

NATIONAL STUDY ON THE ECONOMIC COSTS OF VIOLENCE AGAINST WOMEN AND GIRLS IN JAMAICA

March 2022



**Spotlight
Initiative**
*To eliminate violence
against women and girls*

An initiative of the United Nations funded by the European Union





United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)

UN Women is the United Nations organization dedicated to gender equality and the empowerment of women. A global champion for women and girls, UN Women was established to accelerate progress on meeting their needs worldwide. UN Women supports UN Member States as they set global standards for achieving gender equality and works with governments and civil society to design laws, policies, programmes and services needed to implement these standards. It stands behind women's equal participation in all aspects of life, focusing on five priority areas: increasing women's leadership and participation; ending violence against women; engaging women in all aspects of peace and security processes; enhancing women's economic empowerment; and making gender equality central to national development planning and budgeting. UN Women also coordinates and promotes the UN system's work in advancing gender equality.

The Spotlight Initiative

The Spotlight Initiative (the "Initiative") is a global initiative of the United Nations which has received generous support from the European Union. Its aim is to eliminate all forms of violence against women and girls.

Launched in 2017 with a seed funding commitment of €500 million from the European Union, the Initiative represents an unprecedented global effort to invest in gender equality and women's empowerment as a precondition and driver for the achievement of the Sustainable Development Goals.

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Acronyms

APS	Average Propensity to Save Spend
BGA	Bureau of Gender Affairs
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CGE	Computable General Equilibrium model
CPFSA	Child Protection and Family Services Agency
CSJP	Citizen Security and Justice Programme
CSO	Civil Society Organization
DALYs	Disability-Adjusted Life Years
DOF	Department of Education
DEVAW	Declaration on the Elimination of Violence Against Women
DFID	Department For International Development
ECOVAWG	Economic Cost Of Violence Against Women and Girls
EIGE	European Institute for Gender Equality
EU	European Union
FGD	Focus Group Discussions
FP	Factors of Production
GBV	Gender-based Violence
GDP	Gross Domestic Product
GoJ	Government of Jamaica
GTAP	Global Trade Analysis Project
HH-OI	Households and Other Institutions (incl. Government)
HIV	Human Immunodeficiency Virus
IDB	Inter-American Development Bank
IGDS	Institute for Gender and Development Studies
IMF	International Monetary Fund
I-OM	Input-Output Matrix
IPV	Intimate Partner Violence

IPVAW	Intimate Partner Violence Against Women
JCF	Jamaica Constabulary Force
JISS	Jamaica Injury Surveillance System
JMD	Jamaica Dollar
LIFE	Living in Family Environments Programme
MoCGES	Ministry of Culture, Gender, Entertainment and Sports
MoE	Ministry of Education, Youth and Information
MoFPS	Ministry of Finance and Public Service
MoH	Ministry of Health
MoJ	Ministry of Justice
MoLSS	Ministry of Labour and Social Security
NGO	Non-governmental Organization
OCA	Office of the Children’s Advocate
PA	Production Activities
ROW	Rest of the World
SAM	Social Accounting Matrix
SDG	Sustainable Development Goal
STATIN	Statistical Institute of Jamaica
THE	THE – Total Health Expenditure
TSS	TSS – Total Sum of Squares
UN	United Nations
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UNFPA	United Nations Population Fund
USA	United States of America
USD	United States Dollar
VAW	Violence Against Women
VAWG	Violence Against Women and Girls
VSD	Victim Services Division
VSL	Value of Statistical Life
WHO	World Health Organization



Executive Summary

Violence against women and girls (VAWG) is a global phenomenon and pervasive violation of human rights. Globally, VAWG affects 1 in 3 women in their lifetime. The Declaration on the Elimination of Violence Against Women (DEVAW) defines violence against women as “all acts of gender-based violence that result in, or is likely to result in, physical, sexual, psychological or economic harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.”¹

Gender-based violence (GBV), in its original meaning, is violence that is directed against a person, because of the roles they are expected to play in society. Originally, it reflected the violence perpetrated against women because of the expected gender roles women should play based on stereotypes and unhealthy ideologies. Violence against Women and Girls is one form of GBV. GBV includes acts that inflict physical, mental and/or sexual harm or suffering, as well as threats of such acts, coercion and other deprivations of liberty. GBV impairs or nullifies women’s fundamental human rights and freedoms under international law or human rights conventions. While GBV and VAWG are often used interchangeably in literature and by advocates, the term GBV highlights the gender dimension of violence and the relationship between women’s subordinate status in society and gender inequality, and women and girls’ increased vulnerability to violence. Women are typically victims of GBV perpetrated by men, but can also be victims of GBV perpetrated by women who use violence to reinforce the patriarchal order (e.g., violence at the hands of mothers or mothers-in-law). GBV provides a broader context in which to examine and understand the phenomenon of VAWG.²

The 2030 Agenda for Sustainable Development identifies the elimination of VAWG as a crucial priority for achieving gender equality and sustainable development. After all, VAWG is both a cause and consequence of gender inequality and a major obstacle to women and girls’ enjoyment of all human rights and their full participation in society and the economy. Ending VAWG is a cross-cutting priority across the Sustainable Development Goals (SDGs) and vital to achieving SDGs in areas including poverty eradication, health, education, sustainable cities, and just and peaceful societies.

¹ United Nations General Assembly, Declaration on the Elimination of Violence against Women (Resolution 48/104,1993)

² UNFPA (2016). *Measuring Prevalence of Violence Against Women: Key Terminology*. kNOwVAWdata. UNFPA Asia and the Pacific Regional Office: Bangkok, Thailand. Retrieved on 22 February 2023 from: [kNOwVAWdata Key Terminology.pdf \(unfpa.org\)](https://www.unfpa.org/knowvawdata)

In Jamaica, many women and girls experience gender-based violence in their lifetime and on a daily basis. The *Women's Health Survey 2016 Jamaica*³ found that one in four or 25.2 per cent of women aged 15-64 experienced physical violence by a male partner and 7.7 percent were sexually abused by their male partner. Lifetime prevalence of intimate physical and/or sexual violence was 27.8 per cent for women aged 15-64. There were no significant differences across rural and urban areas or by union status; however, women who had entered into a live-in partner relationship at an early age (under 19 years) had a higher prevalence of lifetime intimate partner physical violence (45.0 per cent), compared to women who entered into such relationships at 19 years of age and older (24.5 per cent). The survey also found that 28.8 percent of women aged 15-64 had experienced emotional violence and 8.5 percent experienced economic violence in intimate relationships in their lifetime.

VAWG has economic costs for individuals (e.g., victims and their children), families, communities and society at-large. Several countries have estimated the costs of VAWG, in an effort to understand the economic impacts of VAWG on the national economy and to determine investments needed to lessen, if not eliminate VAWG. At the global level, research indicates that the cost of VAWG could amount to around 2 per cent of the global gross domestic product (GDP); this is equivalent to \$1.5 trillion, approximately, the size of Canada's national economy.

There are a range of direct costs of VAWG, including costs on the healthcare, police, justice and social welfare systems, as well as costs of victim support services (e.g., shelters, counselling, legal aid). There are also indirect costs related to VAWG, such as lost employment, wages and productivity, learning time lost and harm to the well-being of VAWG survivors and their children. Ultimately, VAWG has negative effects on the lives of women and their children, which undermines poverty reduction measures.

Estimating the economic costs of VAWG enables governments to understand the importance of enacting legislation, policies, action plans and programmes aimed at ending VAWG, and allocating an appropriate budget to support effective implementation of such initiatives and provision of quality essential services to VAWG survivors and their children. Estimating the economic costs of VAWG provides a basis for evidence-based decision- and policy-making, and programme development.

Methodology

This costing study used a methodology that estimated two types of costs – direct and indirect costs.

Direct costs: Cost of services provided to VAWG survivors by governmental and non-governmental service providers, and costs incurred at the household level. Service costs include healthcare costs for survivors of physical and sexual violence, including doctor and clinic/hospital bills for physical injuries, costs of psycho-social care and support, law enforcement and court costs, shelter costs and costs related to other specialised services. At the household level, costs include out-of-pocket expenses incurred by VAWG survivors and their families, loss of earned income due to absence from work, loss of time from being unable to tend to domestic and care work in the home/family.

3 Williams, C.W. (2018). *Women's Health Survey 2016 Jamaica*. STATIN, IDB & UN Women: Bridgetown, Barbados.



Economy-wide costs: Measured as reduced gross domestic product (GDP) or output because of a decline in private consumption due to losses of earned income and earnings because of VAWG. Reduced private consumption expenditures lead to a decline in effective demand and the GDP because of their interdependence in the circular flow of income generation in the economy.

The costing module used for the costing study consisted of four building blocks, two building blocks for the direct cost component which looked at costs at the household level (including out of pocket expenses incurred by the survivors/and or their families and loss of income) as well as costs to specific key economic sectors. The other two building blocks looked at estimates (from 3 perspectives) for provision of services packages to survivors firstly from a typical case scenario and secondly from a full coverage case scenario.

An important feature of the costing framework is the cost estimation at two levels. There is a high degree of under-reporting of incidents of VAWG. In other words, the prevalence of VAWG far exceeds the number of incidents that are actually reported to authorities or service providers, as reflected in administrative data. Thus, costing estimates cannot be based on official statistics alone; doing so would result in a significant underestimation of the economic cost of VAWG. To overcome this limitation, it is best to estimate costs at two levels, using two scenarios:

- **A ‘typical case’** (i.e., micro- or meso-level estimates). Typical case estimates are based on administrative data and parameters⁴ (i.e., either readily available data, such as the unit cost of healthcare services, or derived data, such as per capita value added by an employed person.⁵
- **A ‘full coverage case’** (macro-level estimates). Full coverage case estimates are based on a simulated number of VAWG survivors based on age cohort population data (i.e., in this case, the female population aged 15-64) with the parameters (including cost of services) used in the typical case.⁶

The economy-wide cost of VAWG is estimated using a multiplier model based on an economy-wide database. The two most widely used economy-wide data sets are the input-output matrix (I-OM) and the social accounting matrix (SAM). One outcome of the direct cost of VAWG is loss of work days leading to loss of personal income. In turn, personal income loss leads to a reduction in private consumption expenditures, with a subsequent negative impact on commodity demand and supply of goods and services in the economy. As production of goods and services depend on purchases of other goods and services, loss of female work days (a direct impact of VAWG) may indirectly lead to a further loss of output due to this economy-wide effect. To measure the indirect impacts of the direct costs of VAWG, an economy-wide database or model was used, along with a multiplier model⁷ to assess the indirect economy-wide costs of VAWG.

4 The parameters refer to prevalence rates of different types of violence, the unit cost of various services, wage rates and per capita gross domestic product, etc; Commonwealth Secretariat (2020). *The Economic Cost of Violence Against Women and Girls: A Study of Lesotho*. The Commonwealth: London: United Kingdom, p. 1.

5 Commonwealth Secretariat (2020). *The Economic Cost of Violence Against Women and Girls: A Study of Lesotho*. The Commonwealth: London: United Kingdom, p. 1.

6 Ibid, 2020, p. 1.

7 As an illustration, three broad economic-sector classifications were used. The sectoral scopes of the economy-wide model depend on the sector classification adopted by a country, and the Jamaica multiplier model consisted of 17 sectors.

A VAWG costing study is a data-demanding exercise, which requires a wide range of data (e.g., demographic, economic, health, legal, social protection and education data). In Jamaica, demographic and economic data were not readily available. To address data gaps, a significant amount of time was spent liaising with data producing agencies to extract administrative data, and organisations that serve VAWG survivors to identify survivors who could be surveyed. The COVID-19 pandemic further constrained data collection, and travel restrictions enacted to stop the spread of COVID-19 limited the teams' ability to travel to Jamaica to conduct in-person consultations with data producing agencies; instead, these consultations were conducted online. An online survey was also administered to 25 VAWG survivors to gather data related to the economic impacts of VAWG on survivors and their families. These data were not collected in the *Women's Health Survey 2016 Jamaica*.

Estimated Costs of VAWG

The estimated costs of VAWG, including for the typical case and full coverage case, were calculated using data from 2018; this was the year for which the most relevant data could be found. The table below reveals the total costs of VAWG, including direct and economy-wide costs of VAWG for typical and full coverage cases.

Total direct and economy-wide costs of VAWG for typical and full coverage cases, 2018				
Cost Categories	Typical case		Full coverage case	
	Costs (JMD Million)	% of 2018 GDP	Costs (JMD Million)	% of 2018 GDP
Direct costs (Services costs + Household Costs)	13,600	0.67	85,948	4.24
Services costs*	12,574	0.62	58,101	2.87
Healthcare costs	152	0.01	3,224	0.16
Law enforcement and court costs	1,370	0.07	43,824	2.16
Specialized services costs	1,433	0.07	1,433	0.07
Education services cost	9,619	0.48	9,619	0.48
Household costs	1,026	0.05	27,847	1.37
Personal cost	393	0.02	12,584	0.62
Costs of income lost	632	0.03	15,263	0.75
Economy-wide costs	2,056	0.10	45,682	2.25
Agriculture	199	0.01	4,425	0.24
Industry	812	0.04	18,046	0.99
Services	1,045	0.05	23,212	1.27
Total costs (direct costs + economy-wide costs)	15,656	0.77	131,629	6.49

Notes: Services costs = healthcare costs + law enforcement and court costs + specialized services costs + costs of learning time lost (or education costs); Direct costs = services costs (all of its subcategories) + household costs; Total costs = direct costs + economy-wide costs.

The table below reveals the economic costs of VAWG for different segments of Jamaica’s society.

Economic costs of VAWG for different segments of Jamaica’s society (Full coverage case)	
Costs to Jamaica’s girls	0.5 % of GDP
Costs to Jamaica’s adult females	1.4 % of GDP
Costs to Jamaica’s government and nongovernmental service providers	2.5 % of GDP
Costs to Jamaica’s private sector	2.3 % of GDP
Costs to Jamaica’s society	6.6 % of GDP

Conclusions

Like any other quantitative model or framework, this economic costing model had limitations and merits. A major limitation of the model was the number of assumptions made to estimate healthcare and education data for this exercise. More accurate healthcare and education data could have implications for the outcomes of the costing exercise. Another limitation was the use of an updated SAM based on the technological structure of the 2015 SAM to estimate economy-wide costs. More time and resources could be allocated to this component to improve the outcome of the economy-wide estimation. A newly developed SAM based upon more recent data would not only improve the VAWG costing component, but also help assessments of various economic policies considered in the country’s development plan.

The major advantage of the economic costing model used in this costing study was that it was developed in Microsoft Excel and can be transferred to government partners and other key stakeholders for their use after training. A modular approach has been utilised so that multiple developers can work simultaneously on different model components. The most important merit is that the economic costing model and modular components are living products that can be updated, modified and enhanced with ease.

Observations

Challenges were experienced with accessing administrative data from some service providers. For instance, unit cost data for healthcare, social and legal services were not readily available, and data on service utilisation were not disaggregated by VAWG. Despite these limitations, technical assistance and data collection templates provided by the consultancy team helped government agencies and services providers to generate some of the needed data.

Despite several attempts to collect data from healthcare service providers, such data was not provided. It may be that healthcare services were not collecting or preserving data needed for this costing study; thus, costs of healthcare services were estimated using assumptions and proxy data. For these reasons, personal costs for healthcare services (e.g., emergency services, specialised services and hospital stays) could not be estimated. It is also notable that emotional or psychological costs of VAWG also could not be estimated due to data limitations.



Learning time lost and the education budget were used to estimate the cost of VAWG to educational services. In Jamaica, due to a lack of data specific to learning lost, a proxy value was used. The estimate provided a static cost of learning time lost but could not capture the long-term impacts of learning time lost. Learning time lost can have far-reaching implications on educational attainment, work force participation and productivity, and future earning potentials.

Recommendations

Strengthen Data Collection Systems and Capacities

1. Strengthen the national statistical system to facilitate the collection and production of data related to VAWG services and service provision to VAWG survivors, including disaggregation of services related to VAWG. All data producers in the public, private and civil society sectors that provide essential services to VAWG survivors should collaborate with the Statistical Institute of Jamaica (STATIN), and relevant ministries, departments, and agencies to establish a minimum data set to measure utilisation and costs of services by VAWG survivors.
2. Strengthen the capacity of STATIN and other relevant stakeholders involved in the collection, production and uses of VAWG data and statistics to enable the design of evidence-based and effective ending VAWG policies and programmes, and to monitor progress toward ending VAWG in Jamaica.
3. Strengthen the capacity of frontline service providers (e.g., police, social workers, healthcare workers, justice officials) to deliver quality services to VAWG survivors and to improve data collection and records maintenance in appropriate formats and in confidential and secure environments.

Engage the Private Sector

4. Include representatives from the private sector on working groups addressing VAWG in Jamaica.
5. Develop workplace policies and strategies to prevent and respond to VAWG, including domestic violence, intimate partner violence, stalking, sexual harassment, sexual exploitation and more.⁸
6. Develop and implement strategies to prevent and end VAWG with support from CSOs, women's advocacy and human rights groups, including women's organizations working to end VAWG.

8 [Women's Empowerment Principles Resources.](#)

7. Invest in a corporate social responsibility funds that support efforts to end VAWG and women's empowerment initiatives.
8. Expand workplace health and safety agendas, programmes and/or initiatives to include mental health and well-being, especially for female workers.
9. Develop a clear corporate position and messaging on VAWG via an employee code of conduct policy and human resources policies.
10. The private sector should provide trainings on gender equality and prevention of VAWG for all executives, managers, supervisors and staff.
11. The public and private sectors should work together to support the rollout of a national visibility campaign that highlights the resources available to victims of VAWG in Jamaica, including available essential services where victims of VAWG can go to receive help, information and access to other resources (e.g., shelter), along with improvements in laws and policies aimed at ending VAWG.

Enhance Institutional Capacity

12. Institutional capacity may need to be improved for subsequent VAWG costing studies via specialized training and the production of user-friendly manuals, facilitator guides and training materials.
13. Arrange international and regional educational exchange programmes with reputable institutions with expertise on VAWG to expand and improve data collection, specifications, and coverage related to the costing framework.
14. At the national level, effort should be made to collect disability data disaggregated by sex and related to VAWG, including VAWG survivors with disabilities, and measure the years of life lost to disability, death and chronic disease morbidity.



Chapter 1

Introduction

Violence against women and girls (VAWG) is a global phenomenon and pervasive violation of human rights. Globally, VAW affects one in three women in their lifetime. The Declaration on the Elimination of Violence Against Women (DEVAW) defines VAW as “all acts of gender-based violence that result in, or is likely to result in, physical, sexual, psychological or economic harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.”

Violence against women (VAW) is defined as “all acts of gender-based violence that result in, or are likely to result in, physical, sexual, psychological or economic harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.”

1993 Declaration on the Elimination of Violence against Women

Gender-based violence (GBV), in its original meaning, is violence that is directed against a person, because of the roles they are expected to play in society. Originally, it reflected the violence perpetrated against women because of the expected gender roles women should play based on stereotypes and unhealthy ideologies. Violence against Women and Girls is one form of GBV. GBV includes acts that inflict physical, mental and/or sexual harm or suffering, as well as threats of such acts, coercion and other deprivations of liberty. GBV impairs or nullifies women’s fundamental human rights and freedoms under international law or human rights conventions. While GBV and VAWG are often used interchangeably in literature and by advocates, the term GBV highlights the gender dimension of violence and the relationship between women’s subordinate status in society and gender inequality, and women and girls’ increased vulnerability to violence. Women are typically victims of GBV perpetrated by men, but can also be victims of GBV perpetrated by women who use violence to reinforce the patriarchal order (e.g., violence at the hands of mothers or mothers-in-law). GBV provides a broader context in which to examine and understand the phenomenon of VAWG.⁹

⁹ UNFPA (2016). *Measuring Prevalence of Violence Against Women: Key Terminology*. kNOwVAWdata. UNFPA Asia and the Pacific Regional Office: Bangkok, Thailand. Retrieved on 22 February 2023 from: [kNOwVAWdata Key Terminology.pdf \(unfpa.org\)](https://www.unfpa.org/knowvawdata)

VAWG is most likely to be perpetrated by someone known to the victim, such as a family member or intimate partner, and takes many different forms, including: domestic violence¹⁰ and intimate partner violence (IPV)¹¹; sexual violence¹²; sexual harassment; emotional/psychological violence; sexual exploitation; femicide; and child, early and forced marriage.

VAWG cuts across cultures, ethnicities, socio-economic status and other demographic diversities (e.g., ages and educational backgrounds); however, particular groups of women and girls may be more vulnerable to violence and exposed to multiple forms of violence due to compounded forms of discrimination and exclusion. Because of a lack data on the prevalence of VAWG, in all of its forms, and the impact of gender-based violence (GBV) on women and girls' lives, the economic costs of VAWG calculated in this paper are limited to IPV and non-partner sexual violence.

International legal frameworks, including the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) and DEVAW, and the General Recommendations provided by the Committee on the Elimination of Discrimination and Violence against Women provide the most comprehensive understanding of VAWG globally and defines States' obligations to end VAWG.

The 2030 Agenda for Sustainable Development identifies elimination of VAWG as a crucial priority for achieving gender equality and sustainable development.¹³ After all, VAWG is both a cause and consequence of gender inequality and a major obstacle to women and girls' enjoyment of all human rights and their full participation in society and the economy. Ending VAWG is a cross-cutting priority across the Sustainable Development Goals (SDGs) and vital to achieving SDGs in areas including poverty eradication, health, education, sustainable cities, and just and peaceful societies.¹⁴ The 2030 Agenda builds on existing international frameworks that address VAWG, particularly CEDAW and the agreed conclusions of the Commission on the Status of Women at its fifty-seventh session.¹⁵

1.1 VAWG in Jamaica

In Jamaica, many women and girls experience GBV in their lifetime and on a daily basis. The *Women's Health Survey 2016 Jamaica*¹⁶ found that one in four or 25.2 per cent of women aged

10 The definition of domestic violence can vary across countries, in keeping with laws on domestic violence, but in general, domestic violence is usually a pattern of violence, abusive and controlling behaviours that can happen in intimate, family or informal care relationships. Domestic violence includes a wide range of behaviours that control or dominate someone, or cause them to fear for their personal safety or well-being, including physical or sexual abuse, emotional/psychological abuse, economic abuse, threatening behaviour, coercive behaviour and stalking.

11 The World Health Organization (WHO) defines intimate partner violence as "behaviour within an intimate relationship that causes physical, sexual or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviour. This definition covers violence by both current and former spouses and partners." Retrieved on 22 March 2022 from: [Violence Info – Intimate partner violence \(who.int\)](#)

12 The WHO defines sexual violence as "any sexual act, attempt to obtain a sexual act, or other act directed against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting. It includes rapes, defined as the physically forced or otherwise coerced penetration of the vulva or anus with a penis, other body part or object. Retrieved on 22 March 2022 from: [Violence Info – Sexual violence – Sexual Violence \(who.int\)](#)

13 UN General Assembly (2016). Intensification of efforts to eliminate all forms of violence against women and girls. Seventy-first session, Item 27 of the provisional agenda, Advancement of Women.

14 UN General Assembly (2016). Intensification of efforts to eliminate all forms of violence against women and girls. Seventy-first session, Item 27 of the provisional agenda, Advancement of Women.

15 Ibid, 2016.

16 The 2016 Women's Health Survey in Jamaica was commissioned by the Statistical Institute of Jamaica (STATIN), the Inter-American Development Bank (IDB) and the United Nations Entity for Gender Equality and Empowerment of Women (UN Women); Williams, C.W. (2018). *Women's Health Survey 2016 Jamaica*. STATIN, IDB & UN Women: Bridgetown, Barbados



15-64 had at some point experienced physical violence by a male partner and 7.7 percent were sexually abused by their male partner. Lifetime prevalence of intimate physical and/or sexual violence was 27.8 per cent for women aged 15-64. There were no significant differences across rural and urban areas or by union status; however, women who had entered into a live-in partner relationship at an early age (under 19 years) had a higher prevalence of lifetime intimate partner physical violence (45.0 per cent), compared to women who entered into such relationships at 19 years of age and older (24.5 per cent). The survey also found that 28.8 percent of women aged 15-64 had experienced emotional violence and 8.5 percent experienced economic violence in intimate relationships in their lifetime.

1.2 Economic Costs of VAWG

VAWG has economic costs for individuals (e.g., victims and their children), families, communities and society at-large. Several countries have estimated the costs of VAWG, in an effort to understand the economic impacts of VAWG on the national economy and to determine investments needed to lessen, if not eliminate VAWG. For instance, in 2016, the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) reported the “annual costs of IPV were \$5.8 billion in the United States of America (USA) and \$1.16 billion in Canada. In Australia, violence against women and children cost an estimated \$11.38 billion per year. Domestic violence alone costs approximately \$32.9 billion in England and Wales.”¹⁷

There are a range of direct costs of VAWG, including costs to healthcare systems, justice and social protection systems, and other victim support services (e.g., shelters, counselling, legal aid). There are also indirect costs of VAWG, such as lost employment, wages and productivity and learning time lost. VAWG also has negative impacts on women’s participation in civic life. Both the direct and indirect costs of VAWG undermine the effectiveness of poverty reduction measures.¹⁸

VAWG costing studies, such as this one, enable governments to understand the importance of ending VAWG with legislation, policies, action plans and programmes, and the importance of allocating appropriate budgets to support such initiatives, and the provision of quality essential services to VAWG survivors and their children. Estimating the economic costs of VAWG provides a basis for evidence-based decision- and policy-making, and programme development.

1.2.1 Approaches to Estimating the Economic Costs of VAWG

There is no one method or approach to estimating the economic costs of VAWG. This study focused on finding a method/approach to estimating the economic costs of VAWG based upon four criteria : 1) methods recommended for countries with limited data, especially limited sex-disaggregated data; 2) methods that take into consideration the under-reporting of VAWG, and lack of administrative and survey data on VAWG which could result in an underestimation of the economic costs of VAWG; 3) methods that assess recent trends in VAWG relevant to economic cost estimates; and 4) methods that attempt to consider the value-for-money offered by ending VAWG initiatives.

¹⁷ Retrieved on 22 March 2022 from: [The economic costs of violence against women | UN Women – Headquarters](#)

¹⁸ Ibid.

Table 1.1 highlights different methods that have been used to assess the economic costs of VAWG, including their coverage of direct and indirect costs and data requirements. Each of these methods differ with respect to their coverage of cost categories and data requirements. Some methods include both direct and indirect costs, whereas others include only direct or indirect costs. Direct costs (e.g., healthcare costs, police and court costs, costs to shelter a VAWG survivor and their children) are easier to estimate due to the clear specification and the availability of data; whereas indirect costs (e.g., costs of pain, anxiety, loss of self-esteem, fear, insecurity) can be more difficult to estimate as they lack clear specifications and data.

Table 1.1. Research methods for estimating the costs of VAWG and their data requirement

Method	Coverage	Data Requirement
Accounting	<p>Direct costs related to health, police, courts, shelter, counseling and legal aid</p> <p>Indirect costs related to out-of-pocket expenditures (e.g., accessing services, leaving home, replacing property), loss of income due to missed work, and missed school days.</p>	<p>Prevalence rate – percentage of women who experience gender-based violence in the population</p> <p>Incident/victimization rate – number of incidents of VAWG per 100 women</p> <p>Utilization rate – percentage of VAWG survivors using essential services</p> <p>Unit cost of service provision – cost per woman provided with services, calculated on basis of a detailed breakdown of cost or a proportion of total budget of service based on utilization rate.</p> <p>Primary data for other costs – including costs of fees, transport and other routine costs for accessing and using services, as well as hotel and transportation costs for leaving home, and expenditures to replace property (e.g., furniture, utensils, phones, vehicles)</p> <p>Lost wages – work days missed per incident and average wage loss.</p> <p>Value of missed school days – estimate based on the number of school days missed by children per incident, and total school fees paid in a year.¹⁹</p>
Econometric approaches	<p>Indirect costs related to lost time on the labour market, lost productivity and earnings, and consumption loss.</p>	<p>Prevalence rate disaggregated by age and education</p> <p>Employment rate by occupation, years of employment, hours worked, earnings/wage data, employment, discount rate ²⁰</p> <p>Income data for different types of households to calculate equivalent disposable income</p> <p>Probability data of not being in a relationship after an incident of gender-based violence</p>

19 In this costing, the authors did not use a ‘user fee approach’; instead, used budget data which should include subsidies and full cost by the public sector.

20 There is no standard discount rate, as the discount rate varies from country-to-country, and in this costing was based upon the discount rate relevant to Jamaica.



Willingness-to-pay/accept	Indirect costs related to loss of productivity, pain and suffering, and lost quality of life	Prevalence rate disaggregated by type of incident, type of injury or death. Cost estimates based on willingness-to-pay for services Injury data – risk of different types of injury and negative outcomes Jury award data for different types of injury or death
Disability-adjusted life years (DALYs)	Indirect costs related to loss of productivity, pain and suffering, and lost quality of life	Demographic data Burden of disease data Health data – related to IPV, including attributable burden of diseases related to IPV

Table 1.2 highlights four different studies that focused on the indirect costs of VAWG.

Table 1.2. Studies that include intangible costs of VAWG

Publication Citation	Country	Indirect Cost Categories
Walby, S. (2009). <i>The cost of domestic violence: Up-date 2009</i> . Lancaster University, UK.	United Kingdom	Pain and suffering, based on the notion that people would pay not to suffer the human and emotional costs of being injured.
Nectoux, M., C. Mugnier, S. Baffert, B. Thelot, M Albagli (2010). Economic evaluation of domestic violence in France, <i>Injury Prevention</i> , Vol. 16 (Suppl 1), pp A1 – A289.	France	Loss of quality of life; psychological and human costs; human costs of rape and injury; an impaired quality of life for VAWG survivors who experience mood disorders, fatigue and sleeping problems; costs of the indirect effects of VAWG through a decrease in future revenues due to declines in productivity, disability or death; costs related to a decline in living standards, resulting from separation and other intangible costs.
Fliedner, J., S. Schwab, S. Stern & R. Iten (2013). <i>Costs of intimate partner violence</i> . Federal Office for Gender Equality: Geneva, Switzerland	Switzerland	Intangible costs, such as loss of quality of life.
National Council to Reduce Violence Against Women and their Children (2009). <i>The Costs of Violence against Women and their Children</i> . Commonwealth of Australia: Canberra, Australia.	Australia	Pain, suffering and premature mortality costs associated with VAWG survivors

Source: Council of Europe (2014). Overview of Studies on the Costs of Violence Against Women and Domestic Violence. Equality Division, Directorate General of Democracy: Strasbourg, France

An analysis of the different methods of estimating the economic costs of VAWG, particularly for countries with data limitations, suggested that a pragmatic approach is to adopt the accounting method. For instance, in 2017, a study on the economic costs of VAWG led by the United Nations Population Fund (UNFPA) and the United Kingdom’s Department for International Development (DFID) adopted the accounting method. In 2019 and 2020, the Commonwealth Secretariat

also used an accounting method to study the economic costs of VAWG in Seychelles²¹ and Lesotho.²² In 2021, the European Institute for Gender Equality (EIGE) adopted the accounting method to measure the cost of GBV and IPV across 27 European Union (EU) Member States with different levels of data availability.²³

The aforementioned studies used an accounting method to assess three types of costs related to VAWG, namely unit, proportional and full costs. Each of these studies identified seven cost clusters:

- Health (i.e., emergency, general and mental health services)
- Legal (i.e., criminal justice and civil justice systems)
- Social welfare (i.e., housing and child protection)
- Specialised services (i.e., specialist and specialist government)
- Personal costs (i.e., moving home and property damage)
- Lost income (i.e., loss of personal income)
- Physical and emotional impact (i.e., physical and emotional impact on victims)²⁴

The EIGE study identified data requirements related to each of the seven clusters (**Box 1.1**).

Box 1.1. Data requirements in the EIGE EU VAWG costing study across 27 EU Member States

Area	Type of data
Extent of GBV and IPV against women	No. victims in the past year (prevalence) No. incidents in the past year (frequency, type, severity)
Direct impact of IPV on individual woman	Health-related injuries Increased family breakdown
Extent of services utilised by women affected by violence	Victim support Health services Legal aid/services
Cost of services utilised	
Impact of GBV and IPV on employment for women affected by violence	No. days of employment lost GDP (Or income) per employed person
Value placed on avoiding the physical and emotional impact of IPV and/ or value placed on reduced quality adjusted life years (QALYs) or DALYs	

Source: EIGE (2021). *The costs of gender-based violence in the European Union*. EIGE: Vilnius, Lithuania.

21 Commonwealth Secretariat (2019). *The Economic Cost of Violence Against Women and Girls: A Study of Seychelles*. The Commonwealth: London, United Kingdom.

22 Commonwealth Secretariat (2020). *The Economic Cost of Violence Against Women and Girls: A Study of Lesotho*. The Commonwealth: London, United Kingdom.

23 EIGE (2021). *The costs of gender-based violence in the European Union*. EIGE: Vilnius, Lithuania.

24 Physical and emotional costs were adopted only by the EIGE in 2021.



The costing studies reviewed, relied upon the following data sources:

- Expert judgements
- Victim recall studies
- Surveys
- Administrative data
- Population data
- Studies of similar harms
- Specialised research projects

Moreover, the EIGE costing study recommended that the costs of VAWG could be estimated using the following formula.

$$\text{Economic Cost}_j = \text{Unit Cost}_j \times \text{Multiplier}_j \text{ (or Proportional Multiplier}_j\text{)}$$

Where, j = 1..7 – seven clusters; multiplier refers to data (e.g., number of intimate partner homicides or percentage of referrals to children’s social services because of abuse and/or neglect); and proportional multipliers have been used to specify aspects where it is important to separate the total into costs related to VAWG or otherwise.

An important development in costing methods has been to simulate or extrapolate an estimate based on administrative and survey data, and to arrive at a macro-level estimate using population data related to age cohorts. This approach is appealing because incidents of VAWG are under-reported, and under-reporting is even more pronounced in developing countries and countries that lack prevention and response interventions to VAWG, and have weak administrative record-keeping systems. In recent years, this approach has been used in VAWG costing studies conducted in Ukraine, Seychelles and Lesotho, as well as Viet Nam (Box 1.2).²⁵

Box 1.2. Relevant VAWG costing studies with macro-level estimates

Publication	Description
Duvvury, N., P. Carney & N. Nguyen (2012). <i>Estimating the cost of domestic violence against women in Viet Nam</i> . UN Women: Hanoi, Viet Nam.	A macro-level estimate was extrapolated based on the incidence rate (determined in the study) and prevalence rate reported by the General Statistics Office. These two rates were used to extrapolate onto the whole female population aged 18-49 to determine the number of potential VAWG survivors seeking services. Unit values of various services or cost clusters were applied onto the simulated number of VAWG survivors to assess the potential macro-level economic costs of VAWG in Viet Nam.

²⁵ Duvvury, N., P. Carney & N. Nguyen (2012). *Estimating the cost of domestic violence against women in Viet Nam*. UN Women: Hanoi, Viet Nam.

Publication	Description
UNFPA & DFID (2017). <i>Economic Costs of Violence against Women in Ukraine</i> . UNFPA & DFID: Kyiv, Ukraine.	Prevalence rates as reported in official data were extrapolated onto the whole female population aged 15-59 in Ukraine to simulate the number of VAWG survivors and to arrive at an indicative number of recipients of VAWG-related services (e.g., healthcare services) that are provided; these data are not reflected in official data. Costs of various services or clusters are applied to the simulated number of VAWG survivors to assess potential macro-level economic costs of VAWG. Costs calculated using (unadjusted) administrative data were referred to as the 'typical case', whereas costs based on simulated numbers of VAWG survivors were referred to as the 'full coverage case'.
Commonwealth Secretariat (2019). <i>The Economic Cost of Violence Against Women and Girls: A Study of Seychelles</i> . The Commonwealth: London, United Kingdom. Commonwealth Secretariat (2020). <i>The Economic Cost of Violence Against Women and Girls: A Study of Lesotho</i> . The Commonwealth: London, United Kingdom.	In these two studies, prevalence rates reported in official statistics were extrapolated onto the whole female population aged 18-64, in each of the respective countries, to simulate the number of VAWG survivors and to arrive at simulated numbers of recipients of VAWG-related services (e.g., healthcare services, police services, etc.) that are provided; these data are not reflected in official data. Costs of various services or clusters are applied to the simulated number of VAWG survivors to assess the potential macro-level economic costs of VAWG. Costs calculated using administrative data were referred to as the 'typical case', whereas costs based on simulated numbers of VAWG survivors were referred to as the 'full coverage case'.

In Ukraine's VAWG costing study, costing for the 'typical case' and 'full coverage case' were calculated using the following formulas.

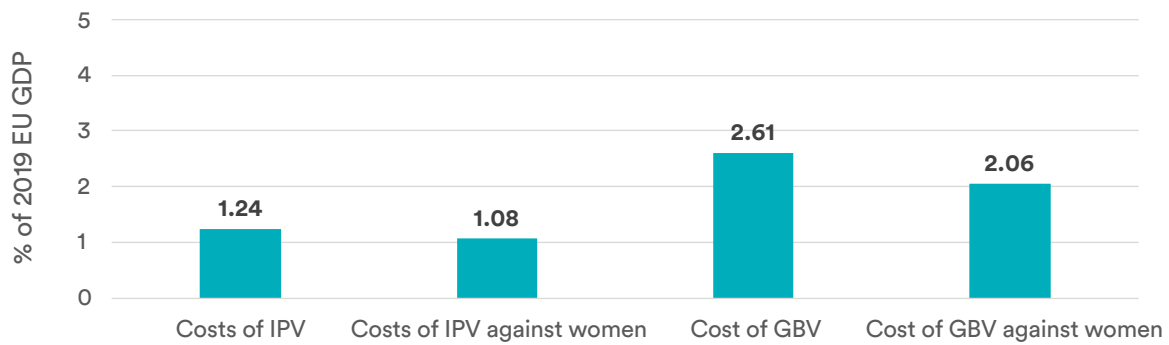
Typical case: $Economic Cost_j = Unit Cost_j \times Victims_j$ (based on administrative data)

Full coverage case: $Economic Cost_j = Unit Cost_j \times Victims_j$ (based on derived data)

Bear in mind, estimates of the economic costs of VAWG can vary considerably depending upon methodology used, coverage of cost categories, numbers of VAWG survivors, incidents of VAWG, cost of services and more. For instance, in 2021, the EIGE VAWG costing study provided cost estimates for 27 EU Member States.²⁶ Cost estimates were an extrapolation of economic cost estimates from the United Kingdom, while applying country population multipliers for the 27 EU Member States. Results from the 2021 EIGE VAWG costing study revealed some important insights. **Chart 1.1** shows that the total costs of GBV are 2.61 per cent of the 2019 EU GDP, of which the costs of GBV against women are 2.06 percent of the EU GDP, which is 79 per cent of the estimated total cost of GBV. In comparison, the total costs of IPV are 1.24 per cent of the 2019 EU GDP, of which the costs of IPV against women are 1.08 per cent of the EU GDP, which is 87 per cent of the estimated total cost of IPV.

26 EIGE (2021). *The costs of gender-based violence in the European Union*. EIGE: Vilnius, Lithuania

Chart 1.1. Economic costs of IPV and GBV in 27 EU Member States, 2019 (% of GDP)



Source: EIGE (2021). *The costs of gender-based violence in the European Union*. EIGE: Vilnius, Lithuania.

Likewise, in 2014, the Copenhagen Consensus Center reported estimated costs of VAWG, including intimate partner violence at 5.18 per cent of the world GDP, sexual violence against women at 0.07 per cent of the world GDP and intimate partner female homicide at 0.05 per cent of the world GDP. In addition, the estimated costs of child abuse was 4.21 per cent of the world GDP and child sexual abuse was 0.04 per cent of the world GDP (**Chart 1.2**). These estimated costs highlight the need to eliminate violence against women and children (VAWG/C).²⁷

Chart 1.2. Estimated costs of VAWG and child abuse and sexual violence (% of world GDP)



Source: Fearon, J. & 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: Tewksbury, MA, USA.

There have also been several VAWG costing studies that have incorporated macro-level estimates into the economic costs of VAWG, taking into consideration under-reporting of VAWG. **Table 1.3** highlights a few of the lessons from the costing studies in Seychelles, Lesotho and Ukraine. In Seychelles and Lesotho, VAWG costing studies revealed large differences between the estimated costs related to the ‘typical case’ (i.e., based on administrative victim data) versus the ‘full coverage case’ (i.e., based on simulated or derived victim data on the basis of the female population aged 15-64).²⁸ In contrast, in Ukraine, the VAWG costing study estimated the macro-

²⁷ Fearon, J. & 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 Center: Tewksbury, MA, USA. Retrieved on 28 May 2022 from: [Benefits and Costs of the Conflict and Violence Targets for the Post-2015 Development Agenda \(copenhagenconsensus.com\)](https://www.copenhagenconsensus.com)

²⁸ Commonwealth Secretariat (2019). *The Economic Cost of Violence Against Women and Girls: A Study of Seychelles*. The Commonwealth: London, United Kingdom; Commonwealth Secretariat (2020). *The Economic Cost of Violence Against Women and Girls: A Study of Lesotho*. The Commonwealth: London, United Kingdom.

level costs of VAWG were 20 times higher than costs based on administrative data (i.e., typical case).²⁹ Similarly, in Viet Nam, a VAWG costing study revealed a larger number of VAWG incidents and economic costs in the ‘full coverage case’ versus the ‘typical case’.

Table 1.3. Comparison between typical case and full coverage case

Country	Number of victims from a Full Coverage Caseover / Number of Victims from a Typical Case)	Costs of Full Coverage Case / Costs of Typical)
Lesotho	16.69	3.63
Seychelles	15.32	3.78
Ukraine	4.40	19.30
Vietnam	NA	1.98

These data show that economic costs of VAWG derived from administrative victim data are more likely to be affected by under-reporting of VAWG. On the other hand, economic costs of VAWG derived from victim data on the basis of the female population (i.e., through nationally representative surveys) are more likely to be higher and may represent more realistic estimates.

1.3 Estimating the Benefits of Investing in Ending VAWG

There is often a reluctance among policy-makers to invest in social protection sectors and programmes related to women, children and families, compared to investing in trade, infrastructure and energy. This is because investments in trade, infrastructure and energy are viewed as growing the productive capacity of the national economy, which contributes to a country’s growth and development. However, recent global estimates of the economic costs of VAWG have revealed that VAWG translates into significant losses to national economies. In fact, in 2021, the International Monetary Fund (IMF) projected that an increase in VAWG by one-percentage point can reduce night lights-based ³⁰ economic activities by up to 8.7 per cent on average.³¹

Considering the importance of investing in ending VAWG initiatives, recent studies have been trying to quantify the benefit-cost ratio (i.e., value for money) of investing in eliminating VAWG. Although the cost of interventions aimed at ending VAWG are relatively easy to determine, it is very difficult to assess the benefits of such interventions. Authors of the Ukraine VAWG costing study argued that international studies demonstrate that one USD invested in VAWG prevention saves the economy USD 5 to 20 in future service costs.³² Based on these estimates, Ukrainian authorities discarded the ‘left over’ principle practice for budgeting for interventions to end VAWG.

29 UN Population Fund and Department for International Development (2017), ‘Economic Costs of Violence against Women in Ukraine’, UNFPA and DFID, Kyiv, Ukraine.

30 Based upon satellite data on night-time lights provided by the US National Oceanic and Atmospheric Administration.

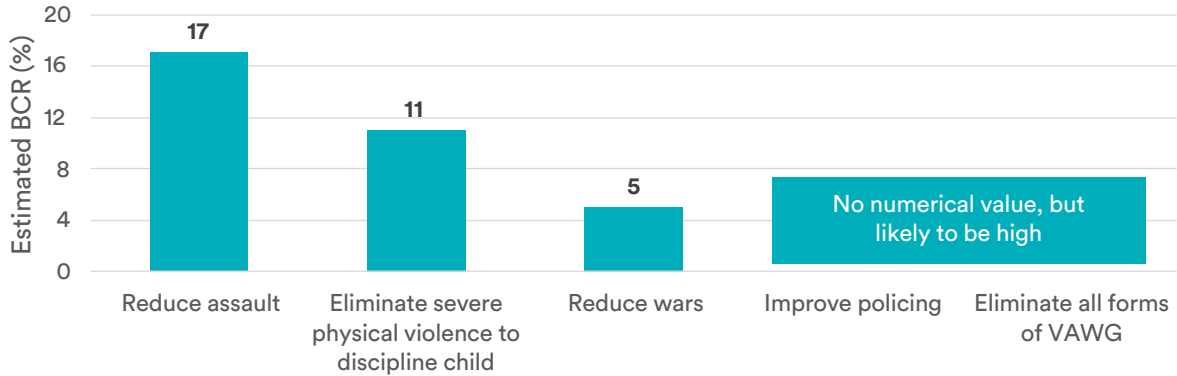
31 Ouedraogo, R & D. Stenzel (2021). The Heavy Economic Toll of Gender-based Violence: Evidence from Sub-Saharan Africa. IMF Working Papers, Volume 2021, Issue 277. Retrieved on 24 March 2022 from: [IMF Working Papers Volume 2021 Issue 277: The Heavy Economic Toll of Gender-based Violence: Evidence from Sub-Saharan Africa \(2021\)](#)

32 UN Population Fund and Department for International Development (2017), ‘Economic Costs of Violence against Women in Ukraine’, UNFPA and DFID: Kyiv, Ukraine.



The Copenhagen Consensus Center provided detailed benefit-cost ratios for interventions aimed at preventing violence, including VAWG. Although the Copenhagen Consensus Center acknowledged that measuring the benefits of interventions to prevent domestic violence was difficult, it did provide benefit–cost ratios for certain interventions. The estimated benefit–cost ratios were high, suggesting there is good value for money when it comes to investing in programmes that aim to eliminate domestic violence (Chart 1.3).

Chart 1.3. Estimated benefit-cost ratio (BCR) of interventions (for every dollar spent)



Source: <https://www.copenhagenconsensus.com/post-2015-consensus/conflictandviolence>

1.4 Why Conduct a VAWG Costing Study in Jamaica?

UN Women commissioned this VAWG costing study in Jamaica in recognition of the fact that VAWG costing studies are important evidence-based policy advocacy tools that can be used to:³³

- Inform policy dialogue and advance effective policies and programmes
- Assess the impact of policies and programmes
- Support evidence-based policymaking
- Ensure accountability for implementation
- Support resource mobilization
- Contribute to strengthening national commitments to ending VAWG.

VAWG costing studies foster understanding that VAWG is not a ‘domestic issue’, but a human rights and development issue. Other benefits include:³⁴

- Measuring the costs of VAWG can demonstrate the financial costs to VAWG survivors and their children, and people who have perpetrated such violence, as well as businesses, organizations, governments, communities and society at large.

³³ UN Women (2020). *ASEAN Regional Guidelines on Violence against Women and Girls Data Collection and Use*. UN Women Regional Office for Asia and the Pacific: Bangkok, Thailand.

³⁴ Ibid, 2020; UN Women (2013). *The Costs of Violence, Understanding the costs of violence against women and girls and its response: selected findings and lessons learned from Asia and the Pacific*. UN Women Regional Office for Asia and the Pacific: Bangkok, Thailand.

- Costing current VAWG-related budgetary landscapes can reveal funding deficits and gaps that can be used to strengthen the case for government budgets to support interventions to prevent and respond to VAWG.
- VAWG costing estimates assist ministries, agencies and service providers from across sectors to prioritize VAWG prevention and response services in government budget allocations, and advocate for the allocation of resources required to offer quality essential services to VAWG survivors, in keeping with legislation, policies and national action plans aimed at ending VAWG.
- VAWG costing studies reveal that implementing essential services is affordable and the benefits of ending VAWG are magnified. When comparing the costs of VAWG to the costs of providing services it shows that preventing and responding to VAWG is a good investment.
- Costing facilitates greater coordination across sectors to prevent and respond to VAWG because it documents the financial impact of VAWG on various sectors and highlights expenditures needed to prevent and respond to VAWG. Coordination is often improved because costing studies open dialogue on which institutions are providing services and what services are missing.
- Costing contributes to strengthening evidence-based planning, budgeting and implementation of national policy commitments to prevent and respond to VAWG.

Data gathered for this VAWG costing study can also be used to inform reporting on SDGs, particularly SDG 5, achieve gender equality and empower all women and girls, and SDG 16, promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. The data gathering process that happens during costing studies also provides an opportunity to assess the strength of national statistical systems, which is crucial to measuring progress across all of the SDGs in a way that is both inclusive and fair.

Chapter 2

Methodology

2.1 Purpose and Objectives

The purpose of this costing study was to estimate the economic costs of VAWG in Jamaica. The main objectives were to:

1. Estimate the annual economic cost of IPV against women in Jamaica at the household-level.³⁵ This requires estimating:
 - Annual direct costs related to incidents of IPV for households, including costs associated with seeking healthcare services, shelter, mediation and judicial resolution, as well as consumption expenditure related to replacement costs of property.
 - Indirect costs, including income loss due to missed paid work and unpaid domestic and care work³⁶, and impacts on children's education (e.g., missed school days, poor academic performance).
2. Estimate annual service provision costs across government sectors (e.g., healthcare, police, judicial and social service sectors) and services provided by civil society organizations (CSOs), such as shelters.
3. Develop macro-estimates of aggregate costs for the national economy, estimated costs of service provision and estimated costs due to lost productivity.

2.2 Costing Study Approach

This study focuses on estimating the direct (rather than indirect) economic costs of IPV, particularly given the difficulties associated with estimating the indirect costs of VAWG due to a lack of data related to loss of quality of life and pain and suffering. The costing framework used in this study consisted of estimates related to total costs and micro-macro costs (Figure 2.1).

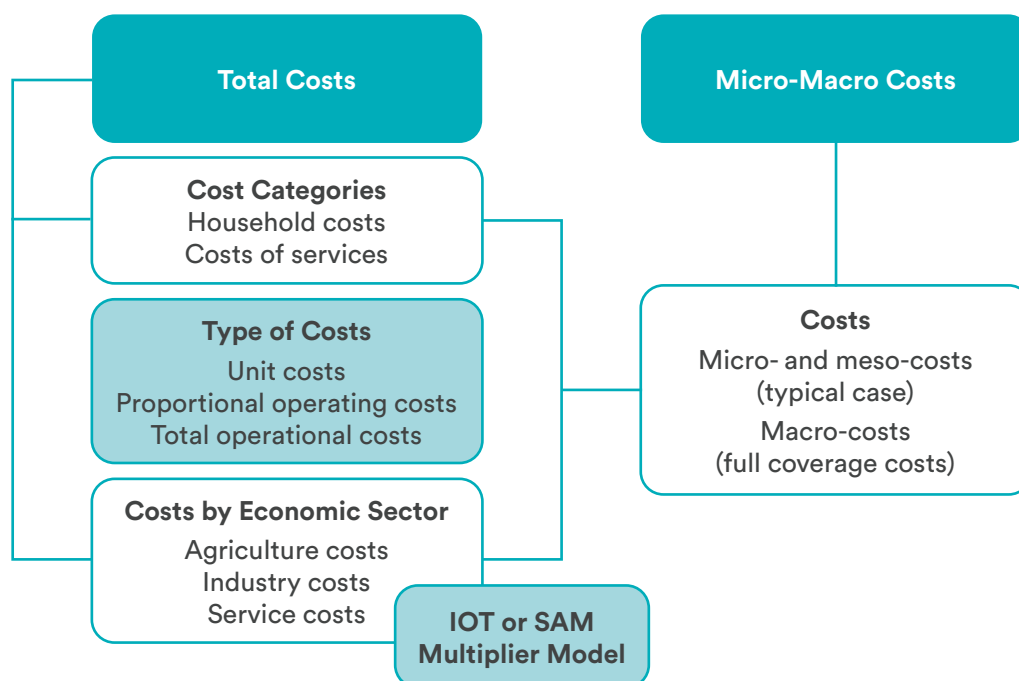
Cost categories include household costs and costs of services provided to VAWG survivors by the government and CSOs. Household costs and costs of services reflect the 'direct' costs of VAWG.

³⁵ This study focused on the economic cost of IPV due to data limitations.

³⁶ Reproductive labour include paid and unpaid domestic and care work that reproduces the work force.

- **Household costs** include: out-of-pocket expenses incurred by VAWG survivors and their households/families; personal property losses by VAWG survivors; violence-related cash expenses paid out by VAWG survivors; and individual income loss due to irreversible population losses (e.g., premature death of women, VAWG-related temporary and permanent disability, and reduced work productivity of VAWG survivors), which leads to losses in output and/or income.³⁷
- **Costs of services** include: services provided mainly by government entities, such as healthcare services, law enforcement and court services, social services and specialised services for VAWG survivors and their children. This includes estimated cost of learning time lost at educational institutions by children of VAWG survivors, and children’s potential longer-term earning losses due to school absenteeism, drop out and poor academic performance. Services provided by the private sector have also been considered, including out-of-pocket expenses for healthcare services in the private sector.

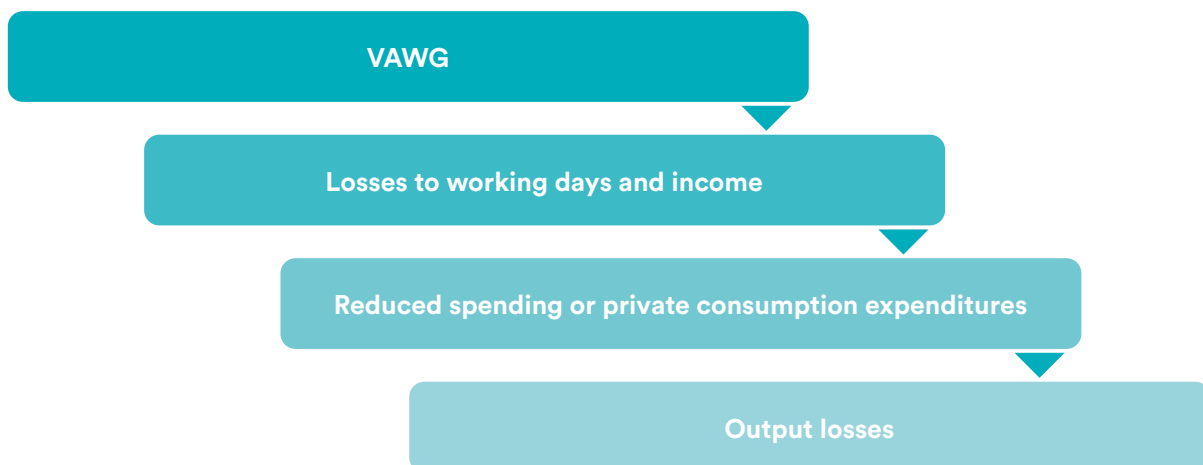
Figure 2.1. Building blocks for the costing framework



Economic sector costs have been used to determine economy-wide costs. To capture economy-wide costs of VAWG, an economy-wide database or model was used. One outcome of the direct costs of VAWG is lost working days which can lead to income loss. In turn, income loss leads to a reduction in spending or private consumption expenditures, which has subsequent negative impacts on demand for and supply of goods and services. Production of goods and services depends on purchases of goods and services, and production. Loss of female workdays (which is a direct impact of VAWG) may indirectly lead to further income loss due to this interdependence (**Figure 2.4**).

³⁷ Another important factor is withdrawal from the labour force, which can have long-term implications on a VAWG survivor’s career progression and income growth. This factor, however, is not considered due to a lack of data.

Figure 2.4. VAWG-induced GDP loss transmission channel



The two most widely used economy-wide data sets are the **input-output matrix (I-OM)**³⁸ and the **social accounting matrix (SAM)**.³⁹ Economy-wide data sets are then converted into a multiplier framework to capture economy-wide indirect costs of VAWG. For this study, the 2015 SAM for Jamaica was updated to a more recent year, 2018, to align with the year for the cost estimation and to assess the economy-wide cost of VAWG.

As it relates to **micro-macro costs**, there are three types of costs that can be used to estimate the direct costs of VAWG – unit costs, proportional operating costs and total operational costs. These costs were chosen because of their simplicity and data availability.

- The **unit cost** approach estimates the cost of a certain package of services provided to a VAWG survivor in a single case (e.g., medical service package for a VAWG survivor with grievous injuries, per visit hospital costs, per visit fees for a doctor or lawyer).
- **Proportional operating costs** are calculated based upon the share of VAWG survivors in the total number of service recipients (e.g., 30 per cent of the total social services budget spent on VAWG survivors).
- **Total operational costs** are applicable to 24 hours a day/7 day a week or full-year services, such as a telephone hotline service for VAWG survivors.

The under-reporting of incidents of VAWG is an issue when it comes to estimating the economic costs of VAWG on the basis of official statistics.⁴⁰ Under-reporting is not surprising given the fact that many VAWG survivors fear being ostracised, stigmatised and blamed for provoking

38 I-OM usually captures the production structure of an economy for a particular year describing production technologies and ensuring equality of supply to demand for all sectors of activities classified in that economy.

39 SAM is an extension of I-OM, incorporating other important agents, such as factors of production (i.e., labour and capital factors) and institutions (i.e., households, government, corporations). A special feature of the SAM is that it shows income generation processes (i.e., income generation processes by factors of production, such as labour and capital factors); distribution of income to various institutions (e.g., households, government, corporations).

40 According to the United Nations Department of Economic and Social Affairs, fewer than 40 per cent of VAWG survivors seek help. Among women who do seek help, most seek help from family and friends; very few seek help from formal institutions, such as police and healthcare services. Fewer than 10 per cent of those seeking help appealed to the police; United Nations Department Economic and Social Affairs (2015). *The World's Women 2015: Trends and Statistics*. UNDES: New York, NY, USA; Under-reporting of incidents of VAWG was also documented in Williams, C.W. (2018). *Women's Health Survey 2016 Jamaica*. STATIN, IDB & UN Women: Bridgetown, Barbados.

their own victimization, and fear retaliation by perpetrator(s) and/or their relatives. For these reasons, estimates based only on official statistics will result in a significant underestimation of the economic costs of VAWG, since official data do not reflect the full extent of VAWG within a society. Accordingly, a sensible approach is to estimate economic costs at two levels – micro-meso level (i.e., typical case) and macro-level (i.e., full coverage case). These two levels were used in VAWG costing studies conducted in Ukraine, Seychelles and Lesotho.⁴¹

- **Micro-meso level (typical case) economic cost estimates** are based on official data (e.g., Ministry of Health and/or police data on VAWG). Micro-meso level economic costs are calculated using the following formula:

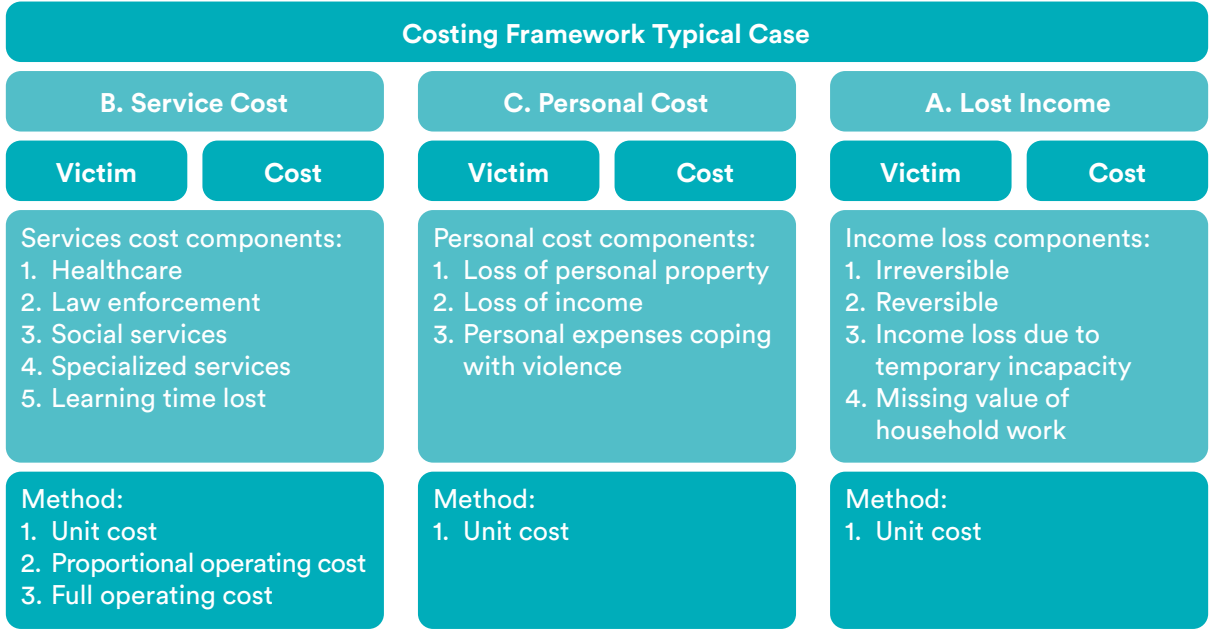
Economic Cost_j = Unit Cost_j x Parameters_j x Victims_j (based on administrative data)

- **Macro-level (full coverage case) economic costs estimates** are based on a simulation model using VAWG prevalence rates and the number of women aged 15-64 or 18-64 in the population (based upon census or population projection data). Macro-level economic costs are calculated using the following formula:

Economic Cost_j = Unit Cost_j x Parameters_j x Victims_j (based on derived data)

Figures 2.2 offers an analytical framework for costing a typical case and a full coverage case.

Figure 2.2. Costing framework for a typical case



41 Estimated costs of a typical VAWG case were calculated based on administrative data that captures the utilisation of VAWG-related services in Jamaica (e.g., police, legal, social and healthcare services). Estimated costs of a typical case are generally lower than estimated costs of a full coverage case because typical case is based on administrative data which fails to capture the estimated costs of the total population at-risk of VAWG. The full coverage case, however, estimates the costs of VAWG experienced by women aged 15-64 in the population, and is derived from data sources that are representative of the women aged 15-64 population (e.g., 2016 Jamaica Women’s Health Survey, national population data, economic estimates).

2.3 Implementation Strategy

The following steps were taken to estimate household costs and costs of services:

1. Collect available administrative and survey data related to VAWG (i.e., micro- and meso-level data) and generate VAWG prevalence rates of different types VAWG, including severity of VAWG.
2. Collect administrative financial data and information to calculate the 'unit cost' for various services (e.g., per day hospitalisation costs, per visit outpatient fees) and cost categories (e.g., minimum wage, per capita income of employed persons, hourly wages and monthly salaries of police personnel, social service providers, prosecutors and judges).
3. Get intervention parameters for different services (e.g., number of hours spent per case by the police, courts, social services, including counselling/psychological care services⁴² and family welfare) for cases involving different types of violence.
4. Collect detailed budget data and information for ministries and agencies involved in preventing and responding to VAWG; this information is needed to determine the amount of public funds allocated to ending VAWG.
5. Arrange consultations with national and local experts to validate VAWG costing study findings.
6. Administer a survey to gather recent information to cover data gaps. In this study, a survey of 25 VAWG survivors was used to gather information related to personal costs incurred, duration of treatment and loss of working days/hours and income.

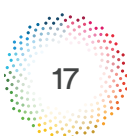
The following steps were taken to estimate economic sector costs:

1. Estimated output loss or income loss from households to examine economy-wide costs of VAWG. If a consistent macro-economic data set (i.e., I-OM or SAM) is available for a recent year, the economy-wide model will be specified by designating some accounts of I-OM or SAM as 'endogenous accounts'⁴³ (analogous to dependent variables) and 'exogenous accounts'⁴⁴ (analogous to independent variables). Endogenous accounts usually include production activities and factors of production (labour and capital) and households. Exogenous accounts are generally composed of policy variables, such as government expenditures, investments and exports.
2. If a recent macro-economic data set is not available, the data set may be updated to a recent year using sectoral economic information (e.g., total value added or GDP, imports, exports, consumption, public expenditures, investments). In this study, the updated macro-economic data set was converted into an economy-wide model; the updating technique used was the same as that used in the Seychelles and Lesotho VAWG costing studies.

⁴² Similar to other costs (e.g. emotional cost), this will depend on data availability.

⁴³ Endogenous accounts usually include an activity account, factor account, household account among others.

⁴⁴ Exogenous accounts usually include private and public consumption, exports and investment, as well as pure transfers between institutions (e.g., from government to households). Foreign remittances are typically included in the definition of exogenous accounts.



3. Carry out simulation exercises to assess the economy-wide costs of VAWG.⁴⁵ Since the Jamaica SAM is composed of 17 economic sectors, the economy-wide costs are estimated based upon those 17 economic sectors.

The following steps were taken to estimate economic costs at the macro-level:

1. Gather age cohort sex-disaggregated population data (15-64 age cohort)⁴⁶ to operationalise macro-level cost estimations.
2. Age cohort population data was used along with information on three types of costs – unit costs, proportional operating costs, full operational costs – and VAWG prevalence rates and other relevant data to estimate macro-level costs or economic costs at the macro-level.

2.3.1 Selecting the Year for the Costing Exercise

Economic costs of VAWG are estimated for a specific year; typically, the year selected is based upon the year for which data and statistics are available.⁴⁷ In this study, there were two choices: 1) select 2016 as the study year since IPV prevalence rates are available for the *Women's Health Survey 2016 Jamaica*; or 2) select a more recent year, such as 2018 or 2019, assuming the 2016 IPV prevalence rates are still valid for 2018 and 2019.⁴⁸ To have a more up-to-date costing of VAWG, the year 2018 was selected as the year for estimating cost; this was a consensus decision made by the National Expert Steering Committee established to provide input and guidance to the research team.

2.3.2 Addressing Data Gaps

Ideally, the costing framework should be developed using data that are available at the country-level and modelled data from international agencies (e.g., UN, World Bank, multilateral development banks); however, in Jamaica, obtaining robust statistics related to VAWG and estimates of the economic costs of VAWG was a challenge due to notable data gaps and limitations.⁴⁹ When data were not readily available, an indirect method was used to generate needed data. For instance, unit value or return to employment data can be derived from information on earnings of female workers and the number of person days or hours worked. In extreme cases, some 'place holder values' could be obtained from similar studies for preliminary estimates, with the intention that the 'place holder values' would be replaced with country-

45 This method has never been attempted in gender studies and studies that estimate the economic cost of VAWG.

46 This is in conformity with the classification adopted in the 2016 Jamaica Women's Health Survey, p. 34.

47 The costing exercise was conducted for the year 2016 in the case of Seychelles due mainly to the availability of IPV/GBV prevalence rates for 2016. While year 2017 was chosen in Lesotho despite the fact that IPV/GBV prevalence rates were estimated for 2013.

48 The prevalence rate measures the population at risk of experiencing VAWG. The 2016 Jamaica Women's Health Survey (WHS) is the first and only national survey to comprehensively estimate the prevalence of VAWG in Jamaica and was used to estimate the ECVAWG for the year 2018. National prevalence surveys such as the WHS are valid for 5-10 years and can be used to estimate ECVAWG. The 2016 Jamaica WHS is well within that range and there were no dramatic changes that occurred in Jamaica in 2018 to invalidate the use of the 2016 prevalence rate.

49 Duvvury, N, A. Callan, P. Carney & S. Raghavendra (2013). *Intimate Partner Violence: Economic Costs and Implications for Growth and Development. Women's Voice, Agency, & Participation Research Series, No.3.* Work Bank Group: Washington, DC, USA.

level data at a later time. In some cases, surveys may need to be conducted to fill data gaps. Digital records also need to be identified and assessed, and in some cases, paper records need to be digitised.

Another challenge related to collecting or collating I-OM and/or SAM data to carry out indirect and induced cost estimations; ideally, SAM data are used to calculate indirect and induced cost estimates. For this study a 2015 SAM was available for Jamaica. Even when a SAM is not readily available, it may be possible to develop a SAM using an I-OM, as was done in the Lesotho VAWG costing study. In a large number of countries, an important source of I-OMs is the Global Trade Analysis Project (GTAP) database.⁵⁰

50 GTAP database, available at: <https://www.gtap.agecon.purdue.edu/>

Chapter 3

Data Requirements

This chapter reviews the data requirements to estimate the economic cost of VAWG in Jamaica, and the approach taken to collecting required data.

3.1 Identification of Data Sources

VAWG costing studies requires a significant amount of data and statistics, however, these data and statistics are not always readily available. Thus, various approaches were adopted to identify data sources and gather needed data and statistics in Jamaica.

Ideally, a costing study uses national data sources, but in some cases modelled data provided by international organizations (e.g., UN, World Bank and multilateral development agencies) were utilized. A desk review of data and statistics identified the following data sources in Jamaica:

- Women's Health Survey 2016 Jamaica
- Jamaica Labour Force Survey
- Ministry of Health and Wellness (administrative data)
- Jamaica Constabulary Force (JCF) (administrative data)
- Child Protection & Family Service Agency (CPFSA) (administrative data)
- Ministry of Justice (MoJ) (administrative data)
- Ministry of Education, Youth and Information (MoE) (administrative data)
- Statistical Institute of Jamaica (STATIN) (administrative data)
- UN population projections by age and sex (World Population Prospects, 2019)⁵¹
- Social Accounting Matrix for Jamaica, 2015

3.2 Formation of a National Expert Steering Committee

The National Expert Steering Committee included representatives from government ministries and agencies, and research and academic institutions in Jamaica (**Box 3.1**). Members of the

⁵¹ Retrieved on 8 December 2022 from: <https://population.un.org/wpp/Download/Standard/Population/>

National Expert Steering Committee had knowledge of the various data sources and data that were relevant to this costing study, and they were able to assist with compiling needed data and statistics.

Box 3.1. National Expert Steering Committee membership

- Bureau of Gender Affairs (BGA)
- Ministry of Justice (MoJ)
- Ministry of Health and Wellness (MoHW)
- Ministry of Labour and Social Security (MoLSS)
- Child Protection and Family Services Agency (CPFSA)
- Planning Institute of Jamaica
- Jamaica Constabulary Force (JCF)
- University of the West Indies, Mona Campus
 - Department of Economics
 - Institute of Gender and Development Studies
- NGO – Woman Inc – Jamaica.

The National Expert Steering Committee met on three occasions (i.e., 23 February 2021, for the inaugural meeting; 14 May 2021, during the data collection phase; and 3 March 2021, for validation of the report). In addition, during the data collection phase, the consultancy team held individual meetings with National Expert Steering Committee members who represented the healthcare sector, and police and courts.

3.3 Data Collection Protocols

Data collection protocols were established by the National Expert Steering Committee, in collaboration with government entities and UN Women. Data collection protocols outlined ethical principles of confidentiality, informed consent and validating the accuracy of data and statistics collected for this study. To facilitate data collection in keeping with these protocols, data templates were developed and shared with relevant government ministries/agencies, CSOs and private sector entities, some of whom were members of the National Expert Steering Committee.

The National Expert Steering Committee agreed that the consultancy team could liaise with institutions and individuals who worked directly with VAWG survivors to gather and analyse relevant VAWG data. An online survey was also developed in SurveyMonkey and administered to a small sample of VAWG survivors. VAWG survivors were asked to provide informed consent and voluntary participation, and were guaranteed anonymity and confidentiality.

3.4 Data Collection

Typically, a VAWG costing study requires the consultancy team to make one or more field visits to the country to meet with the National Expert Steering Committee and to establish



data collection protocols, as well as to hold face-to-face meetings with service providers from relevant agencies and organizations, and to collect necessary data and statistics. Because of the COVID-19 pandemic, field visits to Jamaica by the consultancy team were not permitted; thus, virtual meetings were arranged with the National Expert Steering Committee and data producing ministries/agencies. There was one team member based in Jamaica who was able to support data collection on the ground.

In Jamaica, data collection tasks included:

- Identifying key personnel in service providing agencies (e.g., police, judiciary, health), including those providing specialized services to VAWG survivors (e.g., shelter, telephone hotlines, counselling, psychological services).
- Setting up meetings with key personnel and explain the data template to them.
- Liaising with members of the National Expert Steering Committee to help with data collection.
- Reaching out to specialized groups to gather data related to IPV and related costs.

VAWG costing studies are a special type of study that require data that are not always available from administrative data sources or from dedicated VAWG surveys which are conducted to estimate VAWG prevalence rates. As previously mentioned, the following data are typically required for VAWG costing studies:

Out-of-pocket expenses incurred by VAWG survivors and/or their families:

- Transportation expenses
 - Ambulance service expenses
 - Medical diagnostic expenses
 - Patient costs (doctor fees)
 - Legal costs
 - Loss of property due to violence
 - Other violence-related costs
- Nature and extent of VAWG in terms of severity (i.e., whether the violence led to temporary or permanent disability)
- Number of days absent from paid work due to violence
- Number of days absent from unpaid work due to violence
- Number of hours spent on household activities disrupted due to violence
- VAWG survivors response (or non-response) from frontline service providers when seeking help

As previously mentioned, VAWG survivors were surveyed for this study via SurveyMonkey. VAWG survivors were identified through service providers who work directly with survivors. To improve the accuracy of data provided by VAWG survivors, informed consent was obtained and anonymity and confidentiality were guaranteed. A total of 25 VAWG survivors completed the survey. The sample of VAWG survivors was not intended to be representative of VAWG survivors; the intent was simply to generate increased perspective and understanding of the individual costs associated with experiencing IPV for some survivors.

3.4.1 Economy, Population and Employment Data

There were two main administrative data sources, including: statistics related to the economy, labour market and population that were obtained from STATIN; and data and information related to the number of VAWG survivors and services sought were obtained from service providers. **Table 3.1** shows some of the statistics that were obtained from STATIN for key indicators related to the economy, population, employment and earnings. Some statistics were obtained from STATIN’s website. These data were used in the costing exercise.

Table 3.1. Key indicators related to economy, population and employment and earning

Indicators	Value
Economy	
GDP market price 2018 (JMD)	2,027,251,000,000
Exchange rate 2018 (USD to JMD)	128.53
GDP market price 2018 (USD, 1 JMD = 128.53 USD)	15,772,590,057
Population	
Total Population (Persons)	2,730,982
Total Male Population (Persons)	1,350,919
Total Female Population (Persons)	1,380,063
Total Population, aged 15-64 (Persons)	1,890,241
Total Female Population, aged 15-64 (Person)	955,206
Employment and Earnings	
Estimated number of employed persons	1,633,127
GDP/Employed person	1,241,331
GDP per employed person per day – LC (@250 day/year)	4,965
GDP per employed person per hour – LC (@8 hour/day)	621
Share of Employed population (Percent)	59.80

Source: STATIN

3.4.2 Victim Data

Victim data, particularly the number of victims, are important to any VAWG costing exercise. Victim data came from three sources – police, courts and healthcare services – and were used to calculate cost estimates for each of these sectors. Since sexual violence data were not available from healthcare services, sexual assault data from the police were used to estimate the costs of healthcare services for sexual violence.

Victim data were also required to estimate personal costs and personal income loss. Since victim data do not typically include incurred personal costs and income loss, the typical practice

is to use the number of victims from police, courts and healthcare services to estimate personal costs and income losses. Administrative data, however, are not prevalence data because most incidents of VAWG are not reported to authorities or service providers; thus, the rule is to use the largest number of victims from these data sources.

Table 3.2. Number of female victims identified in administrative data by sector, 2018

Police		Courts		Health	
Crimes	N	Crime processing	N	Violence-related	N
Murder	129	Complaints	5,673	Injury	3,046
Sexual offences	1,649	Protection orders	4,560		
Rape	527	Probation orders	1,234		
Sexual offence	437	Eviction orders	147		
Sexual intercourse (< 16 years)	685	Persons sent to prison	76		
Physical offence	2,321				
Shooting	240				
Robbery	665				
Total aggravated assault	101				
Total assault	1,315				
Total (sexual + physical)	3,970				

Note: Police data were compiled by the consultancy team using data from Crimes Reported Against Females by Relationship for Years 2018 – 2020 provided by the JCF Statistics and Information Management Unit. Court data were provided by the judiciary, and health data were provided by the MoH.

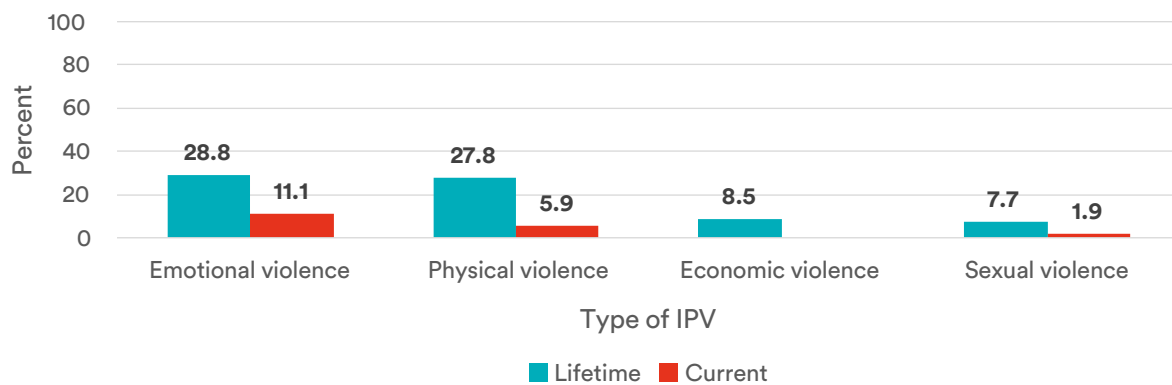
3.4.3 VAWG Prevalence Rates

The *Women’s Health Survey 2016 Jamaica* was conducted with support from UN Women, Inter-American Development Bank (IDB) and STATIN. The survey covered a wide range of pertinent issues related to women’s health and lives, and included a module on intimate partner and non-partner violence. This module measured drivers and patterns of intimate partner and non-partner violence, and the effects of such violence on women’s health and well-being, along with their help-seeking behaviours and responses of service providers.

The survey was administered to a national population-based sample of 2,145 women aged 15-64. Findings from the survey revealed the prevalence of lifetime and current (in past 12 months) experiences of IPV among women aged 15-64 (**Chart 3.1**).



Chart 3.1. Lifetime and current experiences of IPV among women aged 15-64, 2016 (%)



Source: Women's Health Survey 2016 Jamaica

3.4.4 Online Survey of VAWG Survivors

The online survey of VAWG survivors also measured out-of-pocket expenses incurred by VAWG survivors and their families. **Table 3.4** shows that a large proportion of out-of-pocket expenses relate to transportation (47 per cent), rent and/or moving costs (35 per cent), purchases to replace lost/damaged property (29 per cent) and costs of moving children to a new school (29 per cent). Unit costs in JMD are provided for each of the different categories of out-of-pocket personal expenses. It is also notable that 40 per cent of out-of-pocket expenses related to VAWG were paid by victims and 27 per cent were paid by parents/family. Out-of-pocket expenses are rarely covered by perpetrators (3 per cent) or CSOs (10 per cent).

Table 3.4. Out-of-pocket personal expenses related to VAWG

Personal expenses	%	Unit Cost (JMD)
Transportation	47	10,500
Ambulance services	12	20,000
Diagnostic treatments and medicine	24	23,750
Inpatient services	18	10,625
Legal services	18	20,500
Purchases to replace lost/damaged property	29	73,000
Rent and/or moving costs	35	32,187
Costs of moving children to a new school	29	50,000
Other costs	18	19,600

Source: Online survey of VAWG survivors

VAWG survivors were also asked to express their perceptions or understanding of the economic costs of VAWG. **Box 3.2** highlights the voices of some VAWG survivors.

Box 3.2. Voices of VAWG survivors

“To be honest, I don’t know. A house for me and for my kids as well as one million to start a business.”

“There is no amount of money that can compensate for being abused mentally and physically. Honestly, nothing can compensate for what I have been through.”

“There is no dollar value that can appropriately be placed on the trauma and ordeal that a victim endures. And if one could, I am sure it would be dependent on the individual. For me, I would say \$500,000 for the last 12 months alone.”

“I can’t put a price on my mental stability unless that includes affordable housing and court ordered legal guardianship of my children to me, and mandatory fair childcare expenses paid, and keeping him away from my house.”

“For family members to be educated on HIV and full family support, whether financially or just to be loved as a human being, and to be understood.”

“The truth is, no amount of money can truly compensate for what I have gone through but if was to really put a price, I would say 2.5 million. That would get me started back my life and to support my two children.”

“I am not sure how to answer this question, but I think what could be fair is that I should have left when the violence just started. It is not fair for any woman and her kids to live in any violence just to make a family life.”



Chapter 4

Estimated Direct Costs (Typical Case) of VAWG in Jamaica

This chapter focuses on estimates of the direct costs (typical case) of VAWG in Jamaica, including healthcare costs, law enforcement and court costs, costs of specialized services, costs of learning time lost, personal costs and personal income lost.

4.1 Healthcare Costs

It is universally recognized that loss of health and well-being are among the most notable losses suffered by VAWG survivors. The World Health Organization (WHO) defines individual health as “*a state of complete physical, mental and social well-being, and not merely the absence of diseases or infirmity.*”⁵² In 2013, the WHO proposed three groups of health effects to measure when assessing loss of health due to VAWG – physical injuries (traumas), psychological trauma and stress disorders, and fear and effect of controlling behaviour.⁵³

Healthcare costs related to **physical injuries (traumas)** are usually estimated and recorded since data required to calculate such estimates are typically available, even if not in the best possible format or with the best possible coverage. In some developed countries, costs for **psychological trauma and stress disorders** have also been estimated because data are available in administrative medical records. In most countries, however, measurement of psychological trauma and stress is not attempted. Finally, costs of **fear and the effects of controlling behaviours** are difficult to measure as they are costs associated with postponed effects; thus, measurement is not attempted due to a lack of data or lack of clarity as to how to estimate the costs of fear and effects of controlling behaviours.

Administrative data, such as medical records and bills, are the main data source for determining healthcare costs. In some developing countries, reviews of administrative data in healthcare systems have been conducted to estimate healthcare costs related to VAWG. Such reviews, however, have been complicated by a lack of medical data and statistics that identify health

⁵² Constitution of the WHO adopted by the International Health Conference, New York, 19–22 June 1946; signed on 22 July 1946 by representatives of 61 Member States (Official Records of the WHO No. 2, p. 100) and entered into force on 7 April 1948.

⁵³ WHO Global Health Estimates. Retrieved on 2 April 2022 from: [Global Health Estimates \(who.int\)](https://www.who.int/global-health-estimates)

losses due to VAWG⁵⁴ and/or lack of sex-disaggregated data and data that identifies the proportion of total health sector budget allocated to healthcare services received by VAWG survivors.⁵⁵

Given these data challenges, the following approaches have been adopted in several studies to estimate costs of physical injuries (traumas):

- Physical (bodily) injuries and sexual violence are included in estimations based upon data obtained from health statistics departments; and
- A ‘unit cost’ approach has been utilized, which provides a minimum for doctor/staff time, fees, diagnostic tests and medical procedures for each ‘typical’ incident of VAWG or VAWG survivor.

In Jamaica, the consultancy team faced tremendous challenges when it came to gathering data from healthcare services. The only data provided was violence-related injuries data for 2015-2020; no data on unit costs of various healthcare services were provided. A number of factors may have contributed to this outcome, including lack of data collection protocols in healthcare services (i.e., structural aspects) and/or healthcare services were overstretched due to COVID-19 and could not allocate adequate time for data compilation (i.e., temporal aspects).

To overcome this challenge, three strategies were used to collate data and estimate healthcare costs.

- Consider the number of women and girls who were physically injured as a result of a physical assault in 2018, including by intimate partners and non-partners.
- Collect injury data from the Jamaica Injury Surveillance System (JISS). The JISS is operational in nine hospitals in Jamaica, including Kingston Public Hospital, Bustamante Hospital for Children, Spanish Town Hospital, May Pen Hospital, Mandeville Regional Hospital, Savanna-La-Mar Hospital, Cornwall Regional Hospital, St. Ann’s Bay Hospital and Annotto Bay Hospital. JISS data are collected electronically at healthcare facilities, but are not linked at the central-level.
- Consider the number of rape cases against women and girls reported to police as sexual assault in 2018, including by intimate partners and non-partners.

The information source for these data are *Crime Reports Against Females by Relationship* for the periods of 2018-2020 and 1 January – 31 March 2021. These reports were prepared by the JCF Statistics and Information Management Unit.

It is also notable that per capita health expenditures for 2018 were used as a proxy for the unit cost. In 2018, Jamaica’s per capita health expenditures⁵⁶ was 321 USD; estimates of current health expenditures include healthcare goods and services consumed during each year. Using

54 The current system for documenting injuries does not mandate registration of the causes of injuries or causes of discomfort, thereby making it impossible to identify cases of domestic and/or sexual violence in medical records.

55 Healthcare institution expenses are financed via line-item budgeting, make it difficult to identify the actual cost of specific healthcare services.

56 Per capita health expenditures take into account government, out-of-pocket and other expenditures

the 2018 currency exchange rate of 1 USD=128.53 JMD, per capita health expenditures were estimated to be JMD 41,258.

Since per capita healthcare expenditures were used as a proxy for unit costs, a related issue is who pays for healthcare expenditures. An analysis of health finance data for 1995-2011 suggests that there are three main sources. General government expenditures account for about 54 per cent of total healthcare expenditures, whereas private health insurance covers about 12 per cent and household budget (known as out-of-pocket spending) covers the remaining 33 per cent.⁵⁷

Table 4.1. Data used to calculate healthcare costs estimates

Indicators	Value	Data Source
# of assaults/acts of violence against females	3,046	JISS
# rapes/sexual assaults of females	527	JCF
Per capita health expenditures	41,258 JMD	World Bank

The following formula was used to estimate healthcare costs related to physical and sexual violence against women by intimate partner and non-partners for each service or category:

$$Healthcare\ Cost_i = Data_i \times Unit\ Cost_i$$

Where, i =1 and 2 (1=physical assault, 2=sexual violence)

Table 4.3 reveals estimated healthcare costs related to physical and sexual violence against women based upon calculations using the above formula.

Table 4.3. Estimated healthcare costs for VAWG-related injuries

Indicators	Data	Unit cost	Total Cost (JMD)
Physical assault	3,046	49,509.755	125,672,264
Sexual assault	527	41,258.130 ⁵⁸	26,091,641
Total			151,763,905
Memorandum Items (distribution financing by sources)			
General government	54%		81,952,509
Private insurance	12%		18,211,669
Out-of-pocket	33%		51,599,728

57 WHO Global Health Expenditure Database; National Health Accounts in Jamaica.

58 In 2013, the WHO defined the costs for treating traumatic cases of sexual violence to include psychological support, emergency contraception, treatment and prevention of sexually transmitted infections (STIs), adequate prevention of HIV-infection, information on safe abortion and more. Costs may also include at least one consultation with a gynaecologist, an ultrasound pelvic organs and mandatory testing for STIs, HIV and hepatitis.



4.2 Law Enforcement and Court Costs

Law enforcement and court costs are based upon data from the MoJ and activities of Family Courts in Jamaica. MoJ also provided victim data and data related to judges’ salaries. **Table 4.4** shows data estimates for law enforcement and court costs.

Table 4.4. Data used to estimate law enforcement and court costs

Indicators	Value	Data Source
# complaints (administrative offences)	5,673	MoJ
# protection orders issued	4,560	MoJ
# probation orders issued	1,234	MoJ
# eviction orders issued	147	MoJ
# persons sent to prison for VAWG	76	MoJ
Unit Costs		
Hourly wage of a judge (JLG/LO 2)	867	MoJ
Hourly wage of a judge (JLG/JD 1)	2,101	MoJ
Hourly wage of a judge (JLG/JD 2)	2,353	MoJ
Daily cost of detention	3,562	Web search ⁵⁹

Discussions with the judiciary resulted in data and information related to the number of judges involved per case and days and hours spent per case; this information is included in the formula for estimating law enforcement and court costs. The following formula was used to estimate law enforcement and court costs.

$$Law\ Enforcement\ and\ Judiciary\ Cost_i = Data_i \times Days_i \times Hours_i \times Unit\ Cost_i$$

Where, i =1 to 5 (1=registration, 2=protection, 3=probation, 4=eviction and 5=prison).

Table 4.5 reveals estimated law enforcement and court costs based upon calculations using the above formula. Since different categories of judges were involved in probation and eviction cases (with different unit costs) there are two rows of calculations for each of these indicators.

59 How Much Does It Cost Taxpayers to Fee Prison Inmates Each Year. diGJamaica, 5 October 2015. Retrieved on 28 March 2022 from: [How Much Does It Cost Taxpayers To Feed Prison Inmates Each Year? —diG Jamaica](#)



Table 4.5. Estimated law enforcement and court costs related to VAWG

Indicators	Number	# Staff	Days ^a	Hours	Unit Cost (JMD)	Total cost (JMD)
Registration and administration costs	5,673	1	1	4	867	19,673,964
Protection orders issued	4,560	1	10	8	2,101	766,444,800
Probation orders issued (JLG/JD 1)	1,234	1	21	4	2,101	217,781,256
Probation orders issued (JLG/JD 2)	1,234	1	21	4	2,353	243,902,568
Probation total costs (Probation orders issued JLG/JD 1 + JLG/JD 2)						461,683,824
Eviction orders issued (JLG/JD 1)	147	1	28	4	2,101	34,590,864
Eviction orders issued (JLG/JD 2)	147	1	28	4	2,353	38,739,792
Eviction total costs (Eviction order issues JLG/JD 1 + JLG/JD 2)						73,330,656
Long-term detention (prison)	76		180		3,562	48,723,288
Total cost						1,369,856,532

^a Days refer to the approximate number of days as the duration of the case.

Note: Different categories of judges were involved in probation and eviction cases (with different unit costs); therefore, there are two rows of calculations for each of these indicators.

4.3 Costs for Specialized Services

Costs related to specialized services include costs of support provided by the MoJ Victim Support Division (VSD), Woman Inc. Jamaica, the CPFSA and Bureau of Gender Affairs (BGA), including shelter and hotline services. **Table 4.6** shows that in 2018, the full cost of specialized services was estimated to be JMD 1,433,439,264.

Table 4.6. Costs for specialized services, 2018

Services/Agencies	Costs (JMD)
Shelter	312,000
Hotline	547,500
Child Protection Unit	1,305,356,116
MoJ Victim Services Division (VSD)	88,530,000
BGA	38,693,648
Total	1,433,439,264

The sections that follow provide a more detailed description of the costs in Table 4.6.

4.3.1 Costs of Support Provided by the MoJ Victim Support Division (VSD)⁶⁰

MoJ's VSD is responsible for assisting and providing justice to victims of crimes. The VSD has a Director and Regional Directors, and 65 staff who cover 14 parish offices. Each parish office is staffed by a Victim Services Manager, Victim Services Officer (Social Worker) and a Victim Services Clerk. The VSD is assisted by volunteers selected from each district within parishes. Since its inception in 1998, the VSD has served more than 200,000 victims, about 11,000 victims per month across the 14 parish offices.⁶¹

The VSD provides the following services:

- **Emotional support** – includes mediation, counselling and trauma assessments.
- **Crisis intervention** – crisis intervention is provided especially in cases where the victim(s) may require urgent care/attention and can be delivered through telephone counselling, on-the-scene response and/or home visits.
- **Court orientation/readiness** – includes preparing and orienting victims to understand court processes and proceedings, and providing necessary support during and after case dispositions.
- **Training** – offers training to professionals and personnel working on victims' issues.
- **Advocacy (referrals)** – entails advocating on behalf of victims (e.g., if a victim requires psychiatric help, the VSD will speak on behalf of that victim and refer her to a specific facility/service provider).

The VSD also implements a Violence Prevention Initiative, which entails: public awareness-raising as to the social and psychological impacts of crime; providing information to crime victims about victim's rights; promotion of crime prevention tips; and operational strengthening of networking among victim support organizations.

The VSD also provides the following special interventions:

- **West Kingston Satellite Counselling Centre** – provides counselling and emotional support to residents in West Kingston Parish.
- **Special Intervention Programmes** – provides therapy to at-risk and child crime victims.

⁶⁰ Based on the information provided by MoJ VSD.

⁶¹ Prior to COVID-19, clients were accommodated by face-to-face counselling, telephone counselling, on-the scene-response, home visits and walk-in services. In response to COVID-19, VSD upgraded its e-counselling services which now account for approximately 80 per cent of clients served monthly. Service points have been upgraded through relocation and renovation which include offices in Trelawny, St. Mary, St. Catherine and Westmoreland Parishes. Development of a data management portal is actively being worked on to facilitate administrative expansion and client servicing.



Special Intervention Programmes offer:

- **Cultural Resocialization** – a one-day intervention for at-risk and child crime victims aged 6-18 from inner-city communities through the use of cultural sensitization, cognitive restructuring, behaviour modification and teaching coping skills.
- **Overcomers in Action** – provides group counselling therapy and support to facilitate healing and restoration to female victims of sexual violence/abuse.
- **School-based Special Intervention Project** – provides therapy to at-risk and child crime victims in inner-city and other schools to build the capacities of parents, teachers and peers.
- **National Volunteer Programme** – mobilizes volunteers to expand the support base for victims of crime.
- **Parenting Focus** – provides support to parents/guardians/caregivers via parenting information, mentoring support from other parents, and diagnostic and therapeutic services.

Table 4.7 show VSD budget allocations and actual expenditures for the Government of Jamaica (GoJ) and allocated under the Citizen Security and Justice Programme (CSJP).

Table 4.7. VSD budget allocations and actual expenditures, 2017-2019

Fiscal Year	GoJ (JMD Million)		CSJPIII (JMD Million)	
	Budget Allocations	Actual Expenditures	Budget Allocations	Actual Expenditures
2017/2018	143.29	135.38	41.40	31.05
2018/2019	172.69	158.37	45.70	29.32

The following approaches were considered for incorporating VSD expenditures under the purview of the economic costing framework for VAWG.

Since the budget is consolidated, it is not possible to determine the proportion of budget used exclusively for VAWG. Since the VSD also provides services to victims of crimes not related to VAWG, a proportional approach of 50 per cent was used to assess VSD's expenditure on VAWG in 2018.

- Budgets are for the fiscal year, therefore, it may not be correct to assign actual expenditures for 2017/2018 as expenditures for 2018, or to assign actual expenditures for 2018/2019 as expenditures for 2018. Thus, average actual expenditures across these two fiscal years was used as the estimate of VSD expenditures for 2018.

Table 4.8 shows the costs incurred by the VSD using the two abovementioned approaches.

Table 4.8. Estimated VSD costs (JMD)

Budget Source	2017/18 (JMD), a	2018/19 (JMD), b	2018 [c = (a + b)/2]
GoJ	135,380,000	158,370,000	146,875,000
CSIP	31,050,000	29,320,000	30,185,000
Total	166,430,000	187,690,000	177,060,000

4.3.2 Costs of Shelter and Support Provided by Woman Inc. Jamaica⁶²

Woman Inc. Jamaica is a registered charitable NGO in Jamaica that was established in 1984. In 1985, Woman Inc. opened the Crisis Center for Women which offers crisis counselling, referral services and a 24-hour hotline. Issues addressed by Woman Inc. Jamaica, include domestic violence, sexual violence, incest, sexual harassment and domestic crisis. In 1988, Woman Inc. opened the Crisis Shelter which offers short-term shelter to VAWG survivors and their children, particularly survivors of domestic violence, rape and incest. Victims must be 18 years of age or older to stay in the shelter.

Woman Inc. also organizes fundraising events, such as the annual trade fair, and offers seminars and workshops that aim to raise awareness among community members and police officials to issues of VAWG and the services provided by Woman Inc. Jamaica. Woman Inc. Jamaica also mobilizes and networks with other organizations to facilitate legislative reform related to VAWG.

Services provided by Woman Inc. Jamaica include:

- **Crisis Centre** – provides counselling to hundreds of VAWG survivors.
- **Crisis Shelter** – runs the only Crisis Shelter in Kingston which functions as a temporary shelter for women in crisis and in need of protection; the location is kept confidential for women's safety.
- **Hotline** – the Crisis Centre in Kingston provides a 24-hour hotline service and offers walk-in services Monday thru Thursday, 9:00 am – 5:00 pm and Friday, 9:00 am – 4:00 pm.
- **Woman Inc. Hostel and Training Centre** – the Hostel and Training Centre is run in December for female youth aged 18-25. Female youth chosen for this programme are typically in need of long-term assistance, especially those who leave the government children's homes at 18 years of age and who have neither family support, nor skills to fit them for employment. The programme combines residence with skills training for female youth (i.e., one-year placement).
- **Public Education Committee** – the public education programme was introduced in 1989, and aims to raise awareness as to the high incidence and impacts of domestic violence, rape, incest and other forms VAWG in Jamaica.
- **Legal Aid Clinic** – three attorneys-at-law conduct legal aid advisory sessions for Crisis Centre and Crisis Shelter clients every other Saturday, and clients are accompanied to court and provided with legal representation during court appearances, when necessary.
- **Work with the JCF** – in the past, new police recruits have benefited from sessions conducted by counsellors from Woman Inc. during their academy training, which was established by the Police Training Academy at Twickenham Park.

⁶² Information presented was provided by Woman Inc. and gathered from the CSOs website: [Woman Incorporated \(Crisis Centre\) – Do Good Jamaica](#)

Costs for VAWG-related services provided by Woman Inc. include:

- Crisis Shelter⁶³ can accommodate eight women for about three weeks, however, during the COVID-19 pandemic only four women were provided shelter.
- Per day costs for operating the 24-hour hotline are JMD 1,500; estimated yearly costs are JMD 547,500.
- Monthly costs for operating the Crisis Shelter are JMD 26,000; estimated yearly costs are JMD 312,000.

4.3.3 Costs of Services Provided by Child Protection and Family Services Agency (CPFSA)⁶⁴

CPFSA was formed as a result of a merger between the Child Development Agency and the Office of Children's Registry, both of which were important institutions in Jamaica's child protection system. Today, the CPFSA is under the authority of the MoE and works collaboratively with the Office of the Children's Advocate (OCA), JCF and other governmental agencies. The goal of the CPFSA is to promote child-friendly policies and implement programmes to strengthen families. CPFSA's corporate office is in Kingston and there are four regional offices and 14 parish offices, along residential childcare facilities.

CPFSA is headed by a Chief Executive Officer and Division and Regional Directors, along with 600 staff, including social workers, investigators, intake officers, psychologists and other child protection specialists (e.g., children's officers) who serve children and families, provide protection and care to children, and empower children to maximise their potential. CPFSA also has legal officers, public relations specialists, accountants and administrative staff.

CPFSA safeguards children from becoming at-risk through child rights advocacy and public education, and ensures the safety, security and well-being of children at-risk of neglect, abuse and violence, including children with disabilities. CPFSA delivers the following programmes and services:⁶⁵

- Intake, investigation and court services
- Overseas investigations
- Residential services
- Counselling services
- Living in Family Environments (LIFE) Programme
- Primary prevention programmes
- Police lock-up surveillance

⁶³ In 2017, the Crisis Shelter in Kingston was renovated and expanded to house more women and their children who are victims of violence. The five-month project was undertaken by the GoJ with more than USD 14 million in funding from the United States Agency for International Development (USAID). Among the amenities offered are bedrooms, a kitchen, bathrooms, housemother's room, consulting room for counselling services, recreation and dining room, gazebo and garden area, and reading room/quiet area. The building is disabled-friendly. Ground Broken for Renovation and Expansion of Women's Shelter. Retrieved on 28 March 2022 from: [GROUND BROKEN FOR RENOVATION AND EXPANSION OF WOMEN'S SHELTER | Jamaica](#)

⁶⁴ Retrieved on 28 March 2022 from: [Who We Are \(childprotection.gov.jm\)](#)

⁶⁵ CPFSA provides residential childcare services. It is directly responsible for the operation and management of eight government-run children's homes, as well as monitors and licenses another 40 or more private children's homes.

In 2018, CPFSA's actual expenditures were JMD 2,610,712,232.⁶⁶ CPFSA expenditures were incorporated into the economic costs framework for VAWG. Since the budget is consolidated, it is not possible to determine the portion of the budget used exclusively for VAWG. Because of the lack of clarity, a proportional cost approach of around 50 per cent has been adopted. In 2018, costs incurred by CPFSA for VAWG-related support was estimated at JMD 1,305,356,116.

4.3.4 Costs of Services Provided by Bureau of Gender Affairs (BGA)

In 2018, the total cost of services provided by BGA was JMD 44,924,250 (Table 4.9). Since the budget is consolidated, it is not possible to determine the portion of the budget used exclusively for VAWG; thus, a 'full operational' cost approach was used. In 2018, costs incurred by BGA for VAWG have been estimated at JMD 44,924,250. Although, discussions with BGA suggests that most of their activities to a varying extent related to VAWG, they were unable to separate each budget line by VAWG and non-VAWG categories. However, services such as counselling, shelter and social work have been considered to support VAWG victims. Following this approach, the expenditure related to VAWG in 2018 has been estimated at JMD 44,924,250.

Table 4.9. BGA estimated expenditures related to VAWG, 2018

Expenditure Items	Cost (JMD)
Information sessions	780,751
Gender mainstreaming	250,000
Knowledge services	139,895
Counselling services	25,000
Shelter services	34,000,000
Other services	5,059,956
Social workers	4,668,648
Total costs	44,924,250
BGA expenditures identified as specific to VAWG, 2018	Cost (JMD)
Counselling services	25,000
Shelter services	34,000,000
Social workers	4,668,648
Total VAWG costs	38,693,648

⁶⁶ According to CPFSA, these are aggregated costs; thus, information (e.g., medical services, counselling and more) is not broken down by children's homes, places of safety or foster care, especially for children who have been victims of violence. Also, CPFSA does not have access to the financials of private facilities that receive donations from private donors in addition to funding from the government.

4.4 Costs of Learning Time Lost

Children are negatively impacted by domestic violence as direct and indirect victims of the violence. Exposure to domestic violence can cause physical and emotional harm to children, including causing anxiety and depression, hurting children's self-esteem, impacting their behaviour (e.g., displays of aggression and engagement in risky behaviours) and negatively impacting their academic performance (i.e., inability to concentrate at schools, missed school days and poor grades). Data related to these indicators are not collected by schools or the MoE.

In Seychelles and Lesotho's VAWG costing studies, site visits were arranged to schools to gather information related to learning time lost for child victims of domestic violence. Outcomes of this approach, however, were mixed. For instance, in Seychelles, site visits to schools generated useful information, such as teachers' claims that learning time lost due to domestic violence was between 25 and 35 per cent of the total learning time in a year. In comparison, in Lesotho, the schools were unable to provide the information on learning time lost.

In Jamaica, site visits to schools could not occur because schools were closed to prevent the spread of COVID-19; nevertheless, the consultancy team still believed it was important to estimate learning time lost due to domestic violence. Therefore, building upon lessons learned from the Lesotho VAWG costing study, an alternative approach was attempted in Jamaica. First, existing literature was reviewed to understanding data related to the extent of learning time lost in other countries. Next, learning time lost data used in the Seychelles VAWG costing study were considered. Then, budget allocation for the education sector, especially primary and secondary education, was determined.

Box 4.1. Case study of the impact of VAW on children and learning time lost in England

In England, although not directly measured, statistics from the Department of Education offers an estimate of the extent of learning time lost in schools among children affected by VAW. In 2017, the Department for Education estimated that 646,120 children were referred to children's social care in England; police reported the highest number of referrals at 28 per cent, followed by schools at 18 per cent and healthcare services at 14 per cent. School referrals, combined with education service referrals of 3 per cent, implies that the education sector accounted for 21 per cent of referrals overall. The assessment of referred cases also identified factors for referrals.

According to the Department of Education, in 2016–2017, the most common factor was domestic violence, which accounted for 50 per cent of children in need. The second most common factor was mental health at 40 per cent, which encompassed mental health of the child and/or adults in the household. In the United Kingdom, the incidence of domestic violence is not only high among children in need, but also among the wider population, with as many as one in six young people reporting they experienced domestic violence in childhood.

Sources:

Lloyd, M. (2018). Domestic Violence and Education: Examining the Impact of Domestic Violence on Young Children, Children, and Young People and the Potential Role of Schools. *Frontiers in Psychology*, 13 November 2018. Retrieved on 18 June 2022 from: [Frontiers | Domestic Violence and Education: Examining the Impact of Domestic Violence on Young Children, Children, and Young People and the Potential Role of Schools | Psychology \(frontiersin.org\)](https://www.frontiersin.org/journal/10.3389/fpsyg.2018.01111)

Radford, L., Corral, S., Bradley, C., Fisher, H., Bassett, C., Howat, N., et al. (2011). *Child Abuse and Neglect in the UK Today*. National Society for the Prevention of Cruelty to Children (NSPCC): London, UK.. Retrieved on 28 May 2022 from: [Child abuse and neglect in the UK today \(uclan.ac.uk\)](https://www.nspcc.org.uk/what-we-do/our-research/child-abuse-and-neglect-in-the-uk-today/)



Box 4.2. Case study of the impact of VAW on children and learning time lost in Seychelles

	Primary School	Secondary School
No. students	609 (65% girls, 35% boys)	600 (55% girls, 45% boys)
No. teachers	50	50
Ways to detect	<ul style="list-style-type: none"> • Child protection officer's observation • Teacher's observations of physical injuries, absenteeism, erratic behaviour, neglect, school dropout 	<ul style="list-style-type: none"> • Child protection officer's observation • Teacher's observations of physical injuries, absenteeism, erratic behaviour, neglect, school dropout
Vital signs	<ul style="list-style-type: none"> • Neglect 1/10 = 10% • Physical injury 1/20 = 5% 	
Learning time lost	35% of effective learning time	25% of effective learning time

Note: Learning time lost estimated are taken from the Seychelles study.

The proportional cost approach was adopted to convert learning time lost to a monetary measure. In 2018, according to the budget speech, JMD 64,128,728,000 was allocated to primary and secondary education in Jamaica. **Table 4.10** shows the extent of learning time lost was set at 15 per cent for Jamaica, in keeping with the review of existing literature. It was also assumed that there is a one-to-one correlation between learning and the education budget; in other words, one JMD spent on education leads to one JMD worth of learning.

Table 4.10. Data used to estimate learning time lost in Jamaica

Indicator	Value	Source
Education budget (for primary and secondary education)	64,128,728,000	Ministry of Finance, Budget Speech 2018
Extent of learning time lost	15%	Assumption

The following formula was used to estimate the costs of learning time lost.

$$\text{LearningTime Lost}_i = \text{Budget}_i \times \text{Proportional Cost}_i$$

Table 4.11 shows data used to estimate the costs of learning time lost, using the above formula.

Table 4.11. Estimated costs of learning time lost in schools (Loti)

Category	Data	Percent	Total cost (Loti)
Total Education Budget	64,128,728,000	15% (0.15)	=> (64,128,728,000) x 0.15 = 9,619,309,200
Total learning time lost			9,619,309,200

4.5 Personal Costs

Given the fact that few VAWG survivors access essential services in Jamaica, the assessment of personal costs or out-of-pocket expenses incurred by VAWG survivors and/or their families may turn out to be an important cost. Because personal costs were not readily available from service providers in Jamaica, the survey conducted with VAWG survivors was the main source of data, and possibly the only source of data, used to estimate personal costs of VAWG. **Table 4.12** shows the indicators and data used to assess personal costs related to VAWG.

Table 4.12. Indicators and data used to estimate personal costs of VAW, 2018

Indicators	Value	Data Source
No. women who sought help	5,673	Judiciary
% VAW survivors who incurred transportation costs	0.471	Survey/Interview
% VAW survivors who incurred ambulance call costs	0.118	Survey/Interview
% VAW survivors who incurred medical diagnostic costs	0.235	Survey/Interview
% VAW survivors who incurred in-patient services costs	0.176	Survey/Interview
% VAW survivors who incurred legal costs	0.176	Survey/Interview
% VAW survivors who lost property due to violence	0.294	Survey/Interview
% VAW survivors who incurred moving/rent costs	0.353	Survey/Interview
% VAW survivors who incurred costs related to moving their children to new school	0.294	Survey/Interview
% VAW survivors who incurred other costs due to violence	0.176	Survey/Interview
Unit costs		
Average value of transport costs (JMD)	10,500	Survey/Interview
Average value of ambulance call costs (JMD)	20,000	Survey/Interview
Average value of medical diagnostic costs (JMD)	23,750	Survey/Interview
Average value of in-patient services costs (JMD)	10,625	Survey/Interview
Average value of legal services costs (JMD)	20,500	Survey/Interview
Average value of property loss costs (JMD)	73,000	Survey/Interview
Average value of moving/rent costs (JMD)	32,187	Survey/Interview
Average value of costs of moving children to a new school (JMD)	50,000	Survey/Interview
Average value other personal expenses incurred (JMD)	19,600	Survey/Interview

The following formula was used to estimate personal costs of VAWG, using data and parameters (indicators) in Table 4.12.

$$\text{Personal Cost}_i = (\text{Data}_i \times \text{Parameter}_i) \times \text{Unit Cost}_i$$

Where, $i = 1$ to 9 ($1 =$ Personal expenses for transportation; $2 =$ Personal expenses for ambulance call; $3 =$ Personal expenses for diagnostic and medicine; $4 =$ Personal expenses for in-patient services; $5 =$ Personal expenses for legal services; $6 =$ Cost of property damage; $7 =$ Cost of rent; $8 =$ Cost of moving children to new school; and $9 =$ Personal expenses incurred for other items).

Table 4.13 shows the data used to estimate personal costs of VAWG, using the above formula.

Table 4.13. Estimated personal costs of VAW (JMD)

Category	Number	Percent	Unit Cost (JMD)	Cost (JMD)
Personal expenses for transportation	5,673	0.471	10,500	28,056,000
Personal expenses for ambulance call	5,673	0.118	20,000	13,380,000
Personal expenses for medical diagnostics	5,673	0.235	23,750	31,658,750
Personal expenses for in-patient services	5,673	0.176	10,625	10,603,750
Personal expenses for legal services	5,673	0.176	20,500	20,459,000
Cost for lost property due to violence	5,673	0.294	73,000	121,764,000
Cost for moving/rent	5,673	0.353	32,187	64,470,561
Cost of moving children to new school	5,673	0.294	50,000	83,400,000
Personal expenses for other costs due to violence	5,673	0.176	19,600	19,560,800
Total personal cost				393,352,861

4.5.1 Personal Income Lost

VAWG also leads to income losses for VAWG survivors and their families, as well as communities and the whole-of-society. Income loss typically results from violence-related injuries, mental health problems, disabilities and/or death, as well as fears for one’s safety and security. VAWG-related income loss is usually classified into three categories:

- Death – income equivalent (income forgone) of irreversible losses (VAWG-related death)
- Disability – income loss due to temporary or permanent incapacity (disability) of VAWG survivors
- Physical and emotional trauma – income loss arises out of employment termination or reduced labour productivity

Value of statistical life (VSL) and disability-adjusted life years (DALYs) have been used to estimate income losses related to these irreversible (death) and reversible (disorders) categories.

Value of statistical life (VSL) – This approach estimates the lost life value (i.e., it is applicable where death has occurred) based on lost future income and intangible costs, such as lost employment life and lower quality of life for surviving dependents. It is very difficult to provide a monetary equivalent to lower quality of life for surviving dependents; thus, it is argued that ‘loss in life’ has no market value. As such, the VSL approach to estimate income loss has only been attempted in some developed countries. Table 4.14 highlights estimated income losses in some developed countries using the VSL approach.



Table 4.14. Income losses in some developed countries using the VSL approach

Country	Study Year	VSL (USD Millions)
Australia	1991	5.3
Canada	1999	2.9
Canada	2001	5.1–23.1
Hong Kong	1998	2.1
India	2001	1.3–1.8
UK	2000	38.4
USA	1990	4
USA	1993	4.9–11.5
USA	1996	4
USA	2000	2.9–6.1
USA	2000	4.0–11.9
USA	2003	3.4
USA	2004	6.4
USA	2008	4.3–9.5
USA	2008	7.0–12.5

Source: Zhang, T., J. Hoddenbagh, S. McDonald & K. Scrim (2012). *An Estimation of the Economic Impact of Spousal Violence in Canada*, 2009. Department of Justice Canada, Research and Statistics Division: Ottawa, Canada.

Disability-adjusted life years (DALYs) – The concept of DALYs was introduced by the WHO to measure global losses due to disease burden, and is expressed as the number of years lost due to ill-health, disability or early death. Limitations related to DALYs include a lack of any systematic method to translate DALYs into monetary costs⁶⁷ and DALYs are data intensive and methodologically complex.⁶⁸

Considering the difficulties in applying both VSLs and DALYs due to a lack of data and the suitability of these two indicators to the Jamaican context, a much simpler unit cost approach⁶⁹ was adopted based on data related to VAWG-related deaths, female labour force participation rate, incapacity to work (or days not working) due to violence-related injuries, working life of women, and per capita GDP of an employed person.

The police typically have the most reliable data for VAWG-related deaths⁷⁰; such data were obtained from the JCF. VAWG-related disability data were not available in Jamaica; however,

67 In 2004, Access Economics used a method of deriving the value of a life year and ascribing a value to statistical life and applying this to DALYs to convert DALYs into dollar terms.

68 Duvvury, N, A. Callan, P. Carney & S. Raghavendra (2013). *Intimate Partner Violence: Economic Costs and Implications for Growth and Development*. *Women’s Voice, Agency, & Participation Research Series, No.3*. Work Bank Group: Washington, DC, USA.

69 Such an approach was adopted in the Ukraine VAWG costing study to estimate income lost due to VAWG.

70 JCF crime data include murder/homicide of females by immediate family, immediate and former intimate partners, in-laws, acquaintances, colleagues, other associations, relatives and extended relatives, residents, step- and half-relations and relationship not established.

violence-related injury data were obtained, particularly the extent of violence-related injuries (i.e., minor, medium and grievous injury).

In addition to hours spent at work, women also spend time on unpaid domestic and care work in the home/family (e.g., food preparation, cleaning, childcare). In surveys, VAWG survivors reported that as a result of VAWG, on a typical day, they were unable to perform, on average, six hours of domestic and care work in the home/family. In addition, in 2018, GDP per employed person was estimated using National Accounts and Labour Force Data. Table 4.15 shows data for each of these indicators.

Table 4.15. Indicators and data used to estimate personal income lost from VAWG

Indicators	Value	Data Source
No. deaths	129	Police
No. VAWG survivors	5,673	Judiciary
% VAWG survivors reporting minor injuries	68.4%	Survey/Interview
% VAWG survivors reporting medium injuries	21.1%	Survey/Interview
% VAWG survivors reporting grievous injuries)	10.5 %	Survey/Interview
Incapable to work for days due to minor injury	5 days	Economic Costs of Violence against Women in Ukraine. UNFPA & DFID, 2017
Incapable to work for days due to medium injuries	21 days	Economic Costs of Violence against Women in Ukraine. UNFPA & DFID, 2017
Incapable to work for days due to grievous injuries	42 days	Economic Costs of Violence against Women in Ukraine. UNFPA & DFID, 2017
Employment rate among working-age women	52.3%	Labour Force Data
Household work disruption rate for VAWG survivors	45.5%	Survey/Interview
Days incapable of household work	30 days	Survey/Interview
Average hours incapable of performing household work	6 hours per day	Survey/Interview
Unit costs:		
GDP per employed person per year – 2017 (JMD)*	1,241,331	National Accounts
GDP per employed person per data – 2016 (JMD)**	4,965	National Accounts

Note: *Although desirable, GDP data are disaggregated by sex; as an alternative, GDP data was used. In 2018, the GDP was 2,027,251,000,000, whereas the number of employed persons were 1,633,127; thus, GDP per employed person was JMD 1,241,331 (= 2,027,251,000,000/1,633,127). **Given that there are 250 working days in a year, the per day per employed person's GDP was calculated to be 4,965 (= 1,241,331/250).

Box 4.3. Categories of VAWG-related injuries

Severity of Injuries	Type of Injuries	Minimum Healthcare Services	Average Days Incapacitated
Minor injuries	<ul style="list-style-type: none"> • Bruises • Hematoma • Scratches 	<ul style="list-style-type: none"> • Examination by traumatologist • Bandaging 	5 days
Medium injuries	<ul style="list-style-type: none"> • Fractures • Dislocations • Superficial wounds 	<ul style="list-style-type: none"> • Emergency medical aid • Consultation of surgeon/traumatologist • Radiography in several projections • Primary surgical treatment of wounds • Surgical dressing • Imposing fixing bandages/ plaster • Local/general anaesthesia • Medication 	21 days
Grievous injuries	<ul style="list-style-type: none"> • Deep penetrating wounds • Traumatic brain injuries • Rape 	<ul style="list-style-type: none"> • Emergency medical aid • Consultation of surgeon • Radiography in several projections • Magnetic Resonance Imaging (MRI) • Surgery preoperative examination • Surgery • Surgical dressings • Local/general anaesthesia • Medications • Consultations of ophthalmologist, psychologist, neurologist in case of traumatic brain injury 	42 days

Note: Categories of VAWG-related injuries are based on WHO Injury Surveillance Guidelines which are used in the JISS.

The following formulas were used to estimate personal income lost due to irreversible (death) and reversible (disorders) categories.

Irreversible (death)

$$\text{Income Loss} = \text{Data (death)} \times \text{Unit Cost (GDP per employed person)}$$

Reversible (disorder)

Income loss from employment = [Data (number of survivors) x Parameter 1 (female employment rate) x Parameter 2 (extent of injuries) x Parameter 3 (days unable to work due to injuries)] x Unit cost (Estimated GDP per employed person per year)

Income loss from household activities = [Data (number of survivors) x Parameter 1 (median incapacity days) x Parameter 2 (average incapacity hours)] x Unit cost (Estimated GDP per employed person per year)

Table 4.16 reveals data used to estimated costs of lost income due to VAWG using the above formulas.

Table 4.16. Estimated costs of lost income due to VAWG

Indicators	n	Employment Rate (%)	Parameters			Unit Cost (JMD)	Total Costs (JMD)
			Extent of injuries	Days	Hours		
Irreversible (death)	129					1,241,331	160,131,699
Total irreversible							160,131,699
Reversible							
Employment income loss related to VAWG-related injuries							
Minor injuries	5,673	0.523	0.684	5		4,965	51,238,800
Medium Injuries	5,673	0.523	0.211	21		4,965	66,416,805
Grievous injuries	5,673	0.523	0.105	42		4,965	66,104,010
Total employment income lost							183,759,615
Household income loss	5,673		0.455	30	06	621	288,329,963
Total reversible							472,089,578
Total income lost							632,221,277

Note: Parameters refers to the proportion of VAWG survivors who reported their domestic and care activities in the home/family have been affected by VAWG.

Chapter 5

Estimated Direct Costs (Full Coverage Case) of VAWG in Jamaica

This chapter focuses on the estimated direct costs (full coverage case) for VAWG in Jamaica, including costs of healthcare services, law enforcement and court costs, personal costs and costs of income lost.

5.1 Estimating Direct Costs for a Full Coverage Case

In Jamaica, in 2018, the total population of women aged 15-64 was 955,206.⁷¹ According to the *Women's Health Survey 2016 Jamaica*, current prevalence rates⁷² of IPV among women aged 15-64 were:

- 11.2 per cent experienced emotional violence in the past 12 months
- 5.9 per cent of women were experiencing physical violence in the past 12 months
- 1.9 per cent experienced sexual violence in the past 12 months

Using these statistics, in 2018, the number of women who experienced IPV in Jamaica was estimated at 181,489⁷³ (or in any typical year), based upon the following calculation ($955,206 \times 0.19$). More specifically, the number of women who experienced intimate partner sexual violence was estimated at 18,149 (based upon the following calculation, $955,206 \times 0.019$). The number of women who experienced intimate partner physical violence was estimated at 56,357 (based upon the following calculation, $955,206 \times 0.059$). These statistics were used to calculate the full coverage case.

All other parameters and unit costs used in the typical case in Chart 4 are retained for full coverage case estimates; therefore, full coverage case estimates are influenced by the number of VAWG survivors estimated from the total population of females aged 15-64.

The costs of two cost drivers found in the typical case (i.e., costs of specialized services and learning time lost) remain unchanged under the full coverage case since they have been based on full coverage data (i.e., total cost of operating specialised services and total costs of learning

⁷¹ Williams, C.W. (2018). *Women's Health Survey 2016 Jamaica*. STATIN, IDB & UN Women: Bridgetown, Barbados.

⁷² Current IPV prevalence rates are the proportion of women aged 15-64 who experienced violence in the 12 months prior to the survey.

⁷³ The study does not address cumulative forms of violence.

time lost). Healthcare costs, law enforcement and court costs, personal costs and costs of income lost are recalculated for the full coverage case.

5.2 Healthcare Costs

Data generated for the full coverage case are based upon two indicators:

- Number of VAWG survivors seeking healthcare services was increased to 56,357, compared to 3,046 in the typical case
- Number of survivors of sexual violence was increased to 18,149, compared to 527 in the typical case

Table 5.1. Indicators and data used to estimate costs of health care services

Indicators	Value	Data Source
No. females who experienced physical IPV	56,357	Full coverage estimate
No. females who experienced sexual IPV	18,149	Full coverage estimate
Per capita health expenditures	41,258	Typical case

The following formula was applied to estimate the healthcare costs of physical and sexual violence for each service type of violence.

$$Healthcare\ Cost_i = Data_i \times Unit\ Cost_i$$

Where, i =1 physical assault and 2 = sexual violence.

Table 5.2 shows the estimated costs of healthcare services related to VAWG using the above formula.

Table 5.2. Estimated costs of healthcare services related to VAWG (full coverage case)

Category	Data	Unit Cost (JMD)	Total Cost (JMD)
Physical violence	56,357	41,258	2,325,184,432
Sexual violence	18,149	49,510	898,552,562
Total			3,223,736,994
Sources of financing	Proportion		
General government	0.54		1,740,817,977
Private insurance	0.12		386,848,439
Out-of-pocket	0.33		1,096,070,578

5.3 Law Enforcement and Court Costs

Indicators and data generated for the full coverage case highlight a number of differences compared to the typical case. These include:

- Number of VAWG-related survivors is 181,489 in the full coverage case, compared to 5,673 in the typical case.
- Number of protection orders is 145,882 in the full coverage case, compared to 4,560 in the typical case.
- Number of probation cases is 39,478 in the full coverage case, compared to 1,234 in the typical case.
- Number of evictions is simulated at 4,703 in the full coverage case, compared to 147 in the typical case.
- Number of persons sent to prison is 2,431 in the full coverage case, compared to 76 in the typical case.

Table 5.3. Indicators and data used to estimate law enforcement and court costs (full coverage case)

Indicator	Value	Data Source
No. complaints (administrative offences)	181,489	Full coverage estimates
No. protection orders issued	145,882	Full coverage estimates
No. probation orders issued	39,478	Full coverage estimates
No. evictions orders issued	4,703	Full coverage estimates
No. persons sent to prison due to VAWG	2,431	Full coverage estimates
Unit cost	JMD	
Hourly wage of a judge (JLG/LO2)	867	Typical case
Hourly wage of a judge (JLG/JD1)	2,101	Typical case
Hourly wage of a judge (JLG/JD2)	2,353	Typical case
Daily cost of detention	3,562	Typical case

The following formula was used to estimate law enforcement and court costs for VAWG.

$$Law\ Enforcement\ and\ Judiciary\ Cost_i = Data_i \times Days_i \times Hours_i \times Unit\ Cost_i$$

Where, i =1 to 5 (1 = registration, 2 = protection, 3 = probation, 4 = eviction and 5 = prison).

Table 5.4 shows estimated law enforcement and court costs related to VAWG using the above formula.



Table 5.4. Estimated law enforcement and court costs related to VAWG (full coverage case)

Indicator	Value	No. Staff	Days	Hours	Unit Cost (JMD)	Total Costs (JMD)
Registration and administration costs	181,489	1	1	4	867	629,403,852
Protection orders issued	145,882	1	10	8	2,101	24,519,846,560
Probation orders issued (Judge category, JLG/JD1)	39,478	1	21	4	2,101	6,967,195,905
Probation orders issued (Judge category, JLG/JD2)	39,478	1	21	4	2,353	7,802,861,478
Probation total costs (Probation orders issued JLG/JD 1 + JLG/JD 2)						14,770,057,383
Eviction orders issued (Judge category, JLG/JD1)	4,703	1	28	4	2,101	1,106,621,068
Eviction orders issued (Judge category, JLG/JD2)	4,703	1	28	4	2,353	1,239,352,390
Eviction total costs (Eviction order issued JLG/JD 1 + JLG/JD 2)						2,346,082,144
Long-term detention (prison)	2,431		180		3,562	1,558,741,540
Total cost						43,824,059,946

5.4 Personal Costs

Table 5.5 identifies the indicators and data used to estimate personal costs related to VAWG under the full coverage case. These data were updated from those used to calculate the typical case, with one exception, the number of women who sought assistance was estimated at 181,489 persons in the full coverage case versus 5,673 in the typical case.

Table 5.5. Indicators and data used to estimate personal costs (full coverage case)

Indicators	Value	Data Source
No. VAWG survivors who sought help	181,498	Full coverage case
% VAWG survivors who incurred transportation costs	0.471	Survey/Interview
% VAWG survivors who incurred ambulance call costs	0.118	Survey/Interview
% VAWG survivors who incurred medical diagnostic costs	0.235	Survey/Interview
% VAWG survivors who incurred in-patient costs	0.176	Survey/Interview
% VAWG survivors who incurred legal costs	0.176	Survey/Interview
% VAWG survivors who incurred property damage/loss costs	0.294	Survey/Interview
% VAWG survivors who incurred moving/rent costs	0.353	Survey/Interview
% VAWG survivors who incurred cost for moving children to new schools	0.294	Survey/Interview
% VAWG survivors who incurred other costs due to violence	0.176	Survey/Interview

Indicators	Value	Data Source
Unit costs	JMD	
Average value of transport costs	10,500	Survey/Interview
Average value of ambulance call costs	20,000	Survey/Interview
Average value of medical diagnostic costs	23,750	Survey/Interview
Average value of in-patient services costs	10,625	Survey/Interview
Average value of legal services costs	20,500	Survey/Interview
Average value of property damage/loss costs	73,000	Survey/Interview
Average value of moving/rent costs	32,187	Survey/Interview
Average value of costs of moving children to new schools	50,000	Survey/Interview
Average value other personal expenses incurred	19,600	Survey/Interview

The following formula was used to estimate personal cost of VAWG.

$$Personal\ Cost_i = (Data_i \times Parameter_i) \times Unit\ Cost_i$$

Where, $i = 1$ to 9 ($1 =$ Personal expenses for transportation, $2 =$ Personal expenses for ambulance call, $3 =$ Personal expenses for diagnostic and medicine, $4 =$ Personal expenses for in-patient services, $5 =$ Personal expenses for legal services, $6 =$ Cost of property damage, $7 =$ Cost of rent, $8 =$ Cost of moving children to new school, and $9 =$ Personal expenses incurred for other items).

Table 5.6 shows the data used to estimate personal costs related to VAWG for the full coverage case.

Table 5.6. Estimated personal costs of VAWG (full coverage case)

Category	Data	Parameters	Unit Cost (JMD)	Total Costs (JMD)
Personal transportation costs	181,489	0.471	10,500	897,550,500
Personal ambulance call costs	181,489	0.118	20,000	428,320,000
Personal medical diagnostic costs	181,489	0.235	23,750	1,012,937,500
Personal in-patient costs	181,489	0.176	10,625	339,383,750
Personal legal services costs	181,489	0.176	20,500	654,811,000
Personal property damage/loss costs	181,489	0.294	73,000	3,895,134,000
Personal moving/rent costs	181,489	0.353	32,187	2,062,092,342
Personal costs of moving children to new schools	181,489	0.294	50,000	2,667,900,000
Personal other expenses	181,489	0.176	19,600	626,063,200
Total personal cost				12,584,192,292

5.5 Costs of Income Lost

Table 5.7 shows indicators and data used to estimate the costs of income loss for the full coverage case. These data were updated from the typical case, with one exception, the number of VAWG survivors was estimated at 181,489 for the full coverage case, compared to 5,673 in the typical case.

Table 5.7. Indicators and data used to estimate income lost (full coverage case)

Indicators	Value	Data Source
No. deaths	129	Police
No. VAWG survivors	181,489	Full coverage case
% VAWG survivors who reported minor injuries	68.4%	Survey/Interview
% VAWG survivors who reported medium injuries	21.1%	Survey/Interview
% VAWG survivors who reported grievous injuries	10.5%	Survey/Interview
Unable to work for days due to minor injury	5	<i>Economic Costs of Violence against Women in Ukraine.</i> UNFPA & DFID, 2017
Unable to work for days due to medium injuries	21	<i>Economic Costs of Violence against Women in Ukraine.</i> UNFPA & DFID, 2017
Unable to work for days due to grievous injury	42	<i>Economic Costs of Violence against Women in Ukraine.</i> UNFPA & DFID, 2017
Employment rate among working-age women	52.3%	Labour Force Data
% VAWG survivors who reported being unable to perform household work	45.5%	Survey/Interview
# days unable to perform household work	30 days	Survey/Interview
Average hours unable to perform household work	6 hours	Survey/Interview
Unit costs		
GDP per employed person per year – 2017 (JMD) ^a	1,241,331	National Accounts
GDP per employed person per day – 2016 (JMD) ^b	4,965	National Accounts

^a In 2018, the GDP was 2,027,251,000,000 and the number of employed persons was 1,633,127; thus, GDP per employed person was JMD 1,241,331 (= 2,027,251,000,000/1,633,127).

^b Given there are 250 working days in a year, the per day per employed person's GDP was calculated as 4,965 (= 1,241,331/250).

The following formulas were used to estimate income loss under irreversible and reversible categories.

Irreversible (death)

$$\text{Income Loss} = \text{Data (death)} \times \text{Unit Cost (GDP per employed person)}$$

Reversible (disorder)

Income loss from employment = [Data (number of survivors) x Parameter 1 (female employment rate) x Parameter 2 (extent of injuries) x Parameter 3 (days unable to work due to injuries)] x Unit cost (GDP per employed person per year)

Income loss from household activities = [Data (number of survivors) x Parameter 1 (median incapacity days) x Parameter 2 (average incapacity hours)] x Unit cost (GDP per employed person per year)

Table 5.8 reveals indicators, data and parameters used to estimate income lost using the above formulas.

Table 5.8. Estimates of income lost due to VAWG (full coverage case)

Indicators	Data	Parameters				Unit Cost (JMD)	Total Costs (JMD)
		Employment Rate	Extent of injuries	Days	Hours		
Irreversible (death)	129					1,241,331	160,131,699
Total irreversible							160,131,699
Reversible							
Employment income loss							
Minor injuries	181,489	0.523	0.684	5		4,965	1,639,492,650
Medium injuries	181,489	0.523	0.211	21		4,965	2,124,190,845
Grievous injuries	181,489	0.523	0.105	42		4,965	2,114,077,140
Total income loss from employment							5,877,760,635
Household income loss	181,489		0.455	30	6	621	9,224,938,410
Total reversible							9,270,669,062
Total income loss							15,262,830,744

Table 5.9 shows the estimated total costs of violence in Jamaica for the typical case and full coverage case. Building upon the data from Table 5.8, **Table 5.10** shows the total direct costs, services costs and household costs in JMD and USD, and as a percentage of the GDP.

Table 5.9. Estimated economic costs of VAWG in Jamaica by cost of services and category costs, 2018

Costs of services (category of costs)	Typical case			Full coverage case		
	Victims	JMD	USD	Victims	JMD	USD
Healthcare costs						
Sexual violence	527	26,091,641	169,424	18,149	898,552,562	6,990,995
Physical violence	3,046	125,672,264	314,826	56,357	2,325,184,432	18,090,597
Total		151,763,905	1,507,095		3,223,736,994	25,081,592
Law enforcement and court costs						
Registration and administration cost	5,673	19,673,964	153,069	181,489	629,403,852	4,896,941
Number of protection orders issued	4,560	766,444,800	5,963,159	145,882	24,519,846,560	190,771,678
Number of probation orders issued	1,234	461,683,824	3,592,032	39,478	14,770,141,008	114,915,252
Number of eviction orders issued	147	73,330,656	269,127	4,703	2,346,082,144	18,252,342
Long-term detention (prison)	76	48,723,288	379,081	2,431	1,558,504,110	12,127,453
Total		1,369,856,532	10,356,467		43,823,977,674	340,963,666
Specialized services costs						
Shelter		312,000	2,427		312,000	2,427
Hotline		547,500	4,260		547,500	4,260
Child Protection Unit		1,305,356,116	10,156,042		1,305,356,116	10,156,042
Victim Services Division		88,530,000	688,789		88,530,000	688,789
Bureau of Gender Affairs		38,693,648	301,048		38,693,648	301,048
Total		1,433,439,264	11,152,566		1,433,439,264	11,152,566
Education services costs						
Learning time lost		9,619,309,200	74,840,965		9,619,309,200	74,840,965
Total		9,619,309,200	74,840,965		9,619,309,200	74,840,965
Household costs						
Costs of Income Lost (personal income lost)						
Irreversible (deaths)	129	160,131,699	1,245,870	129	160,131,699	1,245,870
Reversible						
Employment income lost	3,018	183,759,615	1,429,702	96,553	5,877,760,635	45,730,651
Missing value of lost household work	2,581	288,329,963	2,243,289	82,577	9,224,938,410	71,772,648
Total		632,221,277	4,918,861		15,262,830,744	118,749,169
Personal Costs (Out of pocket expenses by the survivor and family members)						
Personal expenses for transportation	2,672	28,056,000	218,284	85,481	897,550,500	6,983,198
Personal expenses for ambulance call	669	13,380,000	104,100	21,416	428,320,000	3,332,452
Personal expenses medical diagnostics	1,333	31,658,750	246,314	42,650	1,012,937,500	7,880,942
Personal expenses for in-patient services	998	10,603,750	82,500	31,942	339,383,750	2,640,502
Personal expenses for legal services	998	20,459,000	159,177	31,942	654,811,000	5,094,616
Property damage/loss costs	1,668	121,764,000	947,359	53,358	3,895,134,000	30,305,252
Moving/rent costs	2,003	64,470,561	501,599	64,066	2,062,092,342	16,043,666
Costs of moving children to new schools	1,668	83,400,000	648,876	53,358	2,667,900,000	20,757,022
Personal expenses for other cost	998	19,560,800	152,189	31,942	626,063,200	4,870,950
Total		393,352,861	3,060,397		12,584,192,292	97,908,599

Table 5.10. Estimated economic costs of VAWG in Jamaica, 2018

	Typical case			Full coverage case		
	% of 2018 GDP	JMD	USD	% of 2018 GDP	JMD	USD
Total Direct Costs	0.67	13,599,943,038	105,811,430	4.24	85,947,568,441	668,696,557
Total Services Costs	0.62	12,574,368,901	97,832,171	2.87	58,100,545,404	452,038,788
Total Household Costs	0.05	1,025,574,138	7,979,259	1.37	27,87,023,036	216,657,769

Chapter 6

Estimated Economy-Wide and Indirect Cost (Both Cases)

An important feature of the methodology used in this costing study is the incorporation of an approach to estimate the economy-wide impacts (costs) of VAWG. There are three approaches that have been widely used to capture economy-wide impacts of VAWG:

- Fixed price multiplier model based on an input-output matrix (I-OM).
- Fixed price multiplier model using a social accounting matrix (SAM), which is a super set⁷⁴ of the I-OM that encompasses interdependence between activities, commodities, factors of production and institutions.
- Flexible price computable general equilibrium (CGE) model, which invokes markets (e.g., product markets, labour market and more), behavioural specifications of all agents (e.g., producers, consumers and more) and closure rules (e.g., defining how accounts are balanced).

Figure 6.1. Transmission channel to GDP loss estimation is a data demanding exercise and usually requires a longer period of time to reach a solution, it was decided that a fixed price multiplier model using a SAM should be used to assess the economy-wide impacts of VAWG (**Figure 6.2**).

A data SAM for Jamaica was developed for 2015 and used in a 2018 IDB-supported study that measured the economic impacts of private tourism-related investments in Jamaica.⁷⁵ This study applied a two-step procedure to update the data from the 2015 SAM using data from 2018.

- First step – Macro SAM data for 2018 was developed.
- Second step – 2018 sectoral information on value added, exports, imports and consumption were combined with control totals from the macro SAM 2018 to update micro SAM data for 2018. SAM data for 2018 consists of 43 accounts shown in **Figure 6.3**.

⁷⁴ Super-set is an explanation of the IOT.

⁷⁵ Cicowiez, M. & R. Ordonez (2018). The Economic Impacts of Private Tourism-Related Investments in Jamaica. *Development through the Private Sector Series, TN No. 7*. Inter-American Development Bank (IDB): Washington, DC, USA.

Figure 6.2. Description of Jamaica SAM accounts, 2018

SAM Accounts	Detailed Account Classification
Activities (17)	
	Agriculture; forestry; Fisheries (01)
	Mining; Food and Beverage; Tobacco; Textile and Clothing; Other Industries; Construction; Utilities (06)
	Trade; Hotel and Restaurants; Transport; Communication; Financial Services; Real Estate/Business Services; Public Administration; Education; Health; Recreation; Other Services (10)
Commodities (17)	
	Agriculture product; Forestry product; Fisheries product(01)
	Mining product; Food and Beverage product; Tobacco product; Textile and Clothing product; Other Industrial product; Construction; Utilities (06)
	Trade services; Hotel and Restaurants services; Transport services; Communication services; Financial Services; Real Estate/Business Services; Public Administration; Education; Health services; Recreation services; Other Services (10)
Factors of Production (4)	
	Labour Factor; Capital Factor; Land and Extractive Resources
Institutions (5)	
	Household
	Government
	Tourism Corporation
	Rest of the World
	Savings or Gross fixed capital (consolidated capital)

Source: Jamaica SAM, 2018.

The move from a SAM data framework to a SAM model (also known as a multiplier framework) requires decomposing SAM accounts into ‘exogenous’ and ‘endogenous’. Generally, accounts intended to be used as target of policy instruments (e.g., government expenditures, investments and exports) are made exogenous, and accounts specified as objectives or targets (e.g., output, commodity demand, factor return and household income or expenditures) must be made endogenous. For any given injection into exogenous accounts of the SAM, influence is transmitted through the interdependent SAM system among endogenous accounts.

The interwoven nature of the system implies that the incomes of factors, households and production, are all derived from exogenous injections into the economy via a multiplier process. The multiplier process is developed here on the assumption that when an endogenous income account receives an exogenous expenditure injection, it spends it in the same proportions as shown in the matrix of average propensities to spend (APS). The elements of the APS matrix are calculated by dividing each cell by the sum total of its corresponding column.

Economy-wide impacts of reduced income resulting from VAWG are examined by changing the total exogenous injection vector, especially household consumption. More specifically, income losses in the typical case is JMD 632.2 million, whereas for the full coverage case is JMD 15,263.0 million. In 2018, consumption is adjusted downward for each of the 17 commodities, according to observed base year shares, to determine two separate injections – one for the typical case and the other for the full coverage case – into the multiplier framework as exogenous shocks. Due to reductions in consumption, sectoral outputs in the typical case and full coverage case declined, as output loss columns capture loss in outputs compared to pre-shock and base scenarios. For instance, outputs in the agriculture sector were reduced by 199.1 million JMD in the typical case and by 4.425 million JMD in in the full coverage case, compared to the value of 2018.

Table 6.1 shows the simulated results of output loss using this approach.

Table 6.1. Simulated output loss, 2018 (based upon Jamaica SAM model), In million JMD

Activity Description	Output Loss (typical case)	Output Loss (full coverage case)
Agriculture	199.1	4,424.7
Agriculture sector	199.1	4,424.7
Mining	3.3	73.1
Food processing	302.5	6,721.2
Textile	17.9	396.8
Other manufacturing	362.4	8,052.3
Utilities	96.3	2,139.0
Construction	29.8	663.2
Industry sector	812.0	18,045.5
Trade	304.4	6,765.4
Hotels	3.8	83.92
Restaurants	59.1	1,313.2
Transportation	84.0	1,867.0
Communications	61.7	1,370.3
Financial services	177.7	3,949.3
Real estate	199.4	4,432.1
Public services	77.8	1,729.7
Recreation	47.9	1,064.8
Other services	28.6	635.8
Services sector	1,044.5	23,211.5
Total	2,055.7	45,681.7
% of GDP for 2018	0.101	2.253

Table 6.1 shows that the simulated output loss for the typical case is JMD 2,055.7 million or 0.101 per cent of the 2018 GDP. The services sector was found to be the most affected among the three broad sector categories, with a loss of JMD 1,044.5 million. The output loss for the industry sector was simulated at JMD 812.0 million, with other manufacturing and food processing bearing a large proportion of losses. Agriculture is the least affected sector, with an output loss of JMD 199.1 million.

Simulated output loss for the full coverage case is substantially larger than for the typical case due to larger income loss of JMD 15,263.0 million, compared to a loss of JMD 632.2 million in the typical case. The simulated output loss is JMD 45,681.7 million or 2.253 per cent of the 2018 GDP. Again, the services sector is the most affected sector, with an output loss of JMD 23,211.5 million. The output loss for the industry sector was simulated at JMD 18,045.5 million, and loss for agriculture was JMD 4,424.7 million.

Chapter 7

Main Findings

Table 7.1 shows the framework used to estimate the economic cost of VAWG using data from 2018.

Table 7.1. Summary of VAWG costs in Jamaica, 2018 (JMD Million)

Total direct and economy-wide costs of VAWG for typical and full coverage cases, 2018				
Cost Categories	Typical case		Full coverage case	
	Costs (JMD Million)	% of 2018 GDP	Costs (JMD Million)	% of 2018 GDP
Direct costs (Services costs + Household Costs)	13,600	0.67	85,948	4.24
Services costs*	12,574	0.62	58,101	2.87
Healthcare costs	152	0.01	3,224	0.16
Law enforcement and court costs	1,370	0.07	43,824	2.16
Specialized services costs	1,433	0.07	1,433	0.07
Education services cost	9,619	0.48	9,619	0.48
Household costs	1,026	0.05	27,847	1.37
Personal cost	393	0.02	12,584	0.62
Costs of income lost	632	0.03	15,263	0.75
Economy-wide costs	2,056	0.10	45,682	2.25
Agriculture	199	0.01	4,425	0.24
Industry	812	0.04	18,046	0.99
Services	1,045	0.05	23,212	1.27
Total costs (direct costs + economy-wide costs)	15,656	0.77	131,629	6.49

Notes: Services costs = healthcare costs + law enforcement and court costs + specialized services costs + costs of learning time lost (or education costs); Direct costs = services costs (all of its subcategories) + household costs; Total costs = direct costs + economy-wide costs.

7.1 Total Costs of VAWG

In Jamaica, the estimated total costs of VAWG for the typical case is JMD 15,655.6 million or 0.772 per cent of the 2018 GDP. This comprises an estimated direct cost of JMD 13,599.9 million or 0.671 per cent of the GDP, plus an economy-wide indirect cost of JMD 2,055.7 million or 0.101 per cent of the GDP. The direct costs are composed of services costs of JMD 12,574.4 million or 0.62 per cent of the GDP, and household costs of JMD 1,025.6 million or 0.051 per cent of the GDP.

For the full coverage case, the simulated (or derived) number of VAWG victims was based on population data of women aged 15-64 in 2018 (n=955,206).⁷⁶ Using this population data and a VAWG prevalence rate of 19 per cent from the *Women's Health Survey 2016 Jamaica*, the number of VAWG survivors in the full coverage case is estimated at 181,489. In comparison, the number of VAWG survivors recorded in official administrative data is 5,673. As a result, the estimated total cost for the full coverage case is substantially higher than for the typical case. The total cost for the full coverage case is estimated at JMD 131,629.3 million or 6.493 per cent of the GDP. This is made up of an estimated direct cost of JMD 85,947.6 million or 4.24 per cent of the GDP, and an economy-wide indirect cost of JMD 45,681.7 million or 2.253 per cent of the GDP.

7.2 Direct Costs of VAWG

Direct costs of VAWG are composed of services costs and household costs. In the typical case, the direct costs of VAWG are estimated at JMD 13,599.9 million or 0.671 per cent of the GDP, including services costs of JMD 12,574.4 million or 0.62 per cent of the GDP and household costs of JMD 1,025.6 million or 0.051 per cent of the GDP. In the full coverage case, direct costs were estimated at JMD 85,947.6 million or 4.24 per cent of the GDP, including services costs of JMD 58,100.5 million or 2.866 per cent of the GDP and household costs of JMD 27,847.0 million or 1.374 per cent of the GDP.

7.2.1 Services Costs

Services costs consists of the healthcare costs, law enforcement and courts costs, specialised services costs and costs of learning time lost.

- **Typical case:** Among the various types of services, learning time lost in primary and secondary education turned out to be the largest at JMD 9,619.1 million or 0.475 per cent of the GDP. Costs for specialised services were also high at JMD 1,433.4 million or 0.071 per cent of the GDP. Law enforcement and court costs were estimated at JMD 1,369.9 million or 0.068 per cent of the GDP. A surprising finding was that healthcare costs were very low at JMD 151.8 million or 0.007 per cent of the GDP. Very low healthcare costs

76 Williams, C.W. (2018). *Women's Health Survey 2016 Jamaica*. STATIN, IDB & UN Women: Bridgetown, Barbados.

relate to the fact that VAWG survivors do not typically self-report experiences of violence to healthcare workers; thus, data on unit costs of fees and charges related to healthcare services are lacking. Given the data, the total costs of services for VAWG were estimated at JMD 13,574.4 million or 0.671 per cent of the GDP.

- **Full coverage case:** Costs related to the two major cost drivers in the typical case – learning time lost and specialized services – were not changed for the full coverage case since they were based on full coverage data. Thus, healthcare costs and law enforcement and court costs were recalculated for the full coverage case. Law enforcement and court costs increased to JMD 43,824.1 million or 2.162 per cent of the GDP, and healthcare costs increased to JMD 3,223.7 million or 0.159 per cent of the GDP. In turn, the total costs of services for VAWG is estimated at JMD 58,100.5 million or 2.866 per cent of the GDP.

7.2.2 Household Costs

Household costs include personal cost (out-of-pocket expenses) and personal income lost.

- **Typical case:** Personal costs incurred were estimated at JMD 393.4 million or 0.019 per cent of the GDP. Income lost due to the irreversible factor (VAWG-related deaths) and the reversible factor (temporarily being unable to carry out paid work and unpaid domestic and care work) was estimated at JMD 632.2 million or 0.031 per cent of the GDP. Total household costs were estimated at JMD 1,025.6 million or 0.051 per cent of GDP.
- **Full coverage case:** Personal costs and income lost costs were recalculated for the full coverage case. Income lost increased to JMD 15,262.8 million or 0.753 per cent of the GDP, and personal costs increased to JMD 12,584.2 million or 0.621 per cent of the GDP. Total household costs were estimated at JMD 27,847.0 million or 1.374 per cent of GDP.

7.3 Economy-Wide Indirect Costs

The SAM for Jamaica was updated for 2018 using the 2015 SAM and other required national accounts data for 2018 (i.e., sectoral value added, household consumption, exports and imports). Data for the 2018 SAM were converted into a SAM multiplier model, then to carry out personal income (consumption) reduction shocks on GDP in the SAM, 2018 consumption values were adjusted downward for each of the activities, according to their shares for 2018. Following this approach, two consumption shocks were set up – one for the typical case and the other for the full coverage case. These shocks were then used with the SAM multiplier model to simulate output loss under the typical case and full coverage case.

- **Typical case:** Income loss in the typical case is JMD 632.2 million; thus, household (private consumption) was reduced at JMD 632.2 million to simulate the impact on domestic output/product. Simulated output loss in the typical case is JMD 2,055.7 million or 0.101 per cent of the 2018 GDP. Among the three broad sector categories, the services sector was most

affected with a bill of JMD 1,044.5 million. Output loss for the industry sector was simulated at JMD 812.0 million, with food processing bearing the major loss. Agriculture was least affected, with an output loss of JMD 199.1 million.

- **Full coverage case:** Income loss in the full coverage case is JMD 15,262.8 million; thus, the household (private consumption) was reduced by JMD 15,262.8 million to simulate the impact on domestic output/product. Simulated output loss under the full coverage case is JMD 45,681.7 million or 2.253 per cent of the 2018 GDP. Among the three broad sector categories, the services sector was most affected with a bill of JMD 23,211.5 million. Output loss for the industry sector is simulated at JMD 18,045.5 million. Agriculture was least affected, with an output loss of JMD 4,424.7 million.

Chapter 8

Conclusions and Recommendations

8.1 Overview of the Costing Model

This report presents the development of a comprehensive economic costing model for Jamaica to estimate the economic costs of VAWG using country-level indicators and data. The costing model relied upon official data and covered several important essential services, including healthcare, law enforcement, courts, social services and specialised services. The costing model also included out-of-pocket personal costs incurred by VAWG survivors, costs of learning time lost, and estimated income lost by women being absent from paid work and unable to perform unpaid domestic and care work. The model was unable to include some important costs, such as those related to the emotional cost of IPV.

Like any other quantitative model or framework, this economic costing model had limitations and merits. A major limitation of the model was the number of assumptions made to estimate healthcare and education costs for this exercise. Readily available healthcare and education data could have precision implications for the estimates of the costing exercise. Another limitation was the use of an updated SAM. Based on the technological structure of the 2015 SAM to estimate economy-wide costs, more time and resources were allocated to this component to improve the outcome of the economy-wide estimation. However, a newly developed SAM based on more recent data would not only improve the VAWG costing component, but also help assessments of various economic policies considered in the country's development plan.

The major advantage of the economic costing model used in this study was that it was developed in Microsoft Excel and can be transferred to government partners and other key stakeholders with training. A modular approach has been considered so that multiple developers can work simultaneously on different model components. The most important merit is that the economic costing model and modular approach are live products that can be updated, modified and enhanced with ease.

8.2 Key Findings

A major finding of this economic costing exercise was the finding that harmful effects of VAWG impact not only individuals, but also households, communities and society at-large. Findings

from this costing study suggest that the **costs of violence against girls** is 0.475 per cent of the GDP (i.e., learning time lost), whereas the **costs of violence against adult women** is 1.374 per cent of the GDP. In addition, the **costs of VAWG to government and nongovernmental service providers** is estimated at 2.391 per cent of the GDP, whereas estimated **costs to the private sector** is 2.253 per cent of the GDP. Overall, costs to the whole-of-society is 6.493 per cent of the GDP. These findings highlight the fact that initiatives to end VAWG need to occur on multiple fronts.

8.3 Observations

In Jamaica, there is no standard template used by service providers to collect administrative data relevant to the economic costing of VAWG. For instance, unit cost data for healthcare, social, and legal services were not readily available, and data on service utilisation were not disaggregated by services provided for VAWG. Despite these limitations, technical assistance and data collection templates provided by the consultancy team helped government agencies and services providers to generate some of the needed data.

Despite several attempts, data were not available from healthcare service providers; perhaps, healthcare facilities were neither collecting nor preserving the data needed for this economic costing study. Thus, costs of healthcare services were estimated using assumptions and proxy data. In addition, personal costs (out-of-pocket expenses) for healthcare services (e.g., emergency services, specialised services and hospital stays) could not be estimated because of data limitations. Emotional and psychological costs of VAWG could not be estimated due to data limitations.

Learning time lost and the education budget were used to estimate the cost of VAWG to educational services. In Jamaica, because there was a lack of data specific to learning time lost, a proxy value was used. The estimate provided a static cost of learning time lost, but could not capture the long-term impacts of learning time lost. Learning time lost can have far-reaching implications on educational attainment and productivity, and future earning potentials.

8.4 Recommendations

8.4.1 Strengthen Data Collection Systems and Capacities

Recommendation 1: Strengthen the national statistical system to facilitate the collection and production of data related to VAWG services and services provided to VAWG survivors, including disaggregation of services related to VAWG. All data producers in the public, private and civil society sectors that provide essential services to VAWG survivor should collaborate with STATIN, and relevant ministries, departments, and agencies to establish a minimum data set to measure utilisation and costs of services by VAWG survivors.

Recommendation 2: Strengthen the capacity of STATIN and other relevant stakeholders involved in the collection, production and uses of VAWG data and statistics to enable the design of evidence-based and effective ending VAWG policies and programmes, and to monitor progress toward ending VAWG in Jamaica.

Recommendation 3: Strengthen the capacities of frontline service providers (e.g., police, social workers, health workers, justice officials, shelter staff) to deliver quality services to VAWG survivors and to improve data collection and records maintenance in appropriate formats and in confidential and secure environments.

8.4.2 Engage the Private Sector

The use of an economy-wide model reveals some important implications for employers, including in the private sector. Annual output losses to the private sector related to VAWG have been estimated at JMD 45,681.9 million or 2.253 per cent of the GDP. Given this high cost to the private sector, ending VAWG in Jamaica should be a priority for the private sector. Both the public and private sectors should be encouraged to take an active role to ending VAWG.

Recommendation 4: Include representatives from both public and private sectors, including CSOs, on working groups that address VAWG in Jamaica.

Recommendation 5: Develop workplace policies and strategies to prevent and respond to VAWG, including domestic violence, IPV, stalking, sexual harassment, sexual exploitation and more.

Recommendation 6: Develop and implement strategies to prevent and end VAWG with support from CSOs, women's advocacy and human rights groups, including women's organizations working to end VAWG.

Recommendation 7: Invest in a corporate social responsibility fund that supports efforts to end VAWG and support women's empowerment initiatives.

Recommendation 8: Expand workplace health and safety agendas, programmes and/or initiatives to include mental health and well-being, especially for female workers.

Recommendation 9: Develop a clear corporate position and messaging on VAWG via an employee code of conduct policy and human resources policies.

Recommendation 10: The private sector should provide trainings on gender equality and prevention of VAWG for all executives, managers, supervisors and staff.

Recommendation 11: The public and private sectors should work together to support the rollout of a national visibility campaign that highlights the resources available to victims of VAWG in Jamaica, including available essential services where victims of VAWG can go to receive help, information and access to other resources (e.g., shelter), along with improvements in laws and policies aimed at ending VAWG.

8.4.3 Enhance Institutional Capacity

Recommendation 12: Institutional capacity may need to be improved for subsequent VAWG costing studies via specialized training and the producing of user-friendly manuals, facilitator guides and training materials.

Recommendation 13: Arrange international and regional educational exchange programmes with some reputable institutions and institutions with expertise on VAWG to expand and improve data collection, specifications, and coverage related to the costing framework.

Recommendation 14: At the national level, effort should be made to collect disability data disaggregated by sex and related to VAWG, including VAWG survivors with disabilities, and measure the years of life lost to disability, death and chronic disease morbidity.

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Annex A

Online Self-Administered Survey

Section A: Background and Experience of Violence

- A1. What year were you born?**
- A2. Residence: [please select one]**
1. *Urban*
 2. *Rural*
- A3. Did you experience violence in the last 12 months?**
1. *Yes (if Yes, please go to question A4)*
 2. *No*
- A4. Please state your status in the labour market at the time of your violence [one answer please]**
1. *Employed*
 2. *Student*
 3. *Housewife/Homemaker*
 4. *Receivers of income from abroad*
 5. *Unemployed*
 6. *Pensioner*
 7. *Disabled person*
 8. *Other (specify)*
- A5. What types of violence did you experience? [many responses possible]**
1. *Physical (beating, kicking, other form of physical abuses)*
 2. *Sexual (sexual intercourse, harassment)*
 3. *Emotional, psychological (humiliation, intimidation, blackmailing)*
 4. *Economic (manipulating with money, financial dependency)*
 5. *Other (please explain)*
- A6. How many times did you experience violence during last 12 months?**
1. *One time*
 2. *Two times*
 3. *Three times*

4. *Four times*
5. *More than 4 times*

A7. Do you have children under the age of 16 (age 0-16)?

1. *Yes*
2. *No*

A8. If YES to Question 7, how many children do you have under the age of 16?

1. *I answered No to Question 7*
2. *I have children under 16 (please write the number of children in the comment box)*

A9. Did your child/children witness the violence?

1. *Yes*
2. *No*
3. *I do not have children under the age of 16*

A10. Did you seek any help for violence you experienced in the last 12 months? [select all that apply in your situation]

1. *No*
2. *Medical institutions*
3. *Police*
4. *Social services*
5. *Psychologist*
6. *NGOs*
7. *Relatives/friends*
8. *Religious organization*

A11. Was your call for help attended to? [select only one answers]

1. *Yes*
2. *No (please specify the service providers)*
3. *(service providers)*

A12. Can you explain the cost of not being attended to? unattendance? [many answers possible]

1. *Physically assaulted*
2. *Hospitalized*
3. *Could not attend paid work*
4. *Repeatedly assaulted*
5. *Temporarily disabled*
6. *Permanently disabled*
7. *Removed from home*
8. *Monetary cost*

A13. If hospitalized, how many nights were you hospitalized?

A14. If you could not attend paid work, how many days did you have to stay away from work?

A15. If you were repeatedly assaulted, how many times were you assaulted?

Section B: Health Losses and Status of Incapacity

B1. What kind of bodily injuries have you got?

1. *Minor bodily injuries (bruises, scratches etc.)*
2. *Bodily injuries of medium gravity (dislocations, fractures, sprains etc.)*
3. *Grievous bodily injuries (deep wound, serious head injuries etc.)*
4. *Other health disorders, not injuries (general sickness, aggravation of chronic diseases)*

B2. Have you been on a sick leave due to injuries?

1. *No*
2. *Yes, for how many days?*
3. *Not applicable (unemployed, maternity leave, pensioner)*

B3. If you answered YES to question B2, how many days were you on sick leave?

B4. Were you hospitalized due to injuries?

1. *No*
2. *Yes*

B5. If you answered YES to question B4; how many days were you hospitalised?

B6. Were you bedridden or at home due to injuries?

1. *No*
2. *Yes*

B7. If you answered YES to question B6; how many days were you bedridden?

1. *I did not answer YES to question B6*
2. *I answered YES to question B6 (write the number of days you were bed ridden in the comment box)*
3. *No of Days you were bed ridden*

B8. Did injuries result in permanent incapacity or disability?

1. *No*
2. *Yes, partially but not officially documented*
3. *Yes, I am receiving invalidity benefits*

B9. Have the injuries/violence affected your daily household work (housekeeping, childcare, care for other members of the family)?

1. *No*
2. *Yes*

B10. If you answered YES to question B9 how many days?

Section C: Personal cash expenses

- C1. Did you have any material damage to your property or family property?**
 - 1. No
 - 2. Yes

- C2. If yes to C1, please state the cost.**

- C3. Did you have any losses related to lost earnings (e.g., job loss, inability to concentrate on work, temporary incapacity?)**
 - 1. No
 - 2. Yes

- C4. If yes to question C3, how much would the estimated loss?**

- C5. Please indicate all items borne by you or your family to cope with violence.**

Items
1. Transportation to and from healthcare institutions, police departments, forensics, courts, social service providers, etc.
2. Ambulance call, healthcare services, laboratory tests
3. Diagnostics examination and purchase of medicines
4. In patient treatment (hospital)
5. Consultation with psychologist/psychotherapist
6. Consultation with child psychologist
7. Psychological consultations for other members of your family (child, mother father, and other persons)?
8. Legal advice and legal support in court
9. Administrative services such as payments for issuing certificates, mandatory court fees, and document recovery
10. Payment of rent for a separate apartment (monthly)
11. Moving to a new place of residence, place children in another school
12. Purchase of lost or damaged personal property (clothes, shoes etc.)
13. Cost related to searching for a new job
14. Others

- C6. If you selected transportation to and from healthcare institutions, police departments, forensics, courts, social service providers etc. Please state the cost**
 - 1. I did not select transportation
 - 2. I selected transportation, this is the cost

- C7. C7. If you selected, Ambulance call, healthcare services, laboratory tests, please state the cost**
 - 1. I did not select ambulance call etc.
 - 2. I selected ambulance call etc., this is the cost

- C8. If you selected, Diagnostics examination and purchase of medicines, please state the cost**
1. *I did not select diagnostics examination etc.*
 2. *I selected diagnostics examination etc., this is the cost*
- C9. If you selected, Inpatient treatment (hospital), please state the cost**
1. *I did not select In patient treatment (hospital) etc.*
 2. *I selected In patient treatment (hospital) etc., this is the cost*
- C10. If you selected, Consultation with psychologist/psychotherapist, please state the cost**
1. *I did not select Consultation with psychologist/psychotherapist*
 2. *I selected Consultation with psychologist/psychotherapist., this is the cost*
- C11. If you selected, Consultation with child psychologist, please state the cost**
1. *I did not select Consultation with child psychologist*
 2. *I selected Consultation with child psychologist, this is the cost*
- C12. If you selected, Psychological consultations for other family members, please state the cost**
1. *I did not select Psychological consultations for other family members*
 2. *I selected Psychological consultations for other family members, this is the cost*
- C13. If you selected, Legal advice and legal support in court, please state the cost**
1. *I did not select Legal advice and legal support in court*
 2. *I selected Legal advice and legal support in court, this is the cost*
- C14. If you selected, Administrative services, please state the cost**
1. *I did not select Administrative services*
 2. *I selected Administrative services, this is the cost*
- C15. If you selected, Payment of renting a separate apartment, please state the cost**
1. *I did not select Payment of renting a separate apartment*
 2. *I selected Payment of renting a separate apartment, this is the cost*
- C16. If you selected, Moving to a new place of residence, please state the cost**
1. *I did not select Moving to a new place of residence*
 2. *I selected moving to a new place of residence, this is the cost*
- C17. If you selected, placing children in another school, please state the cost**
1. *I did not select, placing children in another school*
 2. *I selected placing children in another school this is the cost*
- C18. If you selected, Purchase of lost or damaged personal property (clothes, shoes etc.), Please state the cost**
1. *I did not select Purchase of lost or damaged personal property (clothes, shoes etc.)*
 2. *I selected Purchase of lost or damaged personal property (clothes, shoes etc.), this is the cost*



C19. If you selected, Cost related to searching for a new job, Please state the cost

1. *I did not select Cost related to searching for a new job*
2. *I selected Cost related to searching for a new job, this is the cost*

C20. If you selected, Other, please state the cost

1. *I did not select Other*
2. *I selected Other, this is the cost*

C21. Who paid for the above expenses?

1. *Myself*
2. *Parents*
3. *Took money from family budget*
4. *My abuser*
5. *NGOs/CSOs*
6. *Other*

C22. What should be a fair compensation for enduring the violence?

Annex B

Notes

The consequences of minor bodily injuries typically require out-patient treatment, traumatologist examinations and inexpensive medications, which cost on average up to JMD 250. Bodily injuries of medium gravity, however, may require more prolonged and expensive treatments, which cost on average up to JMD 450. In the event of grievous bodily injuries, there is a need for expensive diagnostics and examinations (e.g., magnetic resonance imaging), consultations from multiple medical experts, and in some cases surgery and prolonged rehabilitation. Given these medical expenses, the costs of a minimum set of examinations, treatments (including in-patient healthcare) and medications may be as high as JMD 1,200.

Features	Minor injuries (6-21 days of treatment)	Medium injuries (> 21 days of treatment)	Grievous injuries
Aggregate character	<ul style="list-style-type: none"> • Bruises • Hematomas • Scratches 	<ul style="list-style-type: none"> • Fractures • Dislocations • Superficial wounds 	<ul style="list-style-type: none"> • Deep penetrating wounds, traumatic brain injuries and more
Minimum set of healthcare services needed	<ul style="list-style-type: none"> • Examination by traumatologist • Medication • Bandages 	<ul style="list-style-type: none"> • Emergency medical aid • Consultation with surgeon and/or traumatologist • Radiography in several projections • Primary surgical treatment of wounds and surgical dressing • Impose fixing bandages/plaster • Local/general anaesthesia • Medications • In-patient treatment for 5-14 days 	<ul style="list-style-type: none"> • Emergency medical aid • Consultation with surgeon • Radiography in several projections • MRI • Surgery and surgical dressings • Preoperative examinations • Local/general anaesthesia • Medications • Consultations with Ophthalmologist, psychologist and/or neurologist in cases of brain injury • In-patient treatment from 14-21 days

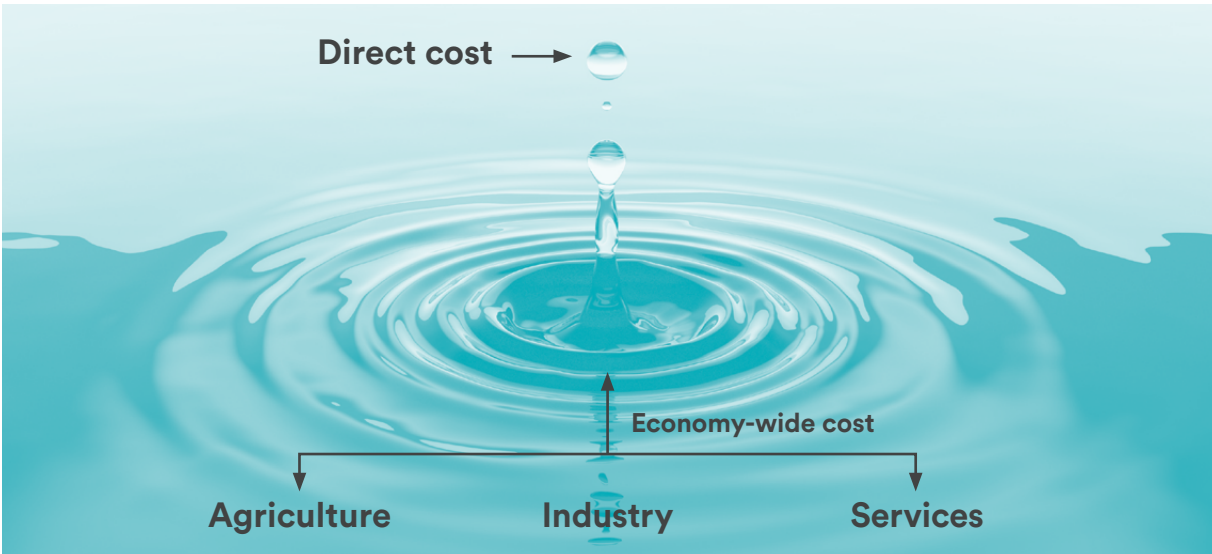
Annex C

Economy-Wide Model

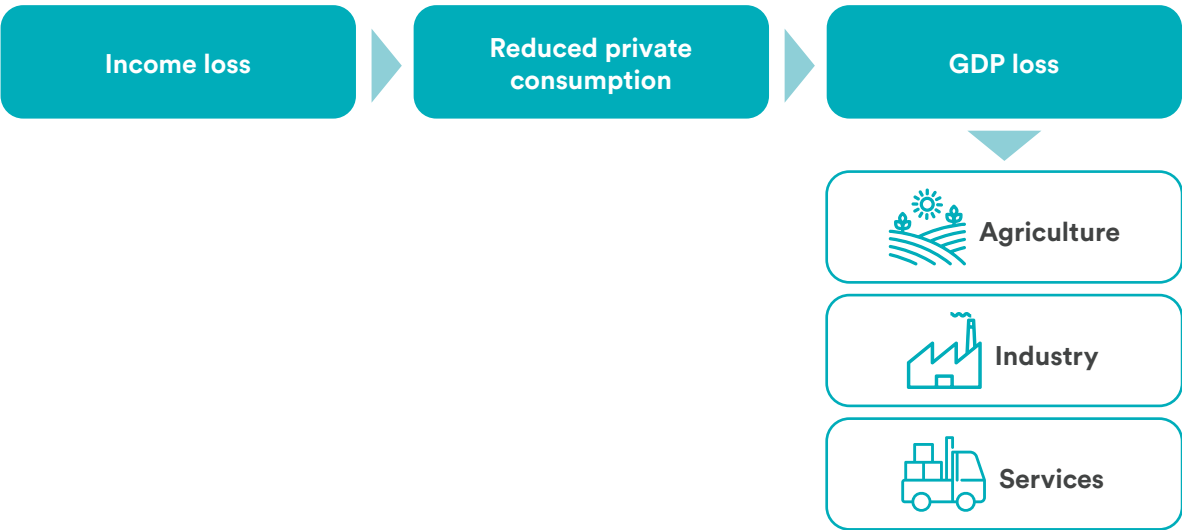
Analytical Framework

The direct economic costs of VAWG, such as individual income lost and out-of-pocket expenses affecting individual (personal) consumption, likely impact the wider economy (i.e., changing the domestic effective demand). This interaction is captured in the image below, which shows how direct costs, such as changes in individual consumption due to VAWG, are like a pebble thrown into a pond of still water. The pebble will create a ripple effect outwards. The sum of these waves is the economy-wide economic costs of VAWG. The greater the power of the pebble (direct costs) or the force with which the pebble hits the water, the larger the ripple effect (economy-wide costs).

One direct cost of VAWG is lost working days, leading to loss of income. Income loss leads to a reduction in private consumption expenditures, with subsequent negative impacts on commodity demand and supply of goods and services. As production of goods and services depend on purchases of other goods and services, and factors of production, a loss of female works days (a direct impact of VAWG) may lead to further losses of income indirectly due to the economy-wide effect. The researcher needs to use an economy-wide database or model to capture these indirect impacts of the direct costs of VAWG.



Annex Figure C1. Personal income loss to GDP loss transmission mechanism



This can be done by using a SAM framework. The SAM is a macro-economic data set which captures the interdependence between product markets (e.g., activities, commodities), factor markets (e.g., labour, capital, land) and institutions (e.g., households, corporations, government). The SAM is based on an I-OM. A SAM or I-OM are available for most countries. For this costing study, a readily available country SAM was used to estimate the indirect/induced costs of VAWG.

Social Accounting Matrix (SAM)

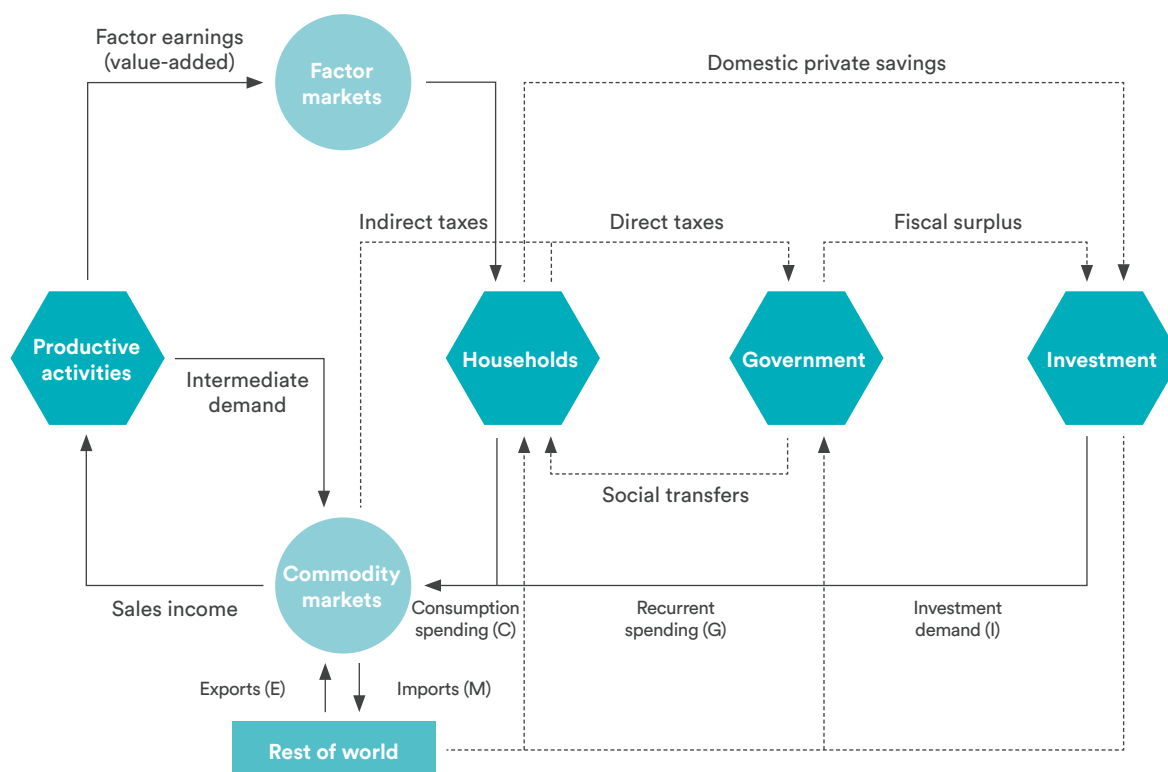
A SAM is an extension (or generalisation) of the I-OM by incorporating other parts of the economy, namely primary and secondary income distribution, and institutions of an economy. SAM is a square matrix that captures all of the main circular flows in an economy in a given period of time (Annex Figures C2 and C3).

The input-output part of SAM captures production linkages between sectors that are determined by those sectors’ production technologies. These linkages can be differentiated into backward and forward linkages; stronger forward and backward production linkages lead to larger multipliers.

Backward production linkages are the demand for additional inputs used by producers to supply additional goods or services. For example, when electricity production expands, it demands intermediate goods like fuel, machinery and construction services. This demand stimulates production in other sectors responsible for supplying these intermediate goods. The more input intensive a sector’s production technology, the stronger its backward linkages.

Forward production linkages account for the increased supply of inputs to upstream industries. For example, when electricity production expands, it can supply more power to the economy, which stimulates production in all sectors that use power. Thus, the more important a sector is for upstream industries, the stronger its forward linkages. Forward linkages are particularly important for the energy sector because the energy sector provides key inputs into other sectors in the economy.

Annex Figure C2. Circular flow in an economy



Source: Breisinger, C., M. Thomas & J. Thurlow (2009). The International Food Policy Research Institute (IFPRI), Updated in April 2010

Annex Figure C3. Basic structure of a SAM

		Expenditure columns							Total
		Activities C1	Commodities C2	Factors C3	Households C4	Government C5	Investment C6	Rest of world C7	
Income rows	Activities R1		Domestic Supply						Activity income
	Commodities R2	Intermediate demand			Consumption spending (C)	Recurrent spending (G)	Investment demand (I)	Export earnings (E)	Total demand
	Factors R3	Value-added							Total factor income
	Households R4			Factor payments to households		Social transfers		Foreign remittances	Total household income
	Government R5		Sales taxes and import tariffs		Direct taxes			Foreign grants and loans	Government income
	Savings R6				Private savings	Fiscal surplus		Current account balance	Total savings
	Rest of world R7		Import payments (M)						Foreign exchange outflow
Total		Gross output	Total supply	Total factor spending	Total household spending	Government expenditure	Total investment spending	Foreign exchange inflow	

Description of SAM Model

The move from a SAM data framework to a SAM model (known as a multiplier framework) requires a breakdown of SAM accounts into ‘exogenous’ and ‘endogenous’. Generally, accounts used as policy instruments (e.g., government expenditures, including social protection, investment, exports) are ‘exogenous’ and accounts specified as objectives or targets (e.g., output, commodity demand, factor return, household income and expenditures) are ‘endogenous’. For any given injection into exogenous accounts of the SAM, influence is transmitted through their interdependence to endogenous accounts of the SAM.

The interwoven nature of the system implies that incomes of factors, households and production are all derived from exogenous injections into the economy via a multiplier process. The multiplier process is developed here on the assumption that when an endogenous income account receives an exogenous expenditure injection, it spends it in the same proportions, as shown in the matrix of APS. Elements of the APS matrix are calculated by dividing each cell by the sum total of its corresponding column.

The economy-wide impacts of personal income loss are examined by changing the household consumption vector.

Annex Table C1. Description of endogenous and exogenous accounts and multiplier effects

Endogenous (y)	Exogenous (x)
Activity (gross output multipliers) indicates the total effect on the sectoral gross output of a unit-income increase in a given account (<i>i</i> in the SAM), and is obtained via the association with the commodity production activity account <i>i</i> .	
Consumption commodity multipliers indicates the total effect on the sectoral commodity output of a unit-income increase in a given account <i>i</i> in the SAM, and is obtained by adding the associated commodity elements in the matrix along the column for account <i>i</i> .	Intervention into through activities ($x = c + i + g + e$), where $i = GFC + ST$ (GFCF) c = household consumption e = exports g = government expenditures i = investment demand s = stock change or inventory demand
Value-added or GDP multiplier indicates the total increase in GDP resulting from the same unit-income injection, and is derived by summing up the factor-payment elements along account <i>i</i> 's column.	

The shift from a data SAM structure to a SAM multiplier module requires the introduction of assumptions and separation of SAM accounts into ‘exogenous’ and ‘endogenous’ components.⁷⁷

⁷⁷ Pyatt, G. & J.I. Round (1977). Social Accounting Matrices for Development Planning. *Review of Income and Wealth*, Vol. 23, No.4, pp. 339-364; Pyatt, G. & J.I. Round (1979). Accounting and Fixed Price Multipliers in a Social Accounting Matrix Framework.

Annex Table C2. General SAM modular structure

		1a-PA	1b-CM	2-FP	3a-HH-OI	4-KHH-OI	5-ROW	TDD
1a	PA		$T_{1a, 1b}$		0			Y_{1a}
1b	CM	$T_{1b, 1a}$			$T_{1b, 3}$	$T_{1b, 4}$	$T_{1b, 5}$	Y_{1b}
2	FP	$T_{2, 1a}$					$T_{2, 5}$	Y_2
3	HH-IO	$T_{3, 1a}$	$T_{3, 1b}$	$T_{3, 2}$	$T_{3, 3}$		$T_{3, 5}$	Y_3
4	KHH-OI	$T_{4, 1a}$			$T_{4, 3a}$		$T_{4, 5}$	Y_4
5	ROW		$T_{5, 1b}$	$T_{5, 2}$	$T_{5, 3}$	0	0	Y_5
	TSS	E_{1a}	E_{1b}	E_2	E_3	E_4	E_5	

Note: $Y_i = E_j$ and 1 Production (1a PA = production activities and 1b CM = commodities); 2 FP = factors of production; 3 HH-IO = households and other institutions, including government; 4 KHH-OI = capital account households and other institutions, including government; 5 ROW = rest of the world (current and capital account). Blank entries indicate that there are no transactions by definition.

Separation is needed to enter the system, allowing some variables within the SAM structure to be manipulated exogenously (via injection instruments) to assess the subsequent impacts on the endogenous and exogenous accounts.

Generally, accounts intended to be used as policy instruments are classified as exogenous, and accounts specified a priori as objectives or targets are classified as endogenous. Two accounts are designated as endogenous accounts – production account (i.e., production activities and commodities) and factors of production account.

Exogenous accounts includes: household (consumption); government (expenditures, transfers, remittances); capital account of institutions (savings and demand for houses, investment demand, infrastructure, machinery and equipment); and ROW transfers, remittances, export demand and capital. **Annex Table C3** shows SAM flows and categorisations of endogenous and exogenous accounts.

Annex Table C3. Endogenous and exogenous accounts

		1a-PA	1b-CM	2-FP	3a-HH-OI	3b-Gov	4-KHH-OI	5-ROW	TDD
1a	PA		$T_{1a, 1b}$		0				Y_{1a}
1b	CM	$T_{1b, 1a}$			$T_{1b, 3a}$	$T_{1b, 3b}$	$T_{1b, 4}$	$T_{1b, 5}$	Y_{1b}
2	FP	$T_{2, 1a}$						$T_{2, 5}$	Y_2
3a	HH-OI			$T_{3a, 2}$	$T_{3a, 3a}$	$T_{3a, 3b}$		$T_{2, 5}$	Y_3
3b	Gov	$T_{3b, 1a}$	$T_{3b, 1b}$		$T_{3b, 3a}$	$T_{3b, 3b}$		$T_{3a, 5}$	
4	KHH-OI	$T_{4, 1a}$			$T_{4, 3}$			$T_{4, 5}$	Y_4
5	ROW		$T_{5, 1b}$	$T_{5, 2}$	$T_{5, 3a}$	$T_{5, 3b}$	$T_{5, 4}$	0	Y_5
	TSS	E_{1a}	E_{1b}	E_2	E_{3a}	E_{3b}	E_4	E_5	

Note: Endogenous includes: 1 Production (1a PA = production activities and 1b CM = commodities); 2 FP = factors of production; 3a HH = households and other institutions, excluding government. Exogenous includes: 3b Government; 4 KHH-OI = capital account of households and other institutions, including government; 5 ROW = rest of the world (current and capital account). Blank entries indicate that there are no transactions by definition.

Annex Table C4. Endogenous and components of exogenous accounts

	PA	CM	FP	EXO	INCOME	Exogenous Accounts (EXO) used as injections Column Vectors
1a PA		$T_{1a 1b}$		X_{1a}	Y_{1a}	$X_{1a} = 0$
1b CM	$T_{1b 1a}$			X_{1b}	Y_{1b}	$X_{1b} =$ Government Consumption Subsidies – Taxes + Exports + Gov. Investment (capital formation in infrastructure and machinery and equipment) + Gross Capital Stock formation
2 FP	$T_{2 1a}$			X_2	Y_2	$X_2 =$ Factor Remittances from ROW
3b-5 Leaks	L_{1a}	L_{1b}	L_2	$L_{3b-5} = X_{3b-5}$	Y_{3b-5}	3b = Aid to Government from ROW
EXPN	E_{1a}	E_{1b}	E_2	E_{3b-5}		Where $E_i = Y_j$
$L_{1a} =$ Activity Tax				$L_{3a} =$ Income Tax + Household Savings + Corporate Savings		
$L_{1b} =$ Commodity Tax + Import Duty + Imports				$L_{3b-5} X_{3b-5}$ and Y_{3b-5} falls out of the model		
$L_2 =$ Factor Remittances to ROW				Blank entries indicate there are no transactions by definition.		

Note: For any given injection into exogenous accounts, X_i (i.e., instruments) of the SAM, influence is transmitted through the interdependent SAM system among endogenous accounts. The interwoven nature of the system implies that the incomes of factors, institutions and production are all derived from exogenous injections into the economy via a multiplier process. Multiplier models may also be built on input-output (I-O) frameworks. The main shortcoming of the I-O model is that the feedback between factor income generation (value-added) and demand by private institutions (households) does not exist. In this case, the circular economic flow is truncated. The problem can be partly tackled by endogenizing household consumption within the I-O framework; this is typically referred to as a 'closed I-O model'. In this case, the circular economic flow is only partially truncated. A better solution is to extend the I-O to a SAM framework, which captures the full circular economic flow derivation of SAM multipliers.



SAM coefficients (A_{ij}) are derived from payment flows by endogenous accounts to themselves (T_{ij}) and other endogenous accounts as to the corresponding outlays ($E_i = Y_j$). Similarly, leak coefficients (B_{ij}) are derived from flows reflecting payments from endogenous accounts to exogenous accounts (**Annex Table C5**).

Annex Table C5. Coefficient matrices and vectors of the SAM model

Account	1a – PA	1b – CM	2 – FP	3a ... 5 EXO	Income
1a – PA		$A_{1a,1b} = T_{1a,1b} / Y_{1b}$		X_{1a}	Y_{1a}
1b – CM	$A_{1b,1a} = T_{1b,1a} / Y_{1a}$			X_{1b}	Y_{1b}
2 – FP	$A_{2,1a} = T_{2,1a} / Y_{1a}$			X_2	Y_2
3a ... 5 Leaks	$B_{1a} = L_{1a} / Y_{1a}$	$B_{1b} = L_{1b} / Y_{1b}$	$B_2 = L_2 / Y_2$		
Expenditure	$E_{1a} = Y_{1a}$	$E_{1b} = Y_{1b}$	$E_2 = Y_2$		

The multiplier analysis using the SAM framework helps us understand the linkages between different sectors and institutional agents at work in the economy. Accounting multipliers are calculated using a standard formula for accounting (impact) multipliers identified below.

$$Y(t) = A Y(t) + X(t) = (I - A)^{-1} X(t) = M_a X(t)$$

Where: t = time; Y = a vector of incomes of endogenous variables; X = a vector of expenditures of exogenous variables; A = matrix of average expenditure propensities for endogenous accounts; $M_a = (I - A)^{-1}$ a matrix of aggregate accounting multipliers (generalised Leontief inverse).

In the above formula, the aggregate accounting multiplier (M_a) is further broken down to separately examine direct and induced effects. To generate direct and induced effects, the M_a multiplier is broken down using multiplicative and additive forms.

It logically follows that the SAM model mainly provides answers to following basic issues:

- a. Impacts on endogenous and exogenous accounts in a clear and differentiated manner.
- b. Technological structure of sectors oriented toward the production of basic intermediate and final goods and services.
- c. Expenditure structures of factors of production, institutions and demand for goods and services of domestic and foreign origin.
- d. Identification of key sectors, commodities, factors of production, institutional accounts and basic needs in the economy and quantification of the main linkages (total and partial).
- e. Dynamics of the production structure, factorial and institutional income formation.
- f. Effects of incomes of institutions and their impact on production via their corresponding demand.
- g. Intra, across or extra and inter-circular group effects, in additive and multiplicative manners.
- h. How matching labour and investment requirements can be calculated.

- i. Price changes on endogenous accounts arising out of endogenous account price changes, and exogenous account price changes.
- j. Design simulations and alternative scenario and perform analysis.
- k. Serves as the basis for development of computable general equilibrium.

Annex D

Basic Structure and Model of a SAM

Annex Figure D1. Basic structure of a SAM

Sam Accounts	Production Account			Institution Account				Total	
				Current Accounts					Capital Accounts
	Activity	Commodity	Factor	Household	Government	Enterprise	Row		
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

Annex Figure D2. SAM Model specification in a matrix format

		Activity					Factors		Institution				Total Use									
		A1	A17	LAB	CAP	HH	GoV	RoW	SI										
Commodity	C1	Endogenous (21 × 21) (Multiplier)						Exogenous (21 × 4)														
	..																					
	..																					
	..																					
	C17																					
Factors	Labour (1)	Leakage						Other														
	Capital (3)																					
Institution	Household											Leakage						Other				
	Government																					
	Rest of the world																					
	SI																					
	Total Supply																					



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