How to calculate the cost to business of gender-based violence in Papua New Guinea:
Review of existing approaches and methodologies
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April 2014
How to calculate the cost to business of gender-based violence in Papua New Guinea:
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- An operational framework for calculating the cost of gender-based violence to business in Papua New Guinea can be developed by drawing on existing approaches and methodologies.
- This calculation will require a mapping of specific cost categories.
- These cost categories can be estimated using the accounting methodology, which simply aggregates these costs.
- We did not identify any existing data to draw on for such a costing exercise, so a bottom-up approach should be taken, through which representative companies can be surveyed.
- Given the lack of information on the impact of gender-based violence in Papua New Guinea, let alone the impact specifically on businesses, such an exercise is likely not only to raise awareness of the scale of the problem but also to facilitate evidence-based decision-making for interventions.
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1 Why focus on the cost of gender-based violence to business?

Gender-based violence (GBV) has been described as the most common human rights violation that both reflects and reinforces inequalities between women and men (Glenn et al., 2009). It is widely prevalent across high-, middle- and low-income countries alike. A recent report by the World Health Organization (WHO) estimates that one in three women globally has experienced physical and/or sexual assault at some point in her life, highlighting the epidemic scale of such violence (WHO, 2013). In Papua New Guinea (PNG) the figure might be as high as two in three (Fulu et al., 2013).

What is GBV?

The term gender-based violence is commonly used to mean violence against women, as defined in the 1993 United Nations Declaration on the Elimination of Violence against Women:

“any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life”.

The UN defines violence against women as gender based to acknowledge that such violence is rooted in gender inequality and is often tolerated and condoned by laws, institutions and community norms (Bott et al., 2005).

GBV includes intimate partner violence, domestic violence and violence by strangers.

Both the rights-based and the economic or business case approach are compelling reasons for tackling GBV (Cruz and Klinger, 2011):

- At the very basic level, GBV is a fundamental violation of human rights as articulated in the 1948 UN Universal Declaration of Human Rights, causing inhuman pain and suffering.
- From an economic perspective, GBV has significant economic costs in terms of expenditure on service provision, lost income for women and their families, decreased productivity, and negative impacts on future human capital formation (Duvvury et al., 2013).

There is wide recognition of GBV in PNG as not only a humanitarian issue but also a core business issue affecting staff and labour productivity. In a recent World Bank survey of the cost of crime and violence to business in PNG (World Bank, 2013), interviewees expressed concern over violence against employees,
particularly cases of domestic violence that intrude into the workplace. Nearly all those interviewed believed their employees had probably been victims of domestic violence, and some referred to incidents where abusive partners came to the workplace to harass staff. Consultations with businesses in PNG by ODI indicate that absenteeism, lower efficiency at work, resignation, and difficulties in recruiting and promoting women are all impacts of GBV that affect business performance. Some companies already recognise the significant cost of GBV to their operations but have not been able to quantify the impact.

A recent UN-led study showed that 62% of men in Papua New Guinea admit to having committed rape – a quarter of these within the last 12 months (Fulu et. al. 2013). Analysis that includes the nature of GBV incidents is also necessary to assess short and long-term costs to business.

Being able to calculate the cost of GBV to business, thus highlighting the potential savings from investing either in response mechanisms or in its prevention, is an important first step in building the business case for intervention.

### Why focus on the cost of GBV to business?

**Focusing on the cost of GBV to business**

- places it at the forefront of business as it allows the scale of the problem to be measured in the same ‘currency’ as other economic and social issues
- provides a baseline measure to monitor the impact of changes in GBV over time
- helps inform the potential benefits from interventions to reduce GBV
- gives the human story measurable scale
- provides the basis for evidence-based policy-making.

*Source: KPMG (2013) and Day et al. (2005)*

Until recently there has been little systematic attention to the economic costs of GBV. Costing studies have largely been limited to developed economies, where the availability of data across different cost categories is generally more robust. In developing countries, estimating the economic costs of GBV, particularly to business, is a new research area gaining rapid attention.

This overview is intended to heighten awareness of this issue among companies in PNG and to build their interest in identifying and quantifying the cost of GBV to their business. Ultimately, the intention is to calculate the cost of GBV to business, review options for interventions to address GBV, and assess both the efficiency and effectiveness of these options.

To calculate the cost of GBV to businesses, there are three elements that need to be understood, as outlined below in the review of existing approaches and methodologies to calculating the cost of GBV.
2 What are the costs of GBV?

Costing studies generally examine the cost of GBV in terms of prevention, response and opportunity costs (Council of Europe, 2012). Building on these cost categories, depending on the objective of the study, there are then two considerations in conceptualising the costs of GBV for subsequent costing estimates: (1) who bears the cost, i.e. business, government, society or the individual, and (2) what is the nature of these costs, i.e. are they direct or indirect, monetary/tangible or non-monetary/intangible.

Who bears the cost?
Existing studies tend first to conceptualise the cost of GBV by who bears the cost, i.e. the individual, household, community, business, government or society as a whole. The figure below provides an overview of the types of costs that may accrue to particular groups.

**Figure 1: Cost bearer and types of costs**

Based on existing studies of the overall cost of GBV across all cost bearers, it is worth keeping in mind that though the costs to business of GBV are often high, most of the total cost is borne by the individual experiencing violence. For example, a costing study of domestic violence to the Australian economy finds that employers only bear roughly 2% of the total cost of GBV and that only 6% of the total cost is production related (Access Economics, 2004). In developing economies, where public service provision to respond to GBV is much weaker, businesses are likely to bear a comparatively higher share of the total cost of GBV.
but most likely it is still the individual and the individual’s household that bear the highest share of the cost.

**Nature of costs**

The majority of studies adopt a framework of direct and indirect costs as well as monetary or tangible and non-monetary or intangible costs in estimating the cost of GBV, as set out below. Whilst direct costs, such as absenteeism, are comparatively straightforward to calculate, indirect costs, such as lower productivity, are often more difficult to quantify. Intangible or non-monetary costs by their very nature are even more difficult to quantify. In fact there is much debate on whether non-monetary or intangible costs such as human suffering can or should even be quantified. Most costs of GBV to business are likely to be direct monetary or tangible costs and indirect tangible costs.

### Framework for costs of GBV by nature of cost

**Direct tangible costs** are actual expenses paid, representing real money spent. These costs can be estimated through measuring the goods and services consumed and multiplying them by their unit cost. They also include expenditure on prevention and service provision across sectors, including justice, health, social services and education.

**Indirect tangible costs** have a monetary value in the economy but are measured as a loss of potential. An example is lower profits resulting from reduced productivity. These costs are measurable, although this involves estimating opportunity costs rather than actual expenditures.

**Direct intangible costs** result directly from the violent act but have no monetary value. Examples are pain and suffering. These costs may be approximated by quality or value of life measures, although there is some debate as to whether or not it is appropriate.

**Indirect intangible costs** result indirectly from the violence, and have no monetary value. An example is the negative psychosocial effect on children who witness violence.

*Source: Day et al. (2005)*

A less common but potentially clearer framework for estimating the cost of GBV to business may be the typology put forward by Buvinic et al. (1999). The advantage is that it disaggregates indirect costs by whether they are economic or social in nature (Duvvury et al., 2004) and hence the extent to which they constitute immediate costs to business.

### Alternative framework for costs of GBV by nature of cost

**Direct costs** refer to the value of goods and services used in treating or preventing violence. The costs include service-related costs as well as costs of programmes for prevention and advocacy.

**Non-monetary costs** capture human costs, including increased suffering, morbidity and mortality, abuse of alcohol and drugs, and depression.

The broader economic effects of GBV are described as **economic multiplier effects** and include increased absenteeism; decreased labour market participation; reduced productivity; lower earnings, investment and savings; and lower intergenerational productivity.

**Social multiplier effects** are described as the impact of violence on
interpersonal relations and quality of life. This includes the effects on children witnessing the violence, reduced quality of life, and reduced participation in democratic processes.

Source: Buvinic et al. (1999)

Specific costs to business
Out of the roughly 30 costing studies of GBV that have been conducted so far, only a few explicitly estimate the cost of GBV to business; see for example Henderson for Australia (2000) and Vara for Peru (2012). There are, however, several studies that estimate the cost of GBV to business as part of the overall costing exercise to national economies; see for example a study by Access Economics (2004) of the cost of GBV to the Australian economy and Duvvury et al. (2012) for a study on the cost of domestic violence against women in Vietnam.

Specific cost categories for the cost of GBV to business vary by study but can be broadly grouped into three major elements (Duvvury et al., 2004):

- **Output loss due to increased absenteeism**: This loss can be estimated through surveys and cross-referencing with payroll records.
- **Output loss due to decreased productivity**: Productivity loss can be established through workplace surveys.
- **Expenditure on provision of services**: This data can be collected from management.

Existing studies have tended to focus on monetary/tangible or economic costs to business and exclude intangible/non-monetary costs. However, even economic costs can be complex to calculate. For example, though the cost of absenteeism as a result of GBV is relatively straightforward to calculate (assuming relevant data is available), productivity loss often also entails non-monetary costs, which result in lower earnings, labour force participation, investment and savings, and these costs are difficult to calculate, as set out in more detail below.

**Specific costs to measure**
To calculate the reduced productivity, outputs and profits for a company as a result of GBV, previous studies (Access Economics 2004, Duvvury et al., 2004, Vara 2012) indicate that specific cost categories to measure may include

- absenteeism of the victim, perpetrators and family members
- presenteeism of the victim, perpetrators and family members
- overtime paid to co-workers covering for victim
- administrative time and costs of managing victims and/or cost of searching, hiring and training replacement
- programs for preventing and managing GBV such as creating safe workplaces, training staff, on-site medical services, and employee assistance programs such as relocation or separation pay benefits

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1 WHO has tested a Health and Performance questionnaire, which could be adapted to developing countries (WHO, 2002).
2 Presenteeism in this context refers to employees coming into work despite experiencing GBV, but being less productive than they would be in the absence of GBV.
grievances related to incidents at work, supervisory time to process complaints, litigation and court time as well as compensation payments

- reputational costs

In establishing the relevant cost categories to estimate the cost of GBV to business in PNG, it would be advisable to first map both the type and extent help-seeking behaviour of individuals experiencing GBV in the work context and use this map to establish the exact categories to be calculated (see for example Duvvury et al., 2004). For this exercise, women should be interviewed to establish what options women may pursue in response to GBV and how the options affect work along a decision tree. While data may be very difficult to collect, the behaviour of perpetrators should also be mapped as this may result in additional costs to the business not captured in the help-seeking behaviour of victims.
3 How can we calculate the cost of GBV to business?

Calculating the cost of GBV to business is complex, and there is no entirely accurate way of doing so. Though several methodological approaches have been developed to calculate the cost of GBV, none adequately account for all costs, and all have their strength and weaknesses. The choice of methodology to quantify the cost of GBV to business, therefore, depends on the overall objective of the costing exercise as well as available resources and data.

Based on a review of existing methodologies, the most appropriate seems to be the accounting method. It is the most straightforward to use; companies can apply it without having to rely on general population surveys, and hence it is also the most cost-effective. The exact methodology to be applied should, however, be reviewed based on a comprehensive mapping of the help-seeking behaviour of individuals experiencing GBV and how that behaviour relates to work.

Studies that have attempted to quantify the cost of GBV largely focus on developed economies and public service utilisation by victims of GBV to estimate the overall cost of GBV to the economy. In developing countries only a handful of studies explore the cost of GBV; see for example Vara (2012) for Peru, Duvvury et al. (2012) for Vietnam, Siddique (2011) for Bangladesh, or Morrison and Orlando (2005) for Peru, Haiti and Zambia.

Several reviews have been conducted of the methodologies used in existing costing studies; see for example Duvvury et al. (2013), Vara (2012), ICRW (not dated), Day et al. (2005), Morrison and Orlando (2004) and Duvvury et al. (2004). The reviews indicate that there are five distinct methodologies. Several studies apply a mix of these, using the most appropriate methodology for each cost category to be estimated (Duvvury et al., 2013).

3.1 Methodological approaches for estimating monetary costs of GBV

Accounting methodology
This is the core methodology used in most studies to establish the cost of mainly direct costs, such as public service usage, but also indirect or opportunity costs of GBV. In essence it is a basic accounting model to aggregate costs. Though sometimes described as a ‘quick and dirty’ way to estimate the cost of GBV, it is straightforward to use and less data intensive than other methodologies (Duvvury et al., 2013). In a developing country, it may not be suitable for calculating the direct costs of, for example, public service usage, given that this may be neither available nor affordable to victims of GBV. However, it is suitable for estimating the direct
costs as well as indirect or opportunity cost to business. One of the major shortcomings of the accounting methodology is that it entirely relies on the initial list of cost categories to be calculated. Impacts of GBV to be included in costing exercises therefore need to be mapped comprehensively.

**Direct costs** are usually calculated by establishing the unit cost of a specific service and multiplying this unit cost by the number of times the service was used (Morrison and Orlando, 2005). This information is usually gathered from population-based surveys. Health-care costs are obtained via a survey of medical service providers. For companies, direct costs may be even more straightforward to calculate if the company has a fixed cost for providing services to employees experiencing GBV.

**Indirect costs** can be calculated by establishing the incidents resulting in missed paid work and applying average numbers of days missed to estimate the total person days lost. This is then multiplied by the mean daily wage rate to estimate the monetary cost of missed work (CDC, 2003 in Duvvury et al., 2013). Similarly, Morrison and Orlando (1999) calculate the indirect costs in terms of total number of days of paid work lost based on survey responses, which is then multiplied by the mean daily earnings to provide a monetary estimate of lost earnings due to GBV. Specific data requirements of the studies tend to include data on prevalence of GBV, number of incidents experienced in a year, days lost per incident and average wage (Duvvury et al., 2013). Similarly, Morrison and Orlando (1999) calculate the indirect costs in terms of total number of days of paid work lost based on survey responses, which is then multiplied by the mean daily earnings to provide a monetary estimate of lost earnings due to GBV. Specific data requirements of the studies tend to include data on prevalence of GBV, number of incidents experienced in a year, days lost per incident and average wage (Duvvury et al., 2013). Specific data requirements of the studies tend to include data on prevalence of GBV, number of incidents experienced in a year, days lost per incident and average wage (Duvvury et al., 2013).

Examples include a study by CDC for the USA (2003) and by Access Economics for Australia (2004).

**Econometric methodology**

Indirect costs can also be calculated econometrically using a human capital framework to estimate the impact of GBV on women’s labour force participation and earnings. In essence this methodology estimates a reduced earnings equation for women who experience GBV compared to those who do not, often including a selectivity correction for labour force participation (Duvvury et al., 2013). Using this methodology, Morrison and Orlando (1999) find, for example, that in Chile and Nicaragua, the presence of any kind of intimate partner violence is associated with between 34% and 46% reduced earnings for women. These findings can be translated into Present Value of Lifetime Earnings, to calculate the cost of GBV to victims rather than to businesses. Data requirements include data on working life trajectories (if Present Value of Lifetime Earnings are to be calculated), micro data sets with standard labour force information on women’s participation, and data on working hours and earnings (Duvvury et al., 2013). A major shortcoming of this approach is that it does not explain the simultaneity problem, that earnings may affect the probability of experiencing violence whilst violence may impact on earnings (Duvvury et al., 2013, Morrison and Orlando, 2005).

Examples include a study by Walby (2004) for the UK and Morrison and Orlando (1999) for Chile and Nicaragua.

**3.2 Methodological approaches for estimating non-monetary costs of GBV**

**Propensity score matching**

Though it can be used for quantifying monetary costs, this approach is largely applied to non-monetary costs, such as social and health impacts on individuals (Duvvury et al., 2004). It is very similar to the econometric methodology above but designed to address the causality between earnings and probability of experiencing
violence (Duvvury et al., 2013). Propensity score matching compares mean outcomes, such as earnings loss or labour force participation rates or educational outcomes, of those who have experienced violence and those who have not (Morrison and Orlando, 2005). It requires large sample sets to have meaningfully matched groups for comparison, and the method is not suitable for calculating all cost categories of GBV as it is focused on outcomes (Duvvury et al., 2013).

Examples include a study by Morrison and Orlando (2005) for Peru, Haiti and Zambia.

**Willingness-to-pay method**

Usually this method is used to establish the amount individuals or communities are willing to pay to avoid the risk of violence, though it could be transferred to businesses. However, the methodology is based on the assumption that the potential negative outcomes are understood and that the individual, community or company prefers to minimise them. So the methodology is only feasible where there is already a comprehensive understanding of the costs of GBV (Duvvury et al., 2004). It is therefore not reasonable to assess willingness-to-pay in a context where GBV is widely accepted as the norm, as it is in PNG.

**Disability adjusted life years (DALY)**

This methodology measures the years of life lost due to death, disability and chronic morbidity (Morrison and Orlando, 2005). It is therefore relevant for health economics in terms of establishing the health burden of GBV relative to other health conditions but not applicable to costing GBV to business.
4 How can we collect data for estimating the cost of GBV to business?

To calculate the cost of GBV to business, the prevalence and incidence rate of GBV needs to be established, as well as the utilisation rate of services provided by companies to deal with GBV, and other specific cost data affecting output in terms of absenteeism and productivity. As, to the best of our knowledge, there is either no or no reliable data available at the national level in PNG to estimate these costs, representative businesses should be selected with which surveys can be undertaken to gather prevalence, utilisation and other specific costing data. Though a national survey may be desirable, depending on the objective of the costing exercise, representative surveys are considerably more cost-effective when calculating the cost of GBV to business.

Measuring GBV in PNG
Despite the scale and pervasiveness of GBV worldwide, data and methods of estimating the prevalence is sparse, especially in developing countries like PNG, where GBV is often an accepted norm of life. Many women simply do not report violence and official prevalence data has been shown to be vastly under-representative (Palermo, et. al. 2013). As a result, accurate measures of the scale and impact of GBV in PNG are difficult to obtain.

Defining measures of GBV

**Prevalence** is the number of women having experienced GBV at some point in their lifetimes (lifetime prevalence) or during the 12 months preceding the study survey.

**Incidence** is the number of separate episodes of GBV that occurred among women in the preceding 12 months. Incidence usually exceeds prevalence.

**Victimisation rate** is the number of incidents involving women per 1,000 in a population

*Source: CDC (2003)*

We did not identify any comprehensive national surveys on GBV in PNG covering the prevalence and incidence of GBV that a costing exercise could reliably draw on. A recent study, however, using the validated WHO research instrument used to investigate women’s experience of domestic violence surveying 200 women, finds that two thirds of women in PNG have been victims of GBV (Ganster-Breidler, 2010), twice the global average (WHO, 2013). A UN survey on men and violence
in the Asia-Pacific finds that 80% of men in Papua New Guinea-Bougainville report having perpetrated physical and/or sexual intimate partner violence in their lifetime (Fulu et al., 2013). Though not necessarily representative, these are alarming figures and point to PNG’s exceptionally high prevalence of GBV.

For the purpose of identifying prevalence and incidence rates of GBV in PNG relevant to business, the above figures could be drawn on. However, these are small-scale surveys and therefore may not be generalizable. In the context of the cost of GBV to business especially, it may very well be that women in employment experience different rates and incidences of GBV than women who are in either no or informal employment (Morrison and Orlando, 2004). Further, women across different business sectors may experience GBV differently, as may women employed in urban vs. rural areas. It would therefore be advisable to include detailed questions on the prevalence and incidence of GBV among women in employment across different business sectors and locations.

**Data gathering for costing exercises**

Most existing costing studies have focused on a top-down approach to aggregate cost building, mainly to calculate the cost of service provision to victims of GBV using the accounting method. However, in developing countries calculating national aggregate costs is difficult given the lack of attention to GBV, and inadequate information systems. A better starting point for cost estimation in developing countries is generally a bottom-up approach (Duvvury, 2004).

The same holds for costing of GBV to business, for which we did not identify any relevant national aggregate data in PNG. A group of representative businesses would need to be surveyed to gather data on the cost and utilisation of services provided to victims of GBV by companies, as well as data on how GBV is affecting employees in terms of absenteeism and productivity of both the victims and their colleagues. The survey should cover each cost category identified through mapping the help-seeking behaviour of those experiencing GBV in the business.
5 Concluding remarks

This brief overview of existing approaches and methodologies to estimate the cost of GBV is intended to inform the development of a costing framework of GBV to business in PNG.

Given the lack of information on the cost of GBV in PNG, let alone the cost specifically to businesses, an enhanced understanding of the actual costs through such an exercise is likely not only to raise awareness of the scale of the problem and hence willingness to act, but also to provide a baseline from which to conduct a cost benefit analysis of potential interventions that either prevent or manage GBV. Without an understanding of the actual costs, evidence-based decision-making in favour of any particular intervention is difficult to achieve.

Such a costing framework should start by mapping the types and extent of help-seeking behaviour of individuals experiencing GBV and the ways this affects their work. The existing literature provides an overview of potential costs to include in the mapping, e.g. costs from absenteeism, presenteeism, overtime paid to co-workers covering for the victim, administrative time and costs as well as the cost of any existing programmes run by companies to prevent and manage GBV. Specific maps of help-seeking behaviour should be validated through interviews with individuals affected by GBV as well as their employers.

Whilst some of these cost categories will be actual costs, some will be opportunity costs. Calculating these will require making assumptions to quantify their value. There are several examples in the literature to draw on to calculate indirect costs associated with GBV. However, these assumptions, too, should be validated through interviews with individuals affected by GBV as well as broader focus group discussions with employees and employers.

Based on the established cost categories, the most appropriate costing methodology can be determined. Most likely the accounting method can be applied, which simply aggregates costs. However, the reliability of the accounting methodology depends heavily on the completeness of the cost categories to be calculated, so these should be well researched.

Given the likely lack of existing data for individual cost categories to draw on, data will probably need to be gathered through interviews with employed individuals affected by GBV as well as employers. Given the sensitive nature of questions related to GBV, these will need to be carefully worded and should be implemented only by a specially trained interviewer. Consequently, a capacity and needs assessment review of the implementing research agency would need to be undertaken to ensure both a ‘do no harm’ approach, as well as the maximisation of rigour in the datasets.

When identifying individuals and companies to interview, efforts should be made to ensure the representativeness of the sample, in order to encourage acceptance and take-up, by other companies, of the findings of such a costing exercise. Factors such as the location, size, and sector of the businesses should be considered.
Based on this kind of an initial costing exercise, either an operational framework for companies in PNG could be designed through which companies themselves could calculate the costs of GBV to their business. This framework could also be implemented across companies to develop an aggregate estimate of the likely cost of GBV to business, potentially by sector and/or location. In addition, it may be possible to design a simple tool, based on a representative costing exercise, through which companies could then quickly calculate the likely cost to their business of GBV according to the number of employees.


Findings from the United Nations Multi-country Study on Men and Violence in Asia and the Pacific. Bangkok: UNDP, UNFPA, UN Women and UNV.


ICRW (not dated) Estimating the Costs and Impacts of Intimate Partner Violence in Developing Countries: A Methodological Research Guide.


The World Bank (2013) “‘Always looking over our shoulder’: The high costs of crime and violence to business in PNG”. Briefing Note 4. Social cohesion and violence prevention team social development department.

USAID and Care (2012) Understanding the Monetary Cost of Domestic Violence: Tools to analyze the costs of domestic violence for behavior change communication, arbitration and advocacy. Prepared by Diana Wu (WayFair Associates) with Julia Ahmed (Team Leader, COVAW).


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ISSN: 2052-7209

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