaken during COVID-19. There are 360 measures adopted in Asia.

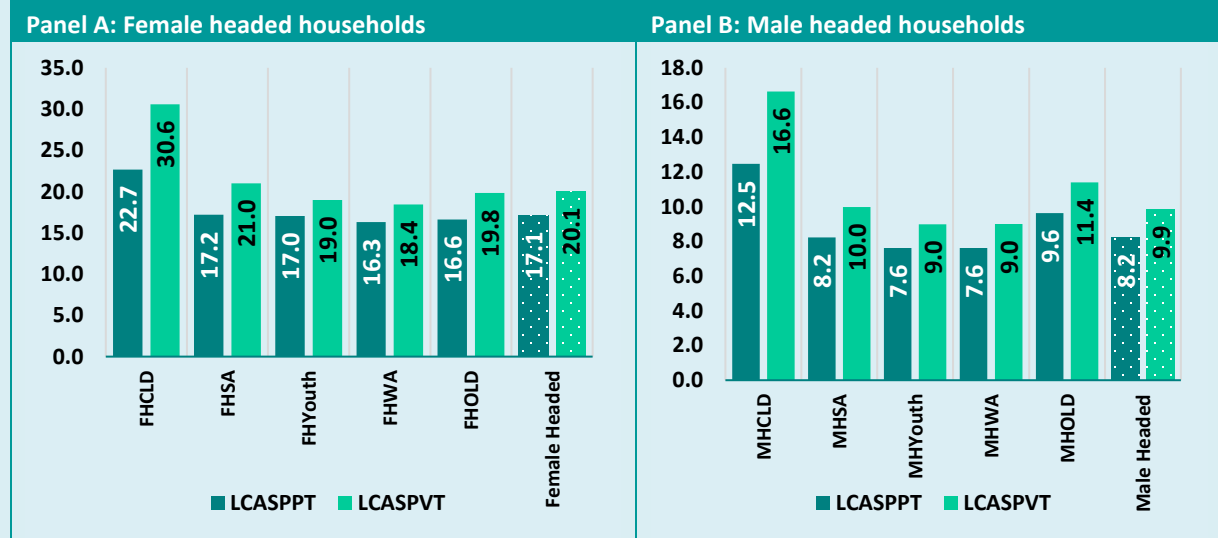
The adjacent graph shows the GS measures adopted by the main South Asian countries. Nepal adopted 15 GS measures, while India and Bangladesh undertook 21 and 19 measures respectively. The data perhaps suggest scopes of adoption of additional GS measures in the case of Nepal.

UN Women (2020)³³ provided a set of policy responses for a gender-responsive recovery. The recommendations have been proposed under two-time frames – immediate term and medium-long term. Some of the immediate term policy responses include designing gender focused economic policies and strategies; improving employability of women by enhanced social protection coverage for female workers, boosting support for women led business, reducing digital divide and enhanced financial inclusion. The medium-long term measures include new investment in gender-responsive social protection and care systems, extend fiscal support to industries (or sectors) with a higher prevalence of women, promote women’s access to decent work – including in male dominated sectors, and instill a gender perspective to trade policies.

Simulate Welfare Impacts of Women Focused Social Protection in Saint Lucia

Social protection transfers are in most cases directly handed over to the household groups or beneficiaries. Thus, the impact of the proposed social protection schemes on household consumption expenditure is expected to be substantially higher than that found for the gross output and value added (which are secondary indirect effects – affecting output via higher demand for goods and services). Gains in household consumption expenditure ranged from 20.1 per cent (over base consumption value) under LCASPVT (Saint Lucia SP with vulnerable targeting) to 9.9 per cent under LCASPPT (Saint Lucia SP with poverty targeting) – substantially higher gains than the gains found for gross output and value added. Consumption gains are substantially higher for female headed households – more than 2 times over gains of male households. In the life cycle groups, the largest gains have been found for the households with early childhood, households with school children and households with Youth.

Effects on household consumption (% change over base values)



Note: F and M refer to female and male. H denotes household. CLD = child, SA = school age, WA = working age, and OLD = old age.

Source: UNDP (2021)³⁴

³³ UN Women (2020), ‘Addressing the Economic Fallout of Covid-19: Pathways and Policy Options for a Gender-Responsive Recovery’, Policy Brief No. 15, COVID-19 Response.

³⁴ UNDP (2021), “Gender Responsive Social Protection Assessment in response to COVID-19 (Saint Lucia)”, prepared under the Under the Joint Programme: Enhancing Resilience and Acceleration of the SDGs in the Eastern Caribbean: Universal Adaptive Social Protection modelled at the community, national and sub-regional levels, July 16, 2021.

The above analysis of low allocation and benefits of higher allocation to women focused or sensitive policies and strategies call for time-abound aggressive allocations to sectors essential for ensuring and promoting gender equality in Nepal. Following strategies may be adopted:

Short Term:

- Devise a formula for budget allocation in line with the objectives to reduce financing gap from 90 per cent to around 50 per cent over the medium term (i.e. within the next five years);
- Direct and indirect measures should be re-assessed to find out scope for introduction of new measures and revamping of the existing measures;
- Credit and interest rate measures should be re-assessed to find out scope for introduction of new measures and revamping of the existing measures;
- Affordable measures focusing on digital banking and marketing needs to be adopted for all women – especially for self-employed and micro/small entrepreneurs;

Medium-Long Term:

- Women focused social protection allocations must increase such that they account for around 25 per cent of the social protection budget allocation (i.e. 1 % of 4 % of GDP allocation);
 - Initiate a pilot project to assess the feasibility of introducing TBI-W in Nepal as a shock responsive measure;
 - Assess and design pathways to gradual transformation to a universal social protection in Nepal through combination of programmes under the four pillars of social protection system – social assistance, social insurance; active labour market and care services;
 - Adopt measures to improve women’s employability and women’s labour market conditions to enhance their eligibility and capacity to contribute to the contributory social security schemes (CSSA);
 - Actively address the barriers women face through the design and implementation of the CSSA and related laws’;
 -
 - Policy formulation and adoption requires in-depth monitoring by third party to identify implementation bottleneck (e.g. excessive paper works, documentations, collateral for loans etc.) to ensure 70 to 80 per cent effectiveness (i.e. implementation of policies) in the medium term and 80 to 90 effectiveness over the long term.
-

6.3. Provision of Care Services

Both female labour force participation (FLFS) and female employment-to-population rate (FEPR) have been found low in Nepal. According to Nepal Labour Force Survey 2018, female labour force participation rate (LFPR), was 26.3 per cent while the labour force participation rate for male was 53.8 per cent. Analogously, in 2018, the female employment-to-population rate (EPR) was 22.9 per cent, which was 25.4 percentage points lower than male EPR (i.e. 48.3 %). Among others, lack of provision of care services ³⁵has been preventing women to participate in the labour force and labour market.

There is an extensive international literature confirming the many positive impacts of quality child care services on economic and social performance. Research on the benefits of the provision of quality and affordable child care services suggests at least four types of benefits to individuals and society:

- Additional economic activity associated with the expanded production of child care services.
- Increased labour force participation, employment, and earnings for parents (especially mothers) of children receiving child care services.
- Long-run economic, social, and fiscal benefits resulting from the improved lifetime capacities of children who participated in care in their childhoods.
- Handsome financial returns to investment in child care services.

There is a strong positive correlation between the availability of child care services and women's labour force participation³⁶. It is important to note that the boost in female labour supply from universal child care has experienced most strongly among lower-income households – since high-income households are able to purchase their own child care services privately, in the absence of a more accessible public system. Thus it is argued that *'this is one channel through which the provision of universal, accessible early learning and child care' improves economic and social equality: it raises the potential for lower-income households to increase their labour supply, and hence their incomes.'* (Stanford, 2020)

Some studies used the “multiplier” framework based on initial costs of interventions and estimated benefits to assess ‘Benefit-Cost’ ratio (BCR) of investment in child care (or care services). Warner and Liu (2004) and Bartik (2006) estimated the BCRs in excess of 3-to-1 (i.e. \$ 1 investment generate \$ 3 worth of returns). Heckman et al. (2010) envisaged that the benefits exceed costs by a ratio of between 7-to-1 and 10-to-1. Reynolds et al. (2011) found an 11-to-1 ratio. The Executive Office of the U.S. President (2015) proposes a benchmark ratio (based on median findings of multiple studies surveyed) of 8.6-to-1.

Studies conducted by UN Women (2021) found significant employment impact of investing in care services. Adopting the SAM multiplier model the study found substantial employment impact of ECCE. The study simulated additional employment impacts of 4 to 7 per cent of total employment (old and new). It also argued on the basis unchanged gender ratios (i.e. observed), most of those jobs would go to

³⁵ The lack of provision or access has also been typified in the literature as ‘motherhood penalty’. The motherhood penalty is a term describing career problems women face after having a child. It's based on biased, stereotypical views of mothers, like the notion that they're less productive. The motherhood penalty affects wages, mothers' ability to get hired, evaluations, and promotions. <https://www.businessinsider.com/personal-finance/motherhood-penalty>.

³⁶ See, for example, Herbst and Tekin (2010), Currie (2001), Dixon (2020), and Bivens et al. (2019).

women as the majority of current ECCE teachers. The study concluded that ‘this is a significant step towards making the paid economy more caring, understood as an economy in which care is shared more equally between society and individuals,’

In addition to these positive outcomes, another important feature is that ‘**Child care doesn’t cost. It pays.**’ implying that there is no additional fiscal pressure on governments.

Recovery with Investing in Universal Child Care: The Canadian Case

A recent study to support the launching of a universal quality child care services released on November 25, 2020 argues a Canada-wide child care programme would create greater equality, boost regional and rural economic development and bring long term health and well-being benefits for future generations. The programme has been estimated to generate following benefits:

- More than **200,000 new jobs** over ten years in regulated child care
- **80,000 additional jobs** in industries that support and supply ELCC (early learning and child care)
- A **\$70 to \$115 billion boost** to annual GDP after ten years
- An **added \$17 to \$29 billion in government revenues per year**, split evenly between the federal and provincial governments
- **Greater equality**, and a boost to rural and regional economic development
- **Long-term health and well-being** benefits for future generations of Canadians – and future fiscal savings

“High-quality ELCC benefits children, parents, society and the economy, spurring job creation and GDP growth. For women, in particular, and for low income and racialized families – and rural communities – it’s a game changer” says Child Care Now Executive Director Morna Ballantyne.

On the basis of these estimates the study not only suggest that the ‘*Child Care Expansion Would Boost Economic Recovery*,’ but ‘*Child care doesn’t cost. It pays.*’

Source: <https://economicsecurity.ca/2021/01/28/new-study-shows-direct-economic-benefits-to-the-economy-from-implementing-a-canada-wide-child-care-system/>

It thus proposed that government of Nepal may undertake a comprehensive study to assess the feasibility of implementing a community based affordable care services (i.e. inclusive of child care – childcare and early learning and primary and secondary education; and health care and long-term elderly care)³⁷. The study should include³⁸:

- Design the care services for Nepal considering Nepal context;
- A forward-looking demand (or use) side estimation of the demand for care services by various economic groups in Nepal;
- A comprehensive assessment of the supply side of the care services cost components;
- Development of a business model focusing on revenue streams, scope of cross-subsidisation and benefit-cost ratios.

³⁷ UN Women explained the method and approach to type of exercise in <https://www.unwomen.org/en/digital-library/publications/2021/12/issue-paper-investing-in-free-universal-childcare-in-sub-saharan-africa>

³⁸ Observing the inequality in care services provision and realizing the global approach with commitment, the Global Alliance for Care initiative has been launched by Women in Mexico (INMUJERES) and UN-Women 2021. For further details please refer to [Acerca – ALIANZA GLOBAL POR LOS CUIDADOS \(forogeneracionigualdad.mx\)](https://www.alianzainmexico.org/).

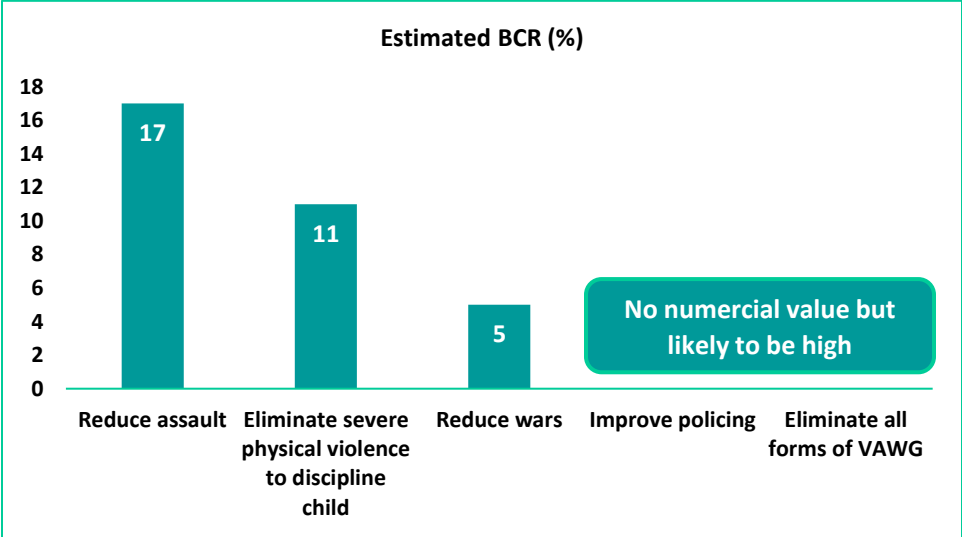
Implementation of such a programme should be a game changer for Nepalese women as well as for Nepalese society.

6.4. End Gender Based Violence

Violence against women is a violation of human rights. Violence against women is a daily occurrence in the lives of many Nepalese girls and women. Although, violence against women may take many forms, the most predominant types of violence against women and girls (VAWG) globally are physical violence, sexual violence, emotional violence, and economic violence.

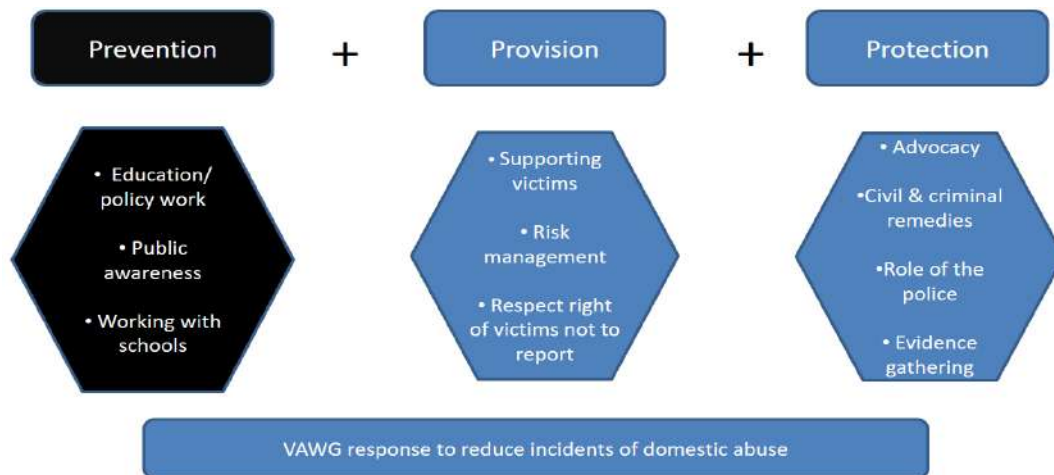
Emerging global studies on assessing the economic cost of VAWG reported that violence imposes significant costs primarily on individuals (i.e., victims and their families) as well as relatives, the community and the State/country. As mentioned above in section 3.3, the estimated costs varied between 4.6 per cent of GDP to around 5.5 per cent of GDP.

Not enough research have been conducted to understand costs and benefits of interventions aim to lessen the incidence of VAWG. However, considering the importance of investment in prevention of VAWG, recent studies have been trying to quantify the benefit–cost ratio (or, in other words, the value for money) of investing in measures to eliminate (or prevent) VAWG. The UNFPA and DFID study (2017), argued that ‘international studies demonstrate that each \$1 invested in GBV prevention saves the economy \$5 to \$20 in future service costs’. On the basis of these estimates, it urged Ukrainian authorities to discard the currently practised ‘left over’ principle for budgeting interventions to prevent VAWG. The study by the Copenhagen Consensus Center, on the other hand, provided detail on the benefit-cost ratios for interventions aimed at preventing violence, including VAWG. Even though the report acknowledged that measuring the benefits of interventions to prevent domestic violence was difficult, it provided some benefit–cost ratios for certain interventions (figure below).



Source: Fearon and Hoeffler (2014)

The estimated benefit–cost ratios were high, suggesting good value for money in investing in programmes to prevent domestic violence. Following the above findings it makes good arguments to implement policies and strategies to lessen if not eradicate the VAWG in Nepal. In this context, the government may formulate strategies in line with the ‘whole system’ approach. The whole system approach focuses on three important aspects, that is prevention, provision and protection.



Since there is no research carried out in Nepal to estimate economic cost of VAWG, it is recommended that new costing should be conducted in Nepal using country data. The exercise should provide new insights into cost of VAWG and the rationale for adopting appropriate measures. Some of the policy recommendations may include:

Multisectoral approach: A multisectoral approach should be considered. This approach should include the carrying out of law reform, including repeal or revision of discriminatory laws (if any); as well as the introduction of new laws.

Strengthening capacity: Strengthen capacity of all stakeholders/services providers dealing with VAWG with dedicated training programmes, digitisation of data and statistics, and better co-ordination of the work of different agencies involved in tackling VAWG.

Empowering schools: Another important intervention in this context may be to train some existing schoolteachers on how to deal with VAWG cases. Thereafter, the government may decide to employ dedicated school welfare personnel in each school or to serve a cluster of schools.

Enhanced budget allocation: Implementation of above measures would require additional resources. The additional resources should in principle emanate from the federal budget. However, given that economic cost also affect the private sectors, they may also be encouraged to come forward to resources.

7. Reference

- Bivens, Josh, Emma García, Elise Gould, Elaine Weiss, and Valerie Wilson (2016), "It's time for an ambitious national investment in America's children" (Washington: Economic Policy Institute), <https://www.epi.org/publication/its-time-for-an-ambitious-national-investment-in-americas-children/>.
- Commonwealth Secretariat (2020), "The Economic Cost of Violence Against Women and Girls: A Study of Lesotho," March 2020, Commonwealth Secretariat, Marlborough House, Pall Mall, London SW1Y 5HX, United Kingdom.
- Currie, Janet (2001), "Early Childhood Education Programs." *Journal of Economic Perspectives*, 15(2): 213-238.
- Dixon, Janine (2020), "Simulations of increased government expenditure in the care sectors" (Canberra: National Federation of Australian Women), <https://nfaw.org/wp-content/uploads/2020/10/Appendix-A.pdf>.
- Executive Office of the President of the United States (2015), "The Economics of Early Childhood Investments (Washington: Executive Office of the President of the United States)," https://obamawhitehouse.archives.gov/sites/default/files/docs/early_childhood_report_update_final_n-on-embargo.pdf.
- Fearon, J, and A Hoeffler (2014), 'Benefits and Costs of the Conflict and Violence Targets for the Post-2015 Development Agenda', Conflict and Violence Assessment Paper, Copenhagen Consensus Centre.
- Heckman, James J., Seong Hyeok Moon, Rodrigo Pinto, Peter A. Savelyev, and Adam Yavitz (2010), "The Rate of Return to the High/Scope Perry Preschool Program." *Journal of Public Economics*, 94(1): 114-128
- Herbst, Chris M. and Erdal Tekin (2010), "The Impact of Child Care Subsidies on Child Well-being: Evidence from Geographic Variation in the Distance to Social Service Agencies." Working Paper 16250. Cambridge, Mass.: National Bureau of Economic Research (August).
- Hunzai, K. and Jean-Yves Gerlitz (2010), "The Poverty Status of Female-headed Households in Nepal," Sustainable Mountain Development No. 57, ICIMOD, Summer 2010.
- IMF (2020a), "Fiscal Monitor," April 2020. IMF, Washington.
- Khondker, B., (2019), "Economic Cost of Violence Against Women and Girls: A Study of Seychelles," June 2019, Commonwealth Secretariat, Marlborough House, Pall Mall, London SW1Y 5HX, United Kingdom.
- Reynolds, Arthur J., Judy A. Temple, Suh-Ruu Ou, Irma A. Arteaga, and Barry A.B. White (2011), "School-Based Early Childhood Education and Age-28 Well-Being: Effects by Timing, Dosage, and Subgroups." *Science*, 333(6040): 360-364.
- Scott Wilson Nepal (2021), "Socio-Economic Vulnerabilities and Needs of Nepali Women, Including Returnee Migrants, Affected by the Covid-19 Pandemic," Report prepares for UN under the UN COVID-19 Response and Recovery Fund, August 2021,
- Shoma, C. D. , (2019), "Financing female entrepreneurs in cottage, micro, small, and medium enterprises: Evidence from the financial sector in Bangladesh 2010–2018", *Asia & the Pacific Policy Studies*, Volume 6, Issue 3, September 2019. <https://onlinelibrary.wiley.com/doi/full/10.1002/app5.286>

UNICEF (2020a), "Sri Lanka's social protection response to COVID-19: Potential impacts of current proposals and alternative options for a lifecycle approach. UNICEF Sri Lanka. Colombo.

UN Population Fund and Department for International Development (2017), 'Economic Costs of Violence against Women in Ukraine', UNPFA and DFID, Kyiv, Ukraine.

UNDP (2020), "Rapid Assessment of Socio-Economic Impact of Covid-19 In Nepal,"

UN Women (2021), "Investing in Free Universal Childcare in Sub-Saharan Africa: Côte D'ivoire, Nigeria, Rwanda, Senegal And the United Republic of Tanzania: Estimating Spending Requirements, Gendered Employment Effects And Fiscal Revenue," Issue Paper, July 2021.

World Bank (2020), 'East Asia and Pacific in the Time of Covid-19', April 2020.

8. Annex

8.1. Gendered SAM and CGE Model

In a narrower sense, a SAM is a systematic data and classification system of a country for a particular time period – generally a year. As a data framework, SAM is a snapshot of a country at a point in time.³⁹ A particular innovation of the SAM approach is to bring together macroeconomic data (such as national accounts) and microeconomic data (such as household surveys) within a consistent framework. This aims to provide as comprehensive a picture of the structure of the economy as possible. Furthermore, a SAM is a generalization of the production relations, and extends this information beyond the structure of production to include: *i) the distribution of value-added to institutions generated by production activities; ii) formation of household and institutional income; iii) the pattern of consumption, savings and investment; iv) government revenue collection and associated expenditures and transactions; and v) the role of the foreign sector in the formation of additional incomes for household and institutions.*

Table 4: Basic structure of a social accounting matrix (SAM)

| SAM Accounts | Production Account | | | Institution Account | | | | Capital Accounts | Total |
|-------------------------|-----------------------------|--------------------------------------|--|------------------------------|-----------------------|------------------------|-----------------|--------------------------|-------------------------|
| | Activity | Commodity | Factor | Current Accounts | | | | | |
| Activity (AC) | | Domestic output | | | | | | | Total Activity Use |
| Commodity (CM) | Input-output | | | Private Consumption | Public Consumption | | Exports | Investment | Total Commodity Use |
| Factor (FP) | Distribution of value added | | | | | | | | Total Factor Income |
| Household (HH) | | | Redistribution of value added (labour and capital) | Inter-Household Transfers | Government Transfers | Enterprise Transfers | Remittances | | Total Household Income |
| Government (GoV) | Value added Tax | Indirect Tax (Production and Import) | Redistribution of capital value added | Income Tax | | Corporation Tax | | | Total Government Income |
| Enterprise (ENT) | | | Redistribution of capital value added | | | | | | Total Enterprise Income |
| Rest of the World (RoW) | | Intermediate Imports | | Imports of Consumption Goods | | | | Imports of Capital Goods | Total RoW Payments |
| Capital (CAP) | | | | Household Savings | Government Savings | Enterprise Savings | Foreign Savings | Flow of Funds | Total Savings |
| Total Supply (TSS) | Domestic Output | Commodity Supply | Payments of Factors of Production | Outlays by Household | Outlays by Government | Outlays by Enterprises | RoW Receipts | Investment | |

Note: R = rows and C = columns

The current SAM for Nepal was developed for 2009. Thus there was a need to develop a new SAM for Nepal. A new SAM for Nepal has been developed for 2019. The SAM 2019 is based on the Nepal Supply and Use (SUT) 2011. Following steps have been adopted to develop SAM 2019 from SUT 2011.









- STEP 1:** the SUT 2011 has been updated for 2019.
- STEP 2:** the updated SUT 2019 has been converted into a symmetric IOT for 2019.

³⁹ Pyatt G and Thorbecke E, *Planning Techniques for a Better Future*, Geneva, ILO, 1976.

3. **STEP 3:** the IOT 2019 has then be extended to develop the SAM for 2019. The important features of the SAM 2019 from gender perspectives has been the incorporation of gender entry points in the
- *Labour market (male and female labour)*
 - *Female and Male headed households. Furthermore female and male headed households have been classified to include age-based households*

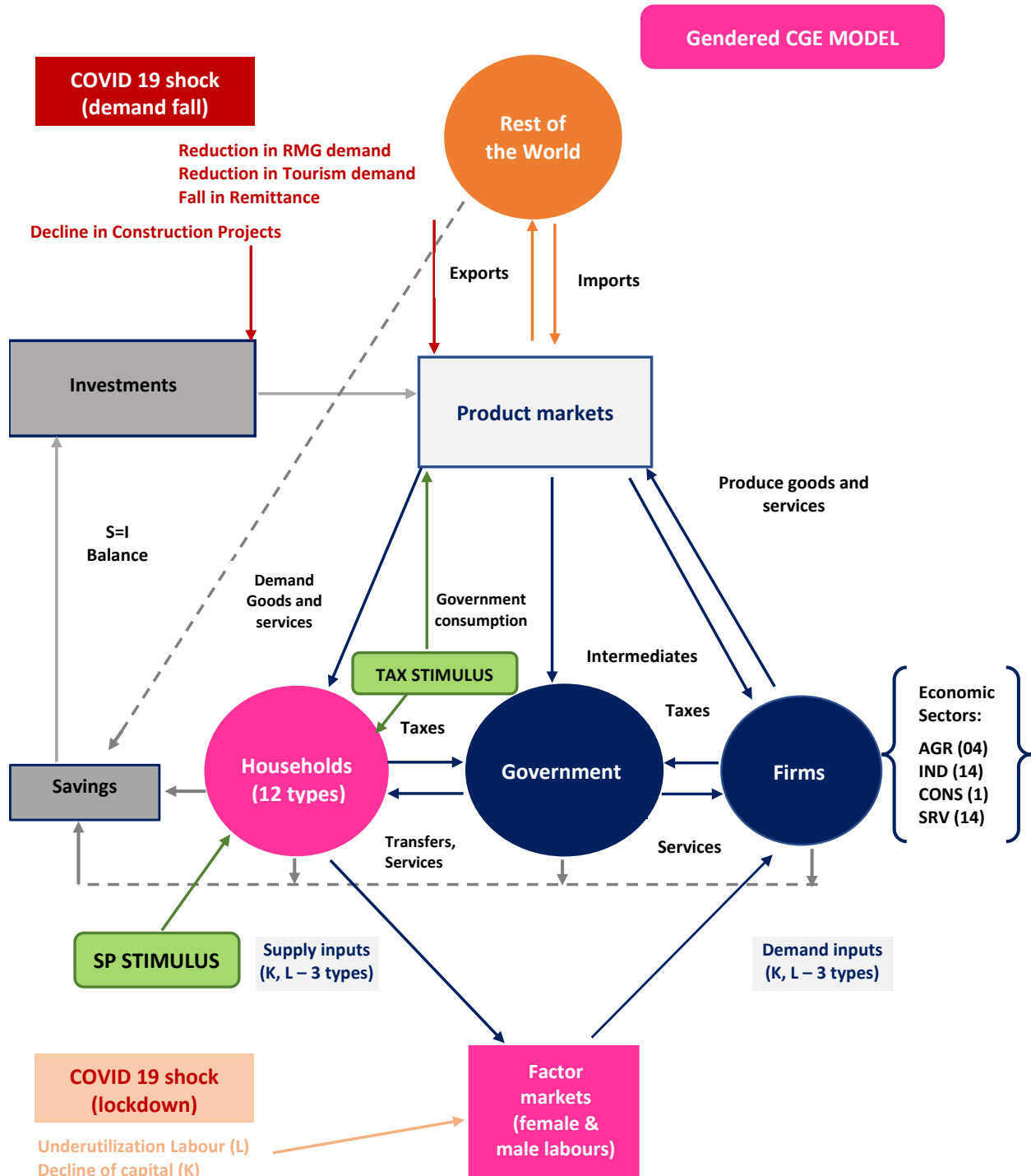
Description of the SAM accounts are provided below.

Table 5: Description of the accounts of 2019 Nepal Gendered SAM

| SAM Accounts | Detailed account classification |
|---|---|
| Activities (33) | |
|  | Agriculture, Livestock, Forestry, and Fishing (04) |
|  | Mining and quarrying, Food manufacturing, Textile, Leather, Wood, Paper, Chemical, Plastic, Other Metal, Metal, Machinery, Other manufacturing, Electricity and gas, Water, and Construction (15) |
|  | Wholesale and retail trade, Land transport, Air transport, Other transport, Accommodation and food service, Information and communication, Financial and insurance, Real estate, Professional services, Administrative services, Public administration, Education, Health and social work, and Other services (14) |
| Commodities (33) | |
|  | Agriculture, Livestock, Forestry, and Fishing (04) |
|  | Mining and quarrying, Food manufacturing, Textile, Leather, Wood, Paper, Chemical, Plastic, Other Metal, Metal, Machinery, Other manufacturing, Electricity and gas, Water, and Construction (15) |
|  | Wholesale and retail trade, Land transport, Air transport, Other transport, Accommodation and food service, Information and communication, Financial and insurance, Real estate, Professional services, Administrative services, Public administration, Education, Health and social work, and Other services (14) |
| Factors of Production (3) | |
|  | Labour factor (02): Male labourer and Female labourer |
| | Capital factor (1): Capital |
| Institutions (17) | |
|  | Household (12): Male headed children, Male headed primary school age children, Male headed secondary school age children, Male headed youth, Male headed working age and Male headed old age. Female headed children, Female headed primary school age children, Female headed secondary school age children, Female headed youth, Female headed working age and Female headed old age; |
| | Enterprises |
| | Government |
| | Rest of the World |
| | Savings or Gross fixed capital and Inventories (02) |

Source: 2019 SAM

Figure 11: The schematic structure of the Nepal gendered-CGE model



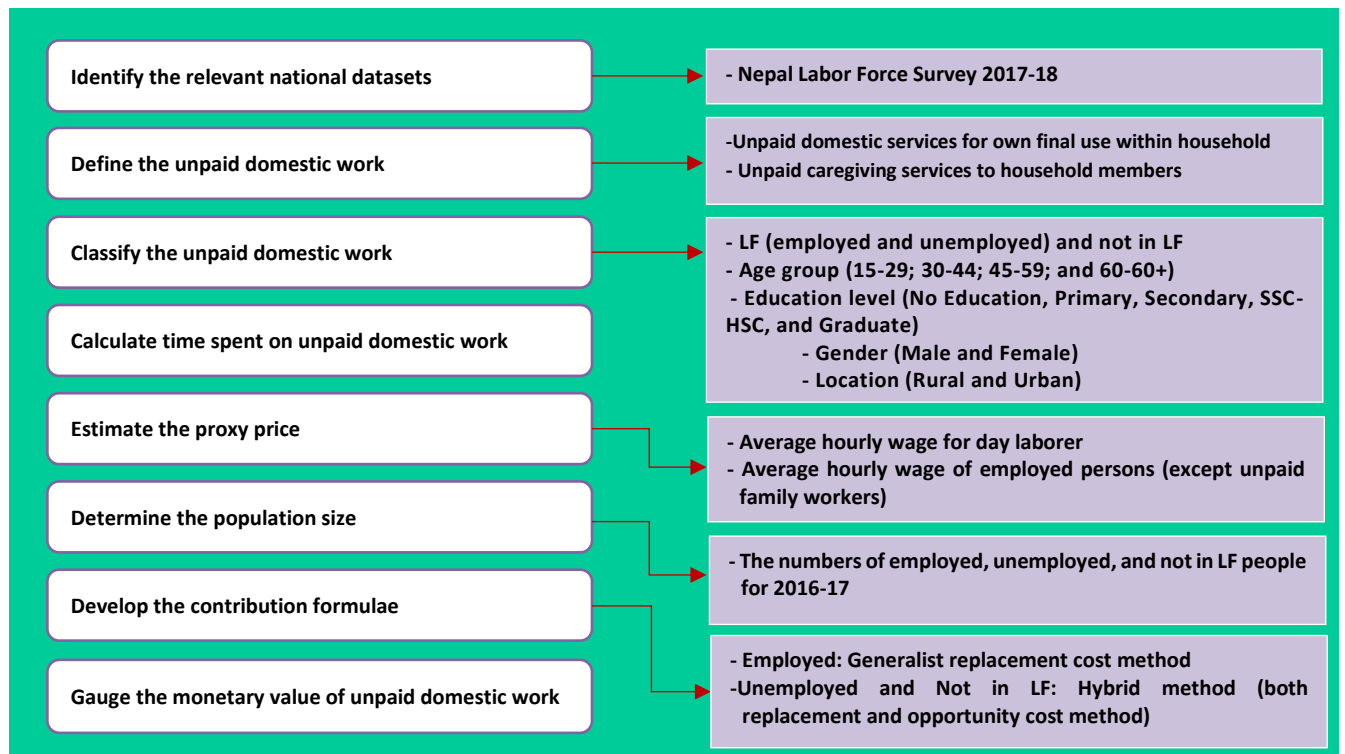
Note: the 'pink' circle and box represent the 'gender' entry points in a CGE model

Source: author's creation based on World Bank (2020)

8.2. Valuation of Unpaid and Invisible Work in Nepal

One of the most popular approaches to construct satellite account is the “Production Approach”. The base of such account is the hours spent in unpaid domestic activities. Satellite account also contains shadow (i.e. proxy) market prices for hours spent on unpaid domestic activities for quantifying these activities similar to conventional market activities in the economy. However, the value is aggregate in nature in the existing literature which is not optimal for observing heterogeneity within the population. Hence, we intend to disaggregate the population through several classifications to construct the satellite account for Nepal. Such holistic approach will provide meaningful insights about the unpaid work performed by women and men which can lead to proper policy suggestions. Figure 1 shows the overall framework.

Figure 12: Steps in Constructing Unpaid Valuation Model



Activities Considered as Unpaid and Unaccounted Domestic Work

A. Caring Services

- Cleaning
- Laundry (includes sewing and clothing repair)
- Cooking (food and drink preparation)
- Childcare
- Eldercare

B. Domestic services for own final use

- Preparing goods and crafts
- Preparing foodstuff to store for future consumption
- Household maintenance and repair
- Lawn and garden management

- Fetching water from natural or other public sources
- Collect firewood, dung or other goods to use as fuel
- Purchasing goods and services
- Other household management works

C. Production of Goods for Household Own Food Consumption

- Farm work
- Raise tend animals or livestock
- Fishing, hunting or gathering foodstuff

Datasets and Analytical Techniques

The satellite account for Nepal has been constructed using Nepal Labor Force Survey (2017-18) dataset that has the time use for above mentioned activities through which one can specifically derive hours spent on different activities in a day. However, NLFS (2017-18) provides overall scenario of the labor market of Nepal. For instance, the classifications have followed the ratio obtained from NLFS to ensure national representation.

Classifications considered

To understand the pattern of unpaid and unaccounted domestic work in the economy, this study follows the classification depicted in Table below.

Table 6: Overall Classification

| Classification | Disaggregation Category |
|----------------|---|
| Location | <ul style="list-style-type: none"> • Rural • Urban • Nepal |
| Gender | <ul style="list-style-type: none"> • Male • Female |
| Employment | <ul style="list-style-type: none"> • Employed • Not Employed • Not in Labor Force |
| Age Group | <ul style="list-style-type: none"> • 15-29 • 30-44 • 45-59 • 60 and above |
| Education | <ul style="list-style-type: none"> • No Education • Primary • Secondary • SSC-HSC • Graduate |

Average Hours Spent for Unpaid Domestic Work

Average hours spent for unpaid domestic work has been calculated by the following formula.

$$H_{unpaid}^{lfs} = \frac{TH_{unpaid}^{lfs}}{N}$$

Where,

H_{unpaid}^{lfs} = Per day hours spent in unpaid domestic work for aforementioned labour force status

TH_{unpaid}^{lfs} = Hours Spent on unpaid domestic activities for total population given the classifications
 N = Population given the classifications

Proxy Prices for Unpaid Domestic Work

Two proxy prices have been calculated, which are average hourly wages. Firstly, average hourly wage of day laborers has been calculated for both genders by location. Secondly, average hourly wage of employed persons (except unpaid family workers engaged with economic activity) has been calculated. The numbers are disaggregated by age, education, gender and location. The formula for deriving proxy price has been mentioned below.

$$W_t^i = \frac{TW_t^i}{N}$$

Where,

W_t^i = Hourly wage given the classification at time t
 TW_t^i = Total hourly wage given the classification at time t
 N = Population given the classification

Developing Formulae for Measuring Unpaid Domestic Work

To measure the value of unpaid domestic work in GDP for both male and female, three different formulae have been developed based on the existing literature. Measuring the value of unpaid domestic work performed by employed persons has been calculated through Replacement Cost Method (RCM). By following generalist RCM, unpaid domestic work performed by employed persons has been monetarized by a minimum wage which is the average wage of day laborer (UNECE, 2017). Value of unpaid domestic work for employed persons has been calculated from following formula.

$$V_{unpaid}^{emp} = \frac{D \times EMP_t \times W_t^d \times H_{unpaid}^{emp}}{GDP_t^c}$$

Where,

V_{unpaid}^{emp} = Value of unpaid household work for employed persons at time t
 D = Number of days in a year
 EMP_t = Number of employed persons at time t
 W_t^d = Hourly wage for day labourer at time t
 H_{unpaid}^{emp} = Per day hours spent in unpaid household work by employed persons
 GDP_t^c = GDP at current prices at time t

For the persons who are not employed and not in labor force, a hybrid approach has been considered for calculating the contribution of unpaid domestic work in GDP. The hybrid approach is a mixture of both replacement and opportunity cost method. Adding opportunity cost in the formula enables us to quantify the portion of the time spent for unpaid domestic activities which could have been used for doing other economic activities. Such portion of the time spent by individuals has been quantified by the average wage of employed person (UNECE, 2017). Value of unpaid domestic work for persons who are not employed and not in labor force has been calculated from following formulae.

For unemployed persons,

$$V_{unpaid}^{unemp} = \frac{D \times UNEMP_t \times [\{W_t^d \times H_{unpaid}^{emp}\} + \{W_t^{emp} \times (H_{unpaid}^{unemp} - H_{unpaid}^{emp})\}]}{GDP_t^c}$$

Where,

V_{unpaid}^{unemp} = Value of unpaid household work for unemployed persons
 D = Number of days in a year

$UNEMP_t$ = Number of unemployed persons at time t
 W_t^d = Hourly wage for day labourers at time t
 H_{unpaid}^{emp} = Per day hours spent in unpaid household work by employed persons
 W_t^{emp} = Hourly wage for employed persons at time t
 H_{unpaid}^{unemp} = Per day hours spent in unpaid household work by unemployed persons
 GDP_t^C = GDP at current prices at time t

For persons not in labor force,

$$V_{unpaid}^{nlf} = \frac{D \times NLF_t \times [\{W_t^d \times H_{unpaid}^{emp}\} + \{W_t^{emp} \times (H_{unpaid}^{nlf} - H_{unpaid}^{emp})\}]}{GDP_t^C}$$

Where,

V_{unpaid}^{nlf} = Value of unpaid household work for persons who are not in labor force
 D = Number of days in a year
 NLF_t = Number of unemployed persons at time t
 W_t^d = Hourly wage for day laborer at time t
 H_{unpaid}^{emp} = Per day hours spent in unpaid household work by employed persons
 W_t^{emp} = Hourly wage for employed persons at time t
 H_{unpaid}^{nlf} = Per day hours spent in unpaid household work by unemployed persons
 GDP_t^C = GDP at current prices at time t

Key Results

Hours Spent in Unpaid Domestic Work

Average hours spent in unpaid domestic work in Nepal can be shown in Table below. Evidently, females spent significantly higher amount of time than male counterparts in performing unaccounted domestic activities. Females who are not in labor force spend 4.16 hours daily on average which is the highest among the three labor force categories. Females from employed and unemployed categories spend 3.38 and 3.18 hours daily performing unpaid domestic work respectively. Contrarily, on average male counterparts spend 2.13 hours daily performing unpaid domestic work. Males from not in labor force category spend daily 2.51 hours whereas, males from employed and unemployed category spend daily 1.35 and 2.53 hours on average respectively.

Table 7: Summary of Hours Spent in Unpaid Domestic Work in Nepal

| Category | Male | Female |
|------------|------|--------|
| Employed | 1.35 | 3.38 |
| Unemployed | 2.53 | 3.18 |
| Not in LF | 2.51 | 4.16 |

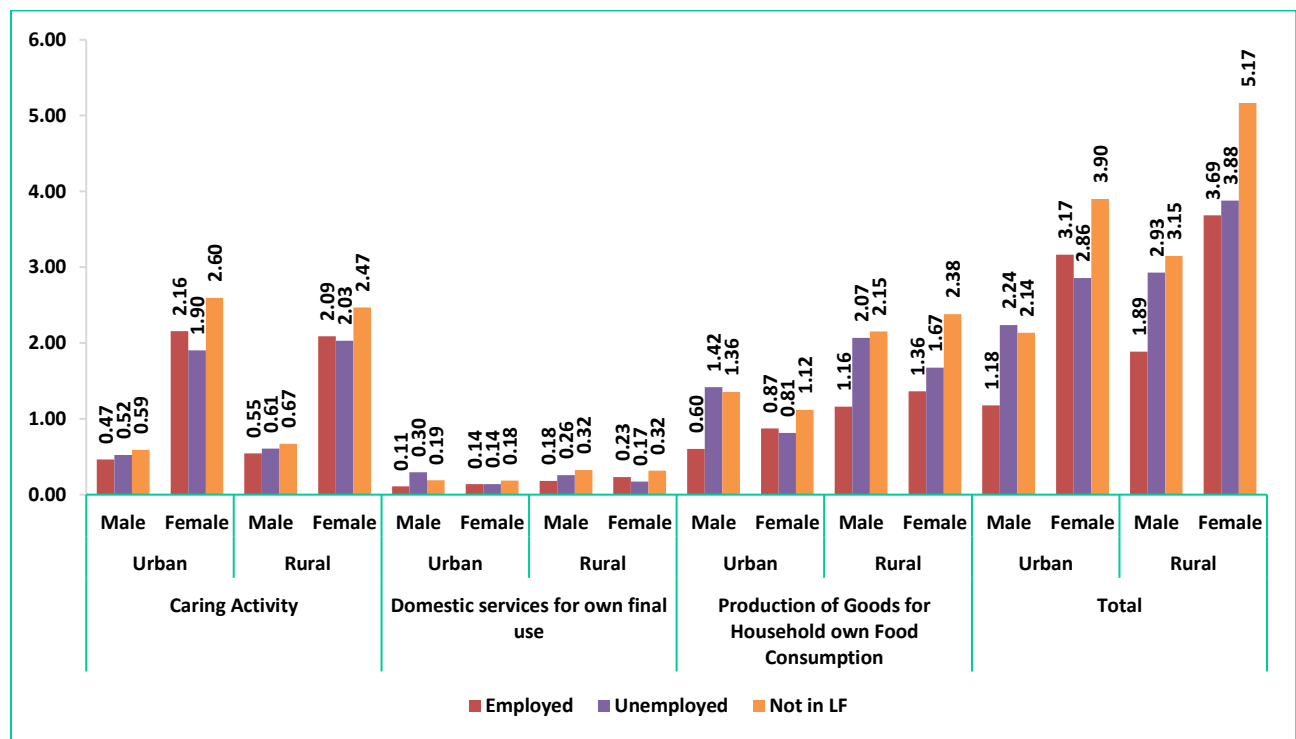
Source: Author's calculation from NLFS (2017-18)

Figure below shows the hours spent in unpaid domestic work by employment status, activity, location, and sex. Considering the employed population, hours spent in unpaid domestic work in both urban and rural areas, females tend to provide longer hours for conducting domestic unaccounted activities. On average, employed females spend 3.17 hours and 3.69 hours daily both in urban and rural areas respectively. On the other hand, employed males from both urban and rural areas spend daily 1.18 hours and 1.89 hours respectively. Comparing with employed people, unemployed people spend longer hours in doing unpaid domestic activities. Males in unemployed category both in

urban and rural areas spend daily 2.24 and 2.93 hours respectively. Females of unemployed category on the other hand spend 2.86 and 3.88 hours daily from urban and rural areas respectively. Likewise, females who are not in labor force spend over 4.24 hours daily for conducting unpaid domestic activities. Daily average hours spent in unpaid domestic work by females who are not in labor force in urban area is 3.90 hours. Besides, rural females spend on average 5.17 hours daily. The amount of time spent by rural females is 25 percent higher than the amount of time spent by urban females who are not in labor force. On the other hand, male counterparts spend considerably less amount of time than females do. Both in urban and rural areas males who are not in labor force daily spend 2.14 hours and 3.15 hours respectively.

Moreover, Figure below also reveals that the difference of unpaid work hours for male and female is very high for the caring activities. For instance, employed females of both urban and rural areas spend 2.16 hours and 2.09 hours respectively where employed males of both urban and rural areas spend only 0.59 hour and 0.67 hour respectively. However, there is no significant differences found regarding the domestic services for household own final use. Contrariwise, the rural people pay more hours in producing goods for their own food consumption than the urban people. The female participation in production of goods for own food consumption is bit higher than the males in rural areas where it is inverse in urban areas.

Figure 13: Hours Spent in Unpaid Domestic Work by Employment Status, Activity, Location, and Sex

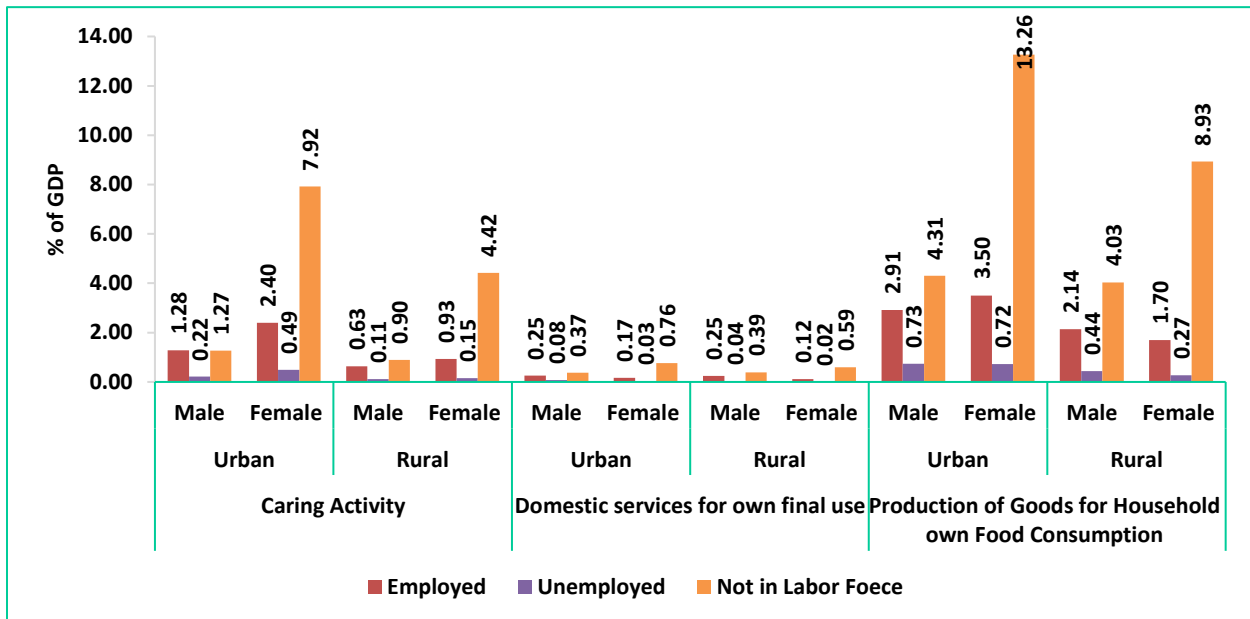


Source: author's calculation

Values of Unpaid Domestic Work

Figure below shows the disaggregated contribution by location, sex, and employment status for each type of activities.

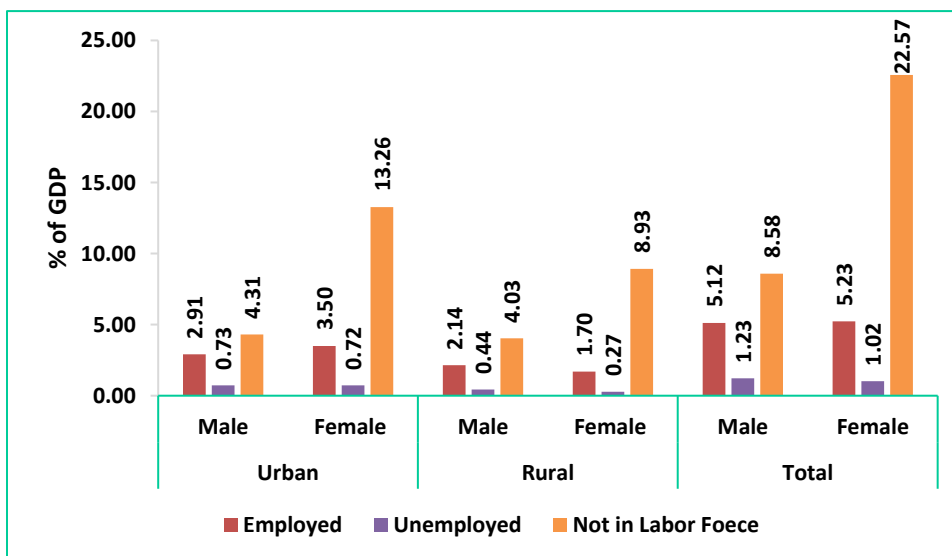
Figure 14: Values of Unpaid Domestic Work by Activity types, Location, Sex, and Employment Status (% of GDP)



Source: author's calculation

Value of unpaid domestic work in terms of location, labor force and sex status can be observed from Figure 6. Both in urban and rural areas, females have higher values. Values of unpaid domestic work of both urban and rural females are 8.58 percent and 22.57 percent of the GDP respectively. Females' value for unpaid domestic work is higher in urban areas (17.48 percent of GDP) than the value of rural areas (10.9 percent of GDP). On the other hand, value of unpaid domestic work of males for urban and rural areas are 7.95 percent and 6.61 percent of the GDP respectively.

Figure 15: Value of Unpaid Domestic Work by Locality, Labor Force Status and Sex (% of GDP)



Source: author's calculation

Values of Unpaid Domestic Work by Economic Status

| Contribution of unpaid household work in Nepal (as % of GDP) | | | | | | |
|---|-------------|--------------|-------------|--------------|------------------|--------------|
| | Urban | | Rural | | Total | |
| | Male | Female | Male | Female | Male | Female |
| Employed | 3.02 | 3.63 | 2.22 | 1.76 | 5.31 | 5.42 |
| Unemployed | 0.76 | 0.75 | 0.45 | 0.28 | 1.27 | 1.06 |
| Not in Labor Force | 4.47 | 13.75 | 4.18 | 9.26 | 8.89 | 23.39 |
| Total | 8.24 | 18.13 | 6.85 | 11.30 | 15.48 | 29.87 |
| Total value of unpaid household work in Nepal (in million USD) | | | | | 13,533.95 | |
| Total contribution of unpaid household work in Nepal (as % of GDP) | | | | | 45.34 | |

Hours Spent in Unpaid Domestic Work by Employed Population

| Age | Education | Urban | | Rural | | Total | |
|--------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 15-29 | No Education | 0.99 | 4.48 | 1.39 | 5.08 | 1.13 | 4.72 |
| | Primary | 1.04 | 4.65 | 1.41 | 4.70 | 1.19 | 4.67 |
| | Secondary | 0.98 | 3.65 | 1.26 | 4.48 | 1.08 | 3.96 |
| | SSC-HSC | 0.79 | 2.86 | 1.25 | 3.67 | 0.93 | 3.09 |
| | Graduate | 0.68 | 2.35 | 1.16 | 3.35 | 0.78 | 2.51 |
| 30-44 | No Education | 1.32 | 3.89 | 1.71 | 4.50 | 1.47 | 4.15 |
| | Primary | 1.19 | 3.88 | 1.69 | 4.56 | 1.40 | 4.10 |
| | Secondary | 1.17 | 3.44 | 1.78 | 4.27 | 1.38 | 3.68 |
| | SSC-HSC | 0.92 | 3.27 | 1.71 | 3.79 | 1.13 | 3.39 |
| | Graduate | 1.01 | 2.93 | 1.86 | 3.26 | 1.17 | 2.99 |
| 45-59 | No Education | 1.50 | 3.52 | 1.74 | 4.22 | 1.61 | 3.80 |
| | Primary | 1.51 | 3.34 | 2.07 | 5.16 | 1.74 | 3.78 |
| | Secondary | 1.14 | 2.91 | 1.78 | 3.53 | 1.35 | 3.02 |
| | SSC-HSC | 0.86 | 2.70 | 2.21 | 2.85 | 1.22 | 2.74 |
| | Graduate | 0.92 | 2.38 | 1.77 | 2.29 | 1.08 | 2.37 |
| 60-60+ | No Education | 1.84 | 3.35 | 2.13 | 3.97 | 1.98 | 3.61 |
| | Primary | 2.07 | 3.96 | 2.47 | 4.53 | 2.24 | 4.10 |
| | Secondary | 1.38 | 0.86 | 2.42 | 5.50 | 1.76 | 2.02 |
| | SSC-HSC | 1.20 | 4.00 | 0.64 | 0.00 | 1.15 | 4.00 |
| | Graduate | 1.00 | 0.90 | 5.29 | 0.00 | 1.17 | 0.90 |

Hours Spent in Unpaid Domestic Work by Unemployed Population

| Age | Education | Urban | | Rural | | Total | |
|-------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 15-29 | No Education | 1.38 | 5.03 | 2.01 | 5.27 | 1.68 | 5.13 |
| | Primary | 2.17 | 4.69 | 3.13 | 4.41 | 2.57 | 4.57 |
| | Secondary | 1.97 | 4.52 | 2.76 | 5.10 | 2.33 | 4.73 |
| | SSC-HSC | 1.63 | 3.75 | 2.41 | 4.31 | 1.92 | 3.90 |
| | Graduate | 1.39 | 2.55 | 1.69 | 3.84 | 1.45 | 2.81 |
| 30-44 | No Education | 2.36 | 4.92 | 3.91 | 6.55 | 3.17 | 5.37 |
| | Primary | 3.45 | 4.28 | 4.23 | 4.11 | 3.86 | 4.24 |
| | Secondary | 2.78 | 5.05 | 3.45 | 5.97 | 3.04 | 5.35 |
| | SSC-HSC | 2.57 | 4.30 | 3.67 | 6.28 | 2.93 | 4.60 |
| | Graduate | 2.70 | 3.83 | 4.29 | 10.71 | 3.05 | 4.81 |

| Age | Education | Urban | | Rural | | Total | |
|--------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 45-59 | No Education | 3.25 | 4.50 | 3.62 | 4.19 | 3.39 | 4.41 |
| | Primary | 3.40 | 3.89 | 4.63 | 11.13 | 3.88 | 6.99 |
| | Secondary | 3.82 | 3.64 | 3.49 | 0.00 | 3.72 | 3.64 |
| | SSC-HSC | 2.81 | 0.00 | 5.18 | 0.00 | 3.40 | 0.00 |
| | Graduate | 0.75 | 0.00 | 0.00 | 0.00 | 0.75 | 0.00 |
| 60-60+ | No Education | 3.13 | 2.19 | 3.65 | 5.71 | 3.29 | 3.07 |
| | Primary | 3.23 | 0.00 | 4.63 | 0.00 | 4.28 | 0.00 |
| | Secondary | 1.94 | 0.00 | 1.85 | 0.00 | 1.91 | 0.00 |
| | SSC-HSC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Graduate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Hours Spent in Unpaid Domestic Work by Population of Not in Labor Force

| Age | Education | Urban | | Rural | | Total | |
|--------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 15-29 | No Education | 1.73 | 5.77 | 3.01 | 6.62 | 2.34 | 6.19 |
| | Primary | 1.84 | 5.68 | 2.91 | 5.85 | 2.44 | 5.76 |
| | Secondary | 1.31 | 4.34 | 1.92 | 4.53 | 1.58 | 4.42 |
| | SSC-HSC | 1.13 | 3.38 | 1.91 | 4.22 | 1.37 | 3.64 |
| | Graduate | 0.82 | 3.42 | 1.52 | 3.81 | 0.95 | 3.49 |
| 30-44 | No Education | 3.90 | 5.65 | 4.36 | 6.34 | 4.15 | 5.98 |
| | Primary | 3.20 | 5.36 | 3.88 | 6.33 | 3.59 | 5.79 |
| | Secondary | 3.17 | 5.36 | 3.80 | 6.01 | 3.48 | 5.56 |
| | SSC-HSC | 2.39 | 4.46 | 4.04 | 6.28 | 3.03 | 4.87 |
| | Graduate | 1.08 | 4.19 | 3.64 | 6.29 | 1.85 | 4.32 |
| 45-59 | No Education | 3.15 | 4.72 | 3.86 | 5.41 | 3.50 | 5.03 |
| | Primary | 3.36 | 4.50 | 3.78 | 5.28 | 3.55 | 4.76 |
| | Secondary | 3.16 | 4.08 | 4.20 | 5.24 | 3.59 | 4.42 |
| | SSC-HSC | 2.32 | 3.14 | 3.79 | 4.71 | 2.80 | 3.34 |
| | Graduate | 1.39 | 3.11 | 3.36 | 0.00 | 1.78 | 3.11 |
| 60-60+ | No Education | 1.93 | 2.49 | 2.57 | 3.05 | 2.25 | 2.74 |
| | Primary | 2.23 | 2.67 | 3.16 | 4.20 | 2.60 | 3.04 |
| | Secondary | 2.21 | 2.22 | 3.18 | 4.58 | 2.53 | 2.50 |
| | SSC-HSC | 1.46 | 1.89 | 3.09 | 9.57 | 1.83 | 2.40 |
| | Graduate | 0.92 | 1.56 | 0.98 | 5.00 | 0.93 | 1.87 |

Values of Unpaid Domestic Work (as % of GDP)

| Age | Education | Urban | | Rural | | Total | |
|-------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 15-29 | No Education | 0.13 | 1.02 | 0.13 | 0.89 | 0.26 | 1.95 |
| | Primary | 0.21 | 0.87 | 0.32 | 0.78 | 0.56 | 1.60 |
| | Secondary | 0.74 | 2.39 | 0.68 | 1.54 | 1.41 | 3.97 |
| | SSC-HSC | 0.86 | 2.04 | 0.35 | 0.58 | 1.40 | 2.74 |
| | Graduate | 0.19 | 0.40 | 0.05 | 0.05 | 0.23 | 0.45 |
| 30-44 | No Education | 0.44 | 2.46 | 0.44 | 2.06 | 0.89 | 4.58 |
| | Primary | 0.38 | 0.88 | 0.51 | 0.65 | 0.90 | 1.55 |
| | Secondary | 0.72 | 1.18 | 0.57 | 0.43 | 1.32 | 1.62 |
| | SSC-HSC | 0.41 | 0.80 | 0.26 | 0.21 | 0.70 | 1.02 |
| | Graduate | 0.22 | 0.30 | 0.08 | 0.03 | 0.32 | 0.32 |
| 45-59 | No Education | 0.73 | 2.62 | 0.78 | 2.01 | 1.52 | 4.72 |
| | Primary | 0.58 | 0.30 | 0.45 | 0.15 | 1.05 | 0.46 |
| | Secondary | 0.49 | 0.21 | 0.33 | 0.05 | 0.83 | 0.32 |

| Age | Education | Urban | | Rural | | Total | |
|--------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 60-60+ | No Education | 0.02 | 0.01 | 0.01 | 0.00 | 0.03 | 0.01 |
| | Primary | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 |
| | Secondary | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 |
| | SSC-HSC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| | Graduate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Values of Unpaid Domestic Work for Population of Not in Labor Force

| Age | Education | Urban | | Rural | | Total | |
|--------|--------------|-------|--------|-------|--------|-------|--------|
| | | Male | Female | Male | Female | Male | Female |
| 15-29 | No Education | 0.05 | 0.84 | 0.06 | 0.76 | 0.12 | 1.65 |
| | Primary | 0.05 | 0.68 | 0.17 | 0.69 | 0.25 | 1.32 |
| | Secondary | 0.39 | 1.94 | 0.38 | 1.29 | 0.76 | 3.26 |
| | SSC-HSC | 0.52 | 1.43 | 0.20 | 0.41 | 0.86 | 1.94 |
| | Graduate | 0.07 | 0.27 | 0.02 | 0.02 | 0.08 | 0.29 |
| 30-44 | No Education | 0.22 | 1.85 | 0.26 | 1.60 | 0.48 | 3.51 |
| | Primary | 0.16 | 0.59 | 0.28 | 0.53 | 0.44 | 1.14 |
| | Secondary | 0.29 | 0.83 | 0.28 | 0.29 | 0.59 | 1.12 |
| | SSC-HSC | 0.15 | 0.42 | 0.11 | 0.15 | 0.27 | 0.58 |
| | Graduate | 0.01 | 0.15 | 0.02 | 0.00 | 0.04 | 0.15 |
| 45-59 | No Education | 0.44 | 2.12 | 0.53 | 1.72 | 0.97 | 3.93 |
| | Primary | 0.36 | 0.23 | 0.29 | 0.11 | 0.66 | 0.35 |
| | Secondary | 0.30 | 0.14 | 0.22 | 0.04 | 0.53 | 0.24 |
| | SSC-HSC | 0.18 | 0.08 | 0.04 | 0.01 | 0.28 | 0.10 |
| | Graduate | 0.02 | 0.02 | 0.01 | 0.00 | 0.04 | 0.02 |
| 60-60+ | No Education | 0.63 | 1.50 | 0.79 | 1.27 | 1.41 | 2.79 |
| | Primary | 0.21 | 0.11 | 0.20 | 0.02 | 0.40 | 0.13 |
| | Secondary | 0.17 | 0.04 | 0.09 | 0.00 | 0.26 | 0.04 |
| | SSC-HSC | 0.07 | 0.02 | 0.05 | 0.00 | 0.12 | 0.02 |
| | Graduate | 0.02 | 0.01 | 0.03 | 0.00 | 0.02 | 0.02 |