

Promoting gender equality and empowerment through infrastructure

Drive to improve outcomes for women and girls in the lowest-income countries launched

A review focusing on how PIDG's work promotes gender equality and empowerment has been launched at a [Women's Infrastructure Network](#) event in Sydney.

The study, commissioned by one of PIDG's Owners, the Australian Department of Foreign Affairs and Trade (DFAT), evaluated how gender outcomes are considered and measured by [InfraCo Asia](#), and makes recommendations for potential improvements for PIDG and the sector as a whole.

PIDG CEO Philippe Valahu said: "We are determined to promote and advance gender equality and women's empowerment, both through our work in low-income countries and at a corporate level.

"11.6m women and girls gained access to new or improved infrastructure as a result of PIDG-supported projects in 2016.

"But there is much more to do and we will further improve the way we create and measure gender development impact, building on our role as a leader in this important area."

InfraCo Asia has begun implementing the recommendations of the review, as a trial for a wider roll-out across all PIDG companies.

Centrally, PIDG will develop new tools to better quantify the gender impact of its work and ensure it is proactively considered in the design and due diligence stages of the projects its companies support.

At a corporate level one of the responsibilities of PIDG's incoming Chair will be to act as a 'gender champion' to ensure that the role of women is considered, developed and advanced at every level of the organisation.

Read the review in full [here](#).

[Read more on PIDG's approach to gender](#)



Gender Equality Advisory Services for
Infrastructure Programs

Gender Review

Final 31 October 2016

Acronyms and Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
ASI	Adam Smith International
CSR	Corporate Social Responsibility
DFAT	Department of Foreign Affairs and Trade
DFI	Development Finance Institution
DFID	Department for International Development
FAO	Food and Agriculture Organisation
EIB	European Investment Bank
ESIA	Environmental and Social Impact Assessments
ESMP	Environmental and Social Management Plan
HDO	High Development Opportunity
IAI	InfraCo Asia Investments
IAsD	InfraCo Asia Development Pte. Ltd
IDB	Inter-American Development Bank
IDC	Investment and Divestment Committee
IFC	International Finance Corporation
IFI	International Finance Institutions
IVCDP	Indigenous and Vulnerable Community Development Plan
JDA	Joint Development Agreement
M&E	Monitoring and Evaluation
MoU	Memorandum of Understanding
OPP	Operating Policies and Procedures
PCN	Project Concept Note
PIDG	Private Infrastructure Development Group
PMU	Project Management Unit
PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public Private Partnerships
RAP	Resettlement Action Plan
RMF	Results Monitoring Framework
RMS	Results Monitoring Sheet
ROI	Return on Investment
SAP	Social Action Plan
SECO	State Secretariat for Economic Affairs of Switzerland
UNGC	United Nations Global Compact
WB	World Bank
WEP	Women's Empowerment Principles

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Executive Summary

The case for gender equality and women's empowerment as requisite for sustainable development has been made and accepted to such a degree that it is now the fifth United Nations Sustainable Development Goal: achieve equality and empower all women and girls. Likewise, there is no argument that infrastructure benefits women, can empower them and can transform their lives—for example by providing access to information, mobility, security, health, employment, training and necessities such as water and electricity that women must otherwise give up scarce time to compensate for not having.

The field of infrastructure has traditionally been taken as gender-neutral, with benefits assumed to accrue to women; this position has not altered substantially, although there is a growing awareness that women and men have unique uses for infrastructure and benefit from it—including in its construction, operation and management—in different ways. There are international minimum compliance standards that relate to women (and all those affected by an infrastructure investment). However, these are about mitigating negative impacts rather than standardising the promotion of gender equality and women's empowerment. Arguments for strengthening women's involvement with infrastructure tend to be based in an efficiency argument (e.g. women's involvement will increase the talent pool of potential workers; women are key to winning community support) rather than a gender equality and women's empowerment approach, which takes these as important goals in and of themselves. Although an efficiency approach may bring women into the infrastructure space, it can do so without challenging inequalities and it does not focus on women's empowerment *per se*.

When infrastructure projects do incorporate elements that benefit women, as may be the case with a Corporate Social Responsibility or 'benefits sharing' mandates where women have been identified as 'vulnerable', women's empowerment is not a target of the infrastructure investment, and as such tends not to be measured or included in impact assessments. This renders it difficult to calculate costs and benefits for integrating a gender focus, as the benefit of doing so is not quantified.

This report concerns itself with gendered approaches to infrastructure, specifically the practices of the Private Infrastructure Development Group (PIDG), of which DFAT is a funder. The report uses the PIDG Facility InfraCo Asia Development (IASD) as a case study of what is currently being done in the development/infrastructure space and to shape recommendations for what might be done differently.

Good practices by IASD that have been identified include: planned benefits sharing (Nepal, Kabela), responding to Sponsors' enthusiasm for women's empowerment/participation and enabling women at the community level to benefit economically (Sri Lanka, Biomass), and trail-blazing in women's leadership in infrastructure management and responding to community needs (Coc San, Vietnam).

While attitudes at IASD are broadly open and supportive of the idea of sharpening its gender-related practice, the company would benefit from: 1) some technical support on gender, 2) a mandate (including at Board/leadership level) and budget support from PIDG, and 3) institutional mechanisms such as the appointment of a gender focal point, the requirement for gender analysis in proposals and incorporation of gender dimensions into the company's "Additionality" selection criteria.

This report is presented in three main parts. The first discusses aspects of gender equality and women's empowerment in infrastructure investment, including elements of good practice, gender and public-private partnership, mandates for addressing gender in infrastructure investment, relevant commitments and key issues. The second discusses IASD as a learning case for how strengthening a gender equality and women's empowerment focus in infrastructure investment might be operationalised. And last, recommendations are presented for DFAT, PIDG and IASD to consider. Challenges to the preparation of the report included the unique nature of the multi-donor PIDG and IASD companies, neither of which fully fits in either the development or the public/private camp, and the dearth of 'start to finish' information about gender mainstreaming in infrastructure.

Part 1: Introduction and literature review

Purpose, structure, audience for the report

This review provides DFAT, PIDG and IAsD with a reflection of how a gender mandate is being implemented in infrastructure investment with reference to the work of IAsD and wider current practice. It provides recommendations on effectively integrating a cross-cutting gender equality and women's empowerment mandate into infrastructure policy and practice, which in turn could be taken up by PIDG in consultation with its donors.

This report is presented in three main parts. The first, a literature review, discusses aspects of gender equality and women's empowerment in infrastructure investment, including elements of good practice, gender and public-private partnerships, mandates for addressing gender in infrastructure investment, relevant commitments and key issues. The second considers IAsD as a learning case for how strengthening a gender equality and women's empowerment focus in infrastructure investment might be operationalised, with particular reference to reconsidering the selection criteria of "Additionality" and to three of IAsD's current projects¹. Last, recommendations are presented for DFAT, PIDG and IAsD consideration.

Methodology

The methodology for this review included: literature and document review; site visits to two projects, Sri Lanka Biomass and Vietnam Coc San, during which semi-structured interviews were conducted with project staff, beneficiaries and IAsD Project Leads; a semi-structured interview with the Project Lead of a third project, Nepal Kabeli; several days spent working in the IAsD Singapore office and reviewing documents as well as meeting with the CEO of IAsD and its Board. Meetings were also held at a distance with members of the Asian Development Bank and World Bank. (See Annex 12: Persons interviewed and met)

The approach taken when working with and reviewing IAsD was not an audit, nor would such an approach have been appropriate considering that IAsD works to a set of guidelines from the PIDG, that to date has not included gender requirements. Rather, the approach taken was exploratory, seeking existing good practice and entry points in IAsD's policies, staffing and practices where realistic recommendations could be made to enhance gender equality outcomes in its work.

Limitations

One limitation in this review is that PIDG and its facilities operate in a unique way that is not directly comparable to a private, fully profit-driven entity, a public entity, or a traditional donor-funded development endeavour. This limited the direct applicability of much of the literature. However, while PIDG does not operate exactly like a Public-Private Partnership (PPP), there are lessons to be derived from a gendered consideration of potentials within a PPP approach. This Review considered economic, rather than social infrastructure.

Secondly, there is a dearth of comprehensive analytical information, both qualitative and quantitative, on mainstreaming a gender equality perspective into infrastructure work. Because gender equality is not articulated as a target in infrastructure work (which is not to say that infrastructure work does not benefit women), it tends to be missed out in the mainstream of monitoring, impact evaluation and capturing of lessons learned. As a result, much of the analysis of practice, such as the World Bank's recent review of decades' worth of its infrastructure investment naturally contains gaps and do not tell a coherent 'story', supported by evidence about what worked, why it worked and how.

Last, while there were opportunities during field visits in Sri Lanka and Vietnam to speak directly with groups of community stakeholders, the results of these discussions may only be taken as indicative points for consideration. There was no scope for the sort of rigour (pre-testing questions, triangulating responses, etc) that characterises true qualitative research and analysis.

¹ The Sri Lanka Biomass project is under evaluation/pre-JDA due diligence stage, so technically not yet 'current'

Literature review

The case for women's economic and social empowerment

Economic empowerment is "...the capacity of women and men to participate in, contribute to and benefit from growth processes in ways which recognise the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth... Women's economic participation and empowerment are fundamental to strengthening women's rights and enabling women to have control over their lives and exert influence in society. It is about creating just and equitable societies." (OECD, 2012)

Economic growth can enhance equality, and vice versa—though women do not reap the benefits of a growing economy in proportionally the same ways as men nor benefit equally from economic participation. Nevertheless, economic empowerment can strengthen women's rights and address strategic gender interests as well as women's practical needs (Commonwealth of Australia, 2016). Growth and development can support gender equality in that wealthier people are more likely to educate both sons and daughters and less likely to have their daughters marry early. Manufacturing and service sectors tend to expand in a growing economy, attracting women into the formal labour force. Service delivery can improve, leading to better health and education outcomes—areas where women's investments of time and finances are heavy and where poor service provision means women work to fill the gaps. However, the relationship between growth and gender equality is neither direct nor automatic. Women's economic empowerment therefore means working to address constraints that women face to participating in and benefiting from growth and development, and working to secure their rights. (Government of Canada, 2013)

Today, it is understood that achieving sustainable economic growth requires the ideas, work, and entrepreneurial inputs of both women and men. Women make up nearly half of the global workforce, a third of business owners, and influence as much as 80 percent of consumer spending. Economies pay a development and economic cost when women are held back from full participation. (Dalberg Global Development Advisors and International Center for Research on Women (ICRW), 2014)

The Food and Agriculture Organization (FAO) tells us that if women had the same access to productive resources as men, they could increase yields on their farms by 20–30 percent, raising the total agricultural output in developing countries by 2.5–4 percent and lifting 150 million people out of hunger. The FAO estimates that productivity per worker would increase by some 25–40 percent with the elimination of discrimination against women workers and managers (Food and Agriculture Organisation of the United Nations, 2011).

Women's economic empowerment is particularly desirable because development effects are multiplied; on average, women spend a larger portion of their incomes on their families, leading to improvements in child nutrition, health, and education, and work to break the cycle of intergenerational poverty (World Bank, 2012). Higher levels of gender equality are correlated with lower rates of poverty, a higher standing in the Human Development Index, and less environmental degradation (Government of Canada, 2013). However, although the proportion of women in the workforce has increased steadily in the past decades, there are significant differences in workforce participation rates between men and women, with women receiving less for their participation (World Economic Forum, 2015). Women are concentrated in informal sectors and in low-productivity, low-paying employment and businesses, limiting the benefits they can receive.

Gender and Infrastructure: linkages and key issues

'Gender is seen as an area of human development that has little relevance to big infrastructure programmes. This is remarkable. Women and men in developing countries use services and utilities in very different ways. This policy of omission reinforces the primacy of men in developing countries and cements the role of women as one which is primarily concerned with drudgery and household based tasks. Put simply, gender-blind infrastructure often empowers men but reinforces the existing, narrow roles of women in the informal, unpaid sector'.

– Sophie Harman, 'Big infrastructure: getting gender and the needs of women wrong (Open Democracy, 2015)

There is no question that improved infrastructure benefits women—in some cases even more than men, as women's needs may be greater in some respects; because of their expected role as caregivers, women and girls face unique constraints on their time and mobility that investments in electricity, water, roads, and transportation services can mitigate. This was demonstrated in rural South Africa, where investments in

electricity networks raised women's employment by almost 10 percent in five years, although they had no significant effect on men's employment. The availability of electricity freed up time that women otherwise spent on home production and expanded the types of market activities available to them, such as service sector jobs. (World Bank, 2012). There are also direct benefits to infrastructure work for women in that it creates long- and short-term employment and may bring opportunities for education and skills training.

Although women benefit from infrastructure investments, the way that they benefit is not well understood, nor are benefits necessarily the result of purposeful targeting and planning. Women's benefit is qualitatively and quantitatively different to men's. A variety of unique constraints, such as on women's time (see Annex 10: Infrastructure and impact on women's time poverty), mobility, education and training, and access to financial products and capital, impinge upon their ability to participate fully in markets as producers and operators, as well as in collective action as members of producer cooperatives or user associations. (Elisabeth Cecelski, 2011). Resettlement, a lack of property rights and land entitlements and discriminatory customary attitudes can also disadvantage women, as can price increases for access to essential infrastructure. (Beard, 2012)

Women's voices are often not heard in identifying infrastructure needs, and women are not always given an opportunity to voice their preferences. A cautionary tale is when electricity arrived in rural Zanzibar and women were excluded from the planning process. As a result, in the village of Uroa, the mill and the kindergarten—two institutions important to women—remained unconnected to the electricity grid. By comparison, institutions of importance to men, such as mosques and the fish market, were connected (Winther, 2008).

Despite some gains and, it could be argued, an all-time high in terms of focus on women's empowerment, gender equality commitments in various sectors are often not translated into planning, budgeting, implementation and monitoring. In the traditionally conservative, male-dominated field of infrastructure, this translation is often missing, despite policy commitments and guidelines committing at least to safeguarding, if not to encouraging, women's full involvement, and promoting their strategic equality needs as sound, essential investment strategy. Nevertheless, it is increasingly understood that integrating gender considerations has a place across elements of infrastructure, including design, strategy and target setting, safeguards, contracting and briefing, results frameworks, terms of reference, monitoring and evaluation, recruitment and project teams and skills make up. That gender is mentioned in Pillar 1 of the World Bank's action plan *Transformation through Infrastructure*, and that the Gender and Development Unit of the World Bank has offered a series of recommendations to its various infrastructure units is testament to this growing understanding.

As stated in an earlier gender-focussed report commissioned by PIDG (IMC Worldwide, 2012): '...research has shown that, despite the policy level commitment there is very little evidence of infrastructure projects taking conscious action on gender. As such, impacts on women are often unplanned and unintended and there may be no gender perspective when targets are set or outcomes are monitored'. There is a need to strengthen gender-related measurement criteria and performance standards. An Inter-American Development Bank (IDB) report reviewed approaches to the assessment and implementation of sustainable infrastructure projects in Latin America and concluded that environmental criteria tend to be better developed than institutional and social criteria. It found that sustainability standards tended to look at social change resulting from environmental changes (e.g., noise, air and water contamination), but not at complex changes in social systems and order (e.g., gender, organizational capacities, and education systems). (Watkins, (Gupta) 2014).

Across infrastructure sectors, the links between women and water are among the more advanced. One early articulation of this link was UN resolution 58/127 adopted in 2005. It sets out goals for the subsequent decade: 'greater focus on water related issues at all levels and on the implementation of water-related programmes and projects, *while striving to ensure the participation and involvement of women in water-related development efforts*'. The UN recognised early the need to address 'prevailing gender systems and the attendant gender division of labour that determines women's primary responsibility for water in the household. Gender systems also determine the distribution of power between men and women' (United Nations, 2006).

The UN points out that taking a gender perspective can lead to gains beyond those originally anticipated, though it may not immediately be possible to monetize them: 'Benefits accrue to both men and women and this seems to tip the scale towards a shift in power relationships between men and women, whereby men, even in traditional communities begin to see the value and accept the need for change in women's roles. This is particularly borne out with regard to women taking on leadership roles at the community level' (United

Nations, 2006). And there is no question that women's involvement can shape the outcome of planning in infrastructure. Having more women in local political bodies, such as *panchayats* in India, has resulted in some cases in more allocations to infrastructure and services prioritised by women (including those that address their children's needs) as well as in greater women's participation in village meetings, increased reporting of crimes against women, and more arrests for such crimes (Chattopadhyay and Duflo in World Bank, 2012).

Infrastructure and private investment: the need for a gendered approach

'The private sector is only willing to come in when it is going to make money.'

– Marianne Fay, chief economist for the sustainable development vice presidency at the World Bank, speaking at a Center for Global Development panel in 2015

Among the Sustainable Development goals to be met by 2030 are universal access to water, sanitation, reliable modern energy, and communications technologies. Meeting these goals will require huge, long-term investment in **infrastructure**. One analysis of infrastructure funding needs for Sub-Saharan Africa concluded that additional spending on clean water and sanitation would need to be about one and a half times current levels—over \$11 billion annually—to improve access significantly (Vivien Foster and Cecilia Beiceno-Garmendia, 2010).

To achieve required financing, decision makers see a significant role for **private investment** leveraged by international support from aid through guarantees, as discussed when the world's Finance Ministers and leading aid officials met in Addis Ababa in 2015 (Center for Global Development, 2016). However, there are shortfalls and uncertainties around many potential infrastructure projects in developing countries due to factors including unclear regulatory regimes, political and market risks, and offtakers' uncertain creditworthiness. PIDG's support gets infrastructure projects off the ground that would otherwise fall prey to such uncertainties.

But PIDG has a greater role to play; it brings a development imperative into the equation, and thus goes beyond what a typical private investor would consider or might be willing to do. Whereas gender equality and women's empowerment has traditionally been left off the infrastructure agenda—often assumed to be 'gender-neutral', with benefits accruing equally to all—groups like PIDG and its donors must now set the standard and **establish the business case for taking a gendered approach to infrastructure investment**. Getting infrastructure projects off the ground effectively, with equitable development benefits, will mean articulating a gender equality and women's empowerment mandate, operationalising it and monitoring and measuring impact and good practice.

Challenges to monitoring and evidence on gender in infrastructure

Despite a growing base of policy and guidelines, gaps in practice and monitoring result in a patchy evidence base that could otherwise help private sector decision-makers to understand and account for the potential 'trade-offs' of taking a substantive gender equality approach. It is important that the type of impacts delivered to (and by) women by infrastructure projects are not lost in assessing the number of women who will benefit. A report commissioned by the IFC looking into the gendered impacts of public-private partnerships in infrastructure uncovered four main impact channels in addition to access: time; economic activity and resources; health and safety; and planning, policy and decision-making. (Beard, 2012) These are all strategic needs for women—needs which, when met, enable women to go beyond the status quo of inequality—and must be better understood in relation to infrastructure investment in a way that can be factored into the business case for gender equality mainstreaming.

Various factors make assessing and evaluating the gender impacts in infrastructure work a challenge: a lack of sex-disaggregated data, a lack of qualitative analysis—necessary for identifying gender-related issues, indicators and impacts—and the absence of baselines and set targets against which to measure change. Existing guidance tends not to detail how data can be collected in the level of detail required or how data collection could be financed as part of the project delivery process.

A contributing factor is that infrastructure projects rely to some extent on data gathering about beneficiaries from other government or private sector entities that may lack resources or time to acquire the level of detail that would be useful to integrate a gender equality approach properly. Infrastructure projects all require some

form of cost-benefit analysis (which does not mean a solely monetized approach) that requires identifying beneficiaries and the scale of benefit they obtain. Most collect data on this, though this data does not tend to be detailed enough to support in depth consideration of gender issues.

Mandates for taking a gender-responsive infrastructure approach

On September 25th 2015, countries adopted a set of goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda: the **Sustainable Development Goals (SDGs)**. Each goal has specific targets to be achieved over the next 15 years.

Integrating gender equality and women's empowerment into infrastructure development directly contributes to achieving seven of the SDGs:

- › **Goal 1:** End **poverty** in all of its forms everywhere
- › **Goal 5:** Achieve **gender equality** and **empower all women and girls**
- › **Goal 6:** Ensure availability and sustainable management of **water and sanitation** for all
- › **Goal 7:** Ensure access to affordable, reliable, sustainable and clean **energy** for all
- › **Goal 8:** Promote sustained, inclusive and sustainable **economic growth**, full and productive employment and decent work for all
- › **Goal 9:** Build resilient **infrastructure**, promote inclusive and sustainable **industrialisation** and foster **innovation**
- › **Goal 11:** Make **cities** and human settlements inclusive, safe, resilient and sustainable.

The Australian Government has made gender equality a strategic priority for its development programme with its high profile announcement that 80 percent of all aid investments must show real progress on gender equality and women's empowerment. Previously, health and education investments were the most likely to promote gender equality, while trade, agriculture, infrastructure and governance investments were least likely (Commonwealth of Australia, February 2016). This has changed, and the Australian Government's position on gender equality and infrastructure is unambiguous: '[We will] ensure our infrastructure investments support women's access to economic opportunities and trade'. 'At a minimum, we will ensure that women and men benefit from our interventions, to avoid exacerbating gender inequalities. This means designing infrastructure programs to meet women's as well as men's needs and priorities, that aid for trade programs engage specifically with women entrepreneurs...' (Commonwealth of Australia, February 2016)

The **Strategy for Australia Aid Investments in Economic Infrastructure** prioritises investment in infrastructure as part of the strategic target of scaling up the aid for trade portfolio. The Strategy identifies key priorities, into which an articulated, gender-related focus is integrated:

- › Mobilise the private sector to finance and deliver infrastructure to meet the needs of the region;
- › Improve access to infrastructure services to facilitate private sector and human development and promote women's participation and empowerment; and
- › Promote infrastructure to enhance trade and connectivity throughout the region.

DFAT places empowering women and girls at the heart of its aid programme, explicitly linking it to economic growth:

- › 80 percent of all aid investments must show real progress on gender equality and women's empowerment
- › Infrastructure investments are explicitly included, in that they must support women's access to economic opportunities and trade
- › Women's economic empowerment – accelerating women's participation in the formal sector workforce
- › Aid for trade investments, including supporting women and traders to learn business and vocational skills
- › Avoiding exacerbating gender inequality (including increasing time and work burden) for example by designing infrastructure to meet the needs of women and men

As part of its commitment to promoting women's inclusion and empowerment, DFAT supports the **Women's Empowerment Principles (WEPs—UN Global Compact and UN Women)**, which include establishing corporate leadership for gender equality; non-discrimination at work; promotion of education, training and professional development for women; promoting equality through community initiatives and advocacy and; measuring and publicly reporting on progress. The WEPs elaborate the gender dimension of good corporate citizenship, the UN Global Compact, and business' role in sustainable development. They are the result of

collaboration between the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and the United Nations Global Compact (UNGC). The Principles were developed as a voluntary framework and resource for companies dedicated to advancing gender equality. (WEP partnership team, 2010) The WEPs are about engaging business to challenge and alter the status quo; CEOs sign onto and abide by the principles to further the goal of gender equality through a variety of means, from a bank offering specialised financial services and business loans for women entrepreneurs to a transport company establishing special employee committees to identify and design programmes tailored to the needs of women.

The **World Bank** and **IFC** are key shapers of infrastructure investment across lower and middle-income countries. The 2016-2023 World Bank gender strategy, 'Gender equality, poverty reduction and inclusive growth', outlines the Bank's objectives and suggests how these are to be operationalised within the institution, noting that gender equality is central to the Bank's stated goals of ending extreme poverty and boosting prosperity. In terms of implementation, it places emphasis on outcomes and results. This includes strengthening the country-driven approach, especially emphasising the value of collecting sex-disaggregated data, disseminating evidence of what works, and adopting a more strategic approach to gender mainstreaming, including developing a more robust monitoring system. The Bank also identified leveraging of the private sector as key to effective gender equality outcomes.

Elements of good practice in gender mainstreaming in infrastructure

From a development perspective, it is not difficult to demonstrate that supporting gender equality and women's empowerment in infrastructure operations has significant benefits for communities and contributes to project effectiveness and efficiency in the longer term. With infrastructure, as with all other sectors, attention to gender leads to better projects—for example, tapping into women's knowledge has led to more efficiently designed projects in water, sanitation and transport. However, the body of evidence is compromised by weaknesses and inconsistencies in targeting and monitoring, and much of it relates to the kind of work that is outside the scope and/or control of infrastructure development initiatives like IAsD. For example, when it has to do with post-financial close phases (e.g. the roles that women can play in longer-term maintenance and within user groups). The review explores the extent to which gender equality measures could be incorporated into the work of infrastructure development initiatives.

Elements of good practice in gender mainstreaming in infrastructure are not difficult to find. These can include participatory consultation involving women, activities intended to reduce gender disparities, such as requiring women's participation on project committees or the provision of training, and innovations such as taking the opportunity of infrastructure work to ensure that women's names are on land titles, engaging in social mobilisation to amplify women's voices, or engineers using 'pregnant' crash dummies to rethink standards and reference models in transportation safety design (Schiebinger, Klinge, Sánchez de Madariaga, Paik, Schraudner and Stefanick, 2011-15). A World Bank review of a decade and a half of infrastructure investment tracked the use of gender methods in over 1,200 projects, finding that—apart from an overall upward trend in gender mainstreaming over time—consultation was the most commonly used gender method (17% of projects), followed by some type of targeted gender activity in 13% of projects. By comparison, however, gender showed up in project development objectives and budgets in only 2% of the projects reviewed, demonstrating that there is still a long way to go in the articulation of gender equality in infrastructure projects, as well as the need for strengthening the business case that would enable decision makers to fund it as sound investment strategy. (Social Development Department, 2010)

The critical link between articulated gender equality-related intentions and impacts and the need to strengthen these links to amplify the benefits of infrastructure investment for women cannot be overstated. A recent review found that basic infrastructure has the potential to reduce the time women spend on housework and care work and influence the gender division of labour. This is of real significance to women who suffer from time poverty as a result of the multiple, gendered roles they are expected to play. However, infrastructure projects rarely include interventions to address this directly, even when reducing time burdens is a stated aim of the project. (Asian Development Bank, 2015)

Good practice now is also recognised to include going beyond supporting women to play their traditional roles, which can have the effect of entrenching norms of inequality, to supporting transition, providing financial and

business training to women in businesses, and supporting initiatives to guide women on opportunities to maximise returns on their productive activities. (Asian Development Bank, 2015). At the policy level, addressing subsidies and pricing is essential to ensure that poor women (and households headed by poor women) can access and use affordable infrastructure and services. Annex 9: Ways of enhancing women's participation in infrastructure projects provides some further points for consideration.

Public Private Partnerships, infrastructure and gender

A Public Private Partnership (PPP) is a contractual arrangement between a public body (often, though not always a service provider) and a private sector entity (ranging in size from a small individual company to a large consortium). The contractual agreement is used to deliver facilities, infrastructure and services to meet the needs of a population, whilst time-sharing the costs and risks of delivery and operation. (Beard, 2012)

A PPP usually involves a contract between a private investor (or consortium of private investors) and a government to build and possibly operate a public infrastructure project. A PPP is usually initiated by a government calling for competitive tenders from the private sector (though there are sometimes PPP projects that occur as a result of unsolicited proposals from the private sector, but this practice is generally discouraged). A PPP usually involves the private sector investor recovering the cost of their investment from either, or a mix of, fees collected from users of the infrastructure or payments directly from government.

IAsD, either by itself or as a member of a consortium cannot bid for a PPP project as it would breach the PIDG requirement that it not compete with the private sector (articulated by the PIDG "Additionality" criteria). Accordingly, IAsD is mostly involved in preparing and providing short-medium term financing and project development capability for infrastructure projects that emerge through other mechanisms, which primarily are:

- (i) stranded PPP projects such as the Kotte waste-to-energy project in Sri Lanka: originally a PPP project where the private sector company selected through competitive tendering was unable to complete the development of the project and eventually came to InfraCo for help;
- (ii) projects that emerge from a government framework for private sector investment: such as in the power generation sector, where a government establishes a structure for the state power distributor to purchase power from independent power producers and, in response, private companies submit proposals to set up power generation stations; and
- (iii) projects where a private sector investor identifies a commercial infrastructure project (which could be public or private infrastructure), but needs the finance and project development skills of IAsD to bring the project to fruition.

Revenue to recover the cost of infrastructure projects that IAsD is involved in appear to rarely involve any direct payments from government, as can occur with PPPs. Where the government initiated the project (as in the Kotte example) or set the framework for investment that integrates with state agencies (as in the power case), it is in the framework of a PPP. In other cases, they would not be described as PPPs, e.g. the IAsD projects to build grain storage facilities in India.

There are several arguments for the positive potential that PPP arrangements have for gender integration. Because PPP projects can use mechanisms such as deductions and penalties if the contractor fails to perform or meet targets, the public sector retains a level of control. PPP contracts carry more immediate and clearly defined compliance criteria and penalties, and are therefore more likely to be followed, potentially resulting in more beneficial gender outcomes.

PPP models at the project level align with performance monitoring by long term outputs/outcomes rather than by inputs or process indicators; they offer a more formal and incentivized way to monitor results, providing scope for better monitoring of gendered outcomes. Conditions could be inserted into finance agreements during assessment and structuring of PPP contracts, requiring gendered output-based results.

Because PPPs involve the raising of private finance, the agenda of lenders (particularly those partly supported by funding from IFIs, who have gender safeguarding and development requirements) could require gender analysis as part of the social due diligence approval and monitoring processes related to lending. Also, PPP models offer a route to systematically integrate reporting against gender indicators.

Scope is also provided through the corporate social responsibility (CSR) policies of private companies, which may explicitly include commitments to addressing gender in their operations. Many PPPs in less developed countries involving foreign private sector financing have IFI involvement, usually in project development (e.g. through PPIAF) but sometimes in actual investment (such as by the IFC). However, there are more PPPs that are locally financed, which less commonly have IFI involvement. IFIs have gender safeguarding and development requirements for the lifetime of projects on which the PPP finance arrangements are conditional.

There are risks of the PPP model disadvantaging women. PPPs are often characterised by more “flexible” labour relations that can adversely affect the poor and unskilled; women more often fall into this group. To drive up efficiency, jobs and training opportunities designed to support and cater for women’s needs may be less likely to be created or maintained than might be the case in a government-operated project. Unless quality controls are in place, private-sector ‘efficiency’ may consist of employing fewer women at lower salaries.

IAsD Project and case study review

As detailed in the Annexes, a review of IAsD projects as well as a limited number of external ‘case studies’ yields some lessons to be learned about gender in infrastructure.

Project Sponsors are often driven by what they see as issues in-country and may well have a personal commitment to social goals of equality and women’s empowerment. It should not be assumed that just because sponsors and developers are driven by the commercial bottom line, they do not share equality and empowerment goals and **receptiveness** to integrating them.

It is both important and doable to have a **detailed, official process** for identifying gender-related issues, ensure appropriate **gender capacity** is in place, and scope for **identifying and implementing responses** to gender-related issues beginning from the very earliest stages of project formulation.

The **ESIA** and related plans (Social Action Plans, Environmental and Social Management Plans, etc) are crucial in laying down early markers—they provide the roadmap that will be followed regarding social and gender commitments, including stakeholder consultation and any sort of benefit sharing, even when projects are handed over to new investors and, eventually, new owners. Where they are gender-neutral—or, as is often the case, group women into a general ‘vulnerable’ category, they offer little scope for meaningful engagement for women’s empowerment and risk ‘tick box’ solutions that provide too little support to too few women.

Though community leaders are crucial, they do not always ‘speak on behalf of the people’, particularly when it comes to voicing women’s needs and concerns. **Women’s groups, collectives** and **women themselves** need to be brought into consultation and decision-making. Existing power frameworks can reflect patriarchal norms and can minimise women’s needs and potentialities. Ongoing commitment is required to work around and with official structures when they are entrenched in, and have a vested interest in, an unequal status quo.

An **efficiency** argument says that women are needed in infrastructure to enhance a needed talent pool and ensure effective communication. While this argument is objectively valid, it serves to limit the approach that might otherwise be taken. A more **transformative approach** considers the factors underlying women’s relative lack of skills and training, takes women’s own viewpoints into direct account, and engages with processes of change to attitudinal and structural barriers to women realising their full potential.

Last, a cautionary note: because women are more often relegated to unpaid domestic work or ill-paid and vulnerable informal work, they may present a source of cheap, easy labour, the returns on which (to investors/employers) may be greater. Those who plan, manage and implement infrastructure investment must ensure that women’s labour is recognised and remunerated in such a way as to contribute to economic empowerment as substantially as possible and that women work in safety. This is in line with international standards of decent pay and conditions and is laid out in the eighth SDG Goal of promoting sustained, inclusive and sustainable economic growth, **full and productive employment**, and **decent work for all**.

Part II: InfraCo Asia

Introduction and key findings

Taken very simply, there are two absolute essentials involved in mainstreaming gender in a project or investment: 1) having some kind of **gender analysis** and 2) **designing elements of the project** to respond to the findings of that analysis. Built around this are other key elements: a conducive institutional policy framework, necessary budget, staff with an understanding of gender issues and decision makers and gender-responsive monitoring and communication.

IAsD's work is not guided by a mandate related to gender equality or women's empowerment; the only specific gender-related requirement made is that there should be development impact (defined and measured in terms of how many men/women gain access and are employed both in the short-term and the long-term as a result of the investment). It is possible, therefore, to say that although women undoubtedly benefit from IAsD's investment and technical guidance, neither equality nor empowerment is part of any stated agenda. Benefits to women outside of the normal increases in access and possible employment opportunities are welcome, and do occur, but fall outside of the targets of the projects and as such are not measured and tracked.

IAsD staff represent a considerable potential asset in scaling up a gender focus. It is a small, dynamic organisation to which staff were drawn initially in no small part because of the development emphasis. Staff are highly receptive to ways in which IAsD's work could be more empowering for women, though there is an understanding that parameters are ultimately set by the PIDG. While there is no existing technical gender capacity among staff, there is willingness to gain this. The CEO and Board are broadly supportive and open to whatever direction the PIDG want to take to enhance and sharpen a focus on gender equality through its infrastructure investment.

Annex 1: Nepal Kabeli project, Annex 2: Vietnam Coc San Project and Annex 3: Sri Lanka Biomass Project provide insights into how gender is approached in various IAsD projects.

Introduction to InfraCo Asia Development

IAsD was established by the Private Infrastructure Development Group (PIDG²) to develop sustainable, socially responsible and commercially viable infrastructure projects involving private sector participation and contributing to economic growth and social development in lower income countries in South/South East Asia.

The IAsD's Funders Agreement states (PIDG 2010:12):

- the **objective** for IAsD is 'to stimulate greater private sector involvement in the development of infrastructure and related projects by reducing the risks of project development'; and
- its **mission** is 'to identify, create and structure financeable private sector and public private partnership investment opportunities and offer them, at or prior to financial close, to the private sector for implementation'.

Key features that distinguish IAsD from other economic development agencies are:

- it supports the development of infrastructure by private companies, whereas the focus of other development agencies is on public infrastructure;
- its projects need to be able to generate a sufficient stream of revenue that allows them to be commercially viable;
- it takes an equity stake in investment projects, with its contributions to project development converted to equity;
- in most cases it provides expertise and funding to support project development, though in some cases it acts as co-developer of projects in association with some other lead developer;
- its investment in projects is sometimes supplemented by equity funding from InfraCo Asia Investments (IAI), another company established by the PIDG;

² The PIDG was established in 2002 as a donor-financed group to help overcome obstacles to private sector involvement in infrastructure development in developing countries. It helps mobilise private sector investment in infrastructure that is needed to boost economic growth, increase service provision to the poor and more generally to alleviate poverty. It is financed by around ten bilateral international development assistance agencies, and oversees eight specialist facilities, one of which is IAsD.

- › it originally aimed to sell its stake when projects reached financial close, though pressure from stakeholders and/or project lenders has necessitated that it retains a financial interest in projects beyond financial close with exit delayed to a later stage; and
- › in the long term it aims to secure sufficient revenue from successful sales of its stakes in projects to fund general operational costs and development costs associated with future projects

IAsD is intended to support commercial (i.e. financially profitable) investment in infrastructure by private companies over the long-term on a full cost-recovery basis. By taking on the cost and risks associated with project development, IAsD seeks to mobilise private sector investment to build and operate infrastructure projects in situations where the private sector would not otherwise be willing or able to invest.

Priority is given to projects in the least developed countries in Asia (including Bangladesh, Bhutan, Cambodia, Laos, Myanmar, Nepal and some poorer states in India) and fragile and post-conflict states (Bangladesh, Myanmar, Nepal, Pakistan and Sri Lanka). IAsD is also able to invest in other lower middle income countries in Asia (the remainder of India and Indonesia, Philippines and Vietnam) subject to no more than a third of its projects being in these countries.

IAsD has two operating models. In one, IAsD outsources most project development activities to private companies, which are involved both in identifying potential investment projects and are responsible for developing the projects. Since moving to a multiple developer model and building up its internal management team in 2015, IAsD staff have increasingly taken a significant role in reviewing project proposals and reviewing the work of its project development partners. In the other operating model (the co-development programme), IAsD is now working with project developers/sponsors that have brought proposals to IAsD seeking support for the project development stage, but who are otherwise capable of carrying out project development activities.

Project Selection Criteria

To be selected for funding and assistance, prospective projects must meet three criteria:

- **Commercial Viability:** will the project lead to reasonable returns for investors?
- **Development Impact:** the number of people who will benefit and number of people who will be employed (both of these are disaggregated by male/female). IAsD usually readily agrees on a rating of low, medium or high on this criterion. This criterion is objective and quantifiable (beneficiaries, number employed) and always present by default in terms of assessing access to new infrastructure services from a project (such as power, transport, water, etc) and creating short-term (during construction) and long-term (in operations) employment.
- **Additionality:** This has to do with how IAsD fills a gap in the market that a typical private investor would not be able or willing to fill and also how IAsD, once it is involved, would go above and beyond what a typical private investor would be able and willing to do for a similar infrastructure project. More specifically, this relates to the following “types” of additionality:
 1. By mobilizing finance for project development and/or for completing the project
 2. By improving the design of infrastructure projects
 3. By contributing to policy or building the capacity of local stakeholders, empowering them with the skills, experience or tools needed to better engage with the private sector and equitably share the benefits and risks of future projects.³
 4. By promoting good environmental, social⁴ and governance standards through improving the social standards of a project such that it demonstrates good labour, working and health and safety practices.

³ For example: in Zambia, InfraCo Africa invested in building the capacity of a smallholders co-operative so they could define their own constitution and the conditions under which they wished to participate in an irrigation project.

⁴ It is expected that InfraCo Asia and InfraCo Africa’s projects will meet international standards and that these standards may exceed those required by host governments.

5. By having a direct Developmental impact on people, including secondary benefits such as directly improving people's livelihoods, living standards, access to opportunity or health through additional measures⁵.

Additionality as a gender entry point

The selection criterion of Additionality is worth special consideration from a gender perspective.

The PIDG Central Management Office (CMO) through its membership of the Development Finance Institution (DFI) Indicator Harmonization Group, led an initiative in 2015 to review the Additionality definitions used by DFIs (EIB, ADB, AfDB, CDC and others). It found that most DFIs use qualitative definitions of Additionality and report it at the project appraisal stage (ex-ante). The PIDG CMO was subsequently asked by PIDG Members to develop Facility-specific definitions of Additionality.

Previously, IAsD had used only 'financial' and 'capability/expertise' types of Additionality as its criteria. However, IAsD (and its sister Facility, InfraCo Africa) refined and extended this definition in recognition of the fact that IAsD's involvement might also have benefits in the areas of technology/design, regulatory changes, standards/procedures and development impact over and above that of a typical investor. While the refined definitions of Additionality listed above have not yet been incorporated into the Operating Policies and Procedures (OPPs) or the Results Monitoring Handbook, the IAsD LogFrame does reflect the requirement that 30 percent of IAsD projects must be 'Highly Additional'. This means that, out of the five types of additionality listed above, 30 percent of projects must exhibit at least three of these types.

It is important to differentiate 'development impact' Additionality from development impact as a stand-alone selection criterion. The development impact criterion is a quantitative, sex-disaggregated measure of beneficiaries and people employed. However, development impact in the context of Additionality relates to how IAsD's involvement would lead to development impact over and beyond what might be the case if a private investor was involved. It provides an entry point for including gender impact as a function of IAsD's involvement (which a typical investor might or might not care about). *The extent to which gender equality and women's empowerment is articulated and understood within the IAsD Additionality criteria, and the extent to which IAsD decision makers are informed of and mandated to incorporate gender equality in their consideration of projects would have a direct correlation with the selection of projects that have an articulated, gendered impact.* See Annex 6: Additionality for a suggested framework of how gender may be considered within each of the Additionality type measures.

Users of the Additionality framework

While it is helpful to have a framework (the Additionality measurement assessment), it is also important to consider how it is used and by whom. Achievement of each type of Additionality is subjective as the definitions can only be assessed qualitatively, not quantitatively. This means the three-person **Investment and Divestment Committee (IDC) or the IAsD Board**, as the case may be, (see the section on Governance below) will be accountable for evaluating how additional IAsD's involvement in a project is likely to be.

IAsD expects **developers** (working with IAsD's internal management teams) initially to identify how IAsD's involvement will be Additional. This assessment is presented to IAsD managers for an initial vetting, then approved by the IDC or the full Board. Scores are at the discretion of the IDC as is whether IAsD's involvement in a project is recognised as 'Highly Additional'. A score of two out of the five possible types of additionality yields the conclusion of 'Additional'. For involvement to be considered 'Highly Additional' the project must score at least three: i.e. must demonstrate three out of the five types of Additionality. IAsD has a target quota of 30 percent of Highly Additional projects.

It is important to note that, before IAsD and, later, the IDC or Board ever receive a project proposal, co-developers or developer services will have already collected project details for consideration. It is possible—and necessary—to require that their submission provide qualitative and quantitative gender analysis as well as

⁵ For example: InfraCo Africa is developing a power project in Zambia which will provide power to a grid but will also deliver secondary benefits to people through the establishment of a Community Trust which could fund a school, health clinic or other developmental initiatives.

a narrative outline of exactly what the proposed project will do for gender equality and women's empowerment and, importantly, how it will do this.

Governance

The UK Department for International Development (DFID), the Australian Department of Foreign Affairs and Trade (DFAT), and the State Secretariat for Economic Affairs of Switzerland (SECO) fund IAsD through PIDG.

IAsD has a **Board** with five non-executive directors. It is subject to the PIDG Code of Conduct, PIDG OPPs and conditions of funding set by the PIDG Members. Appointments of IAsD Board members are subject to approval by the relevant PIDG members and there is formal oversight by PIDG members via Quarterly Meetings with IAsD donors and twice-yearly Governing Council Meetings. In addition to the Funders Agreement, IAsD is governed by a set of Operating Policies and Procedures, a medium term business plan and annual operating plan and budget: all three of these documents are approved by the Board and the PIDG.

The Board has several subcommittees. Of particular relevance to the present review is the IDC, which has approval authority for prospective projects under USD5 million for co-development projects, and USD8 million for developer services projects. In these instances, the IAsD management staff first decide whether to present a prospective project for approval to the IDC, which then approves it (or not). Projects over that amount are referred to the full Board for review and approval.

IAsD Board members' expertise covers an impressive range, however there is currently no member with a background in gender or women's empowerment, nor is there any mandate for the Board to consider gender-related aspects of potential or ongoing investment.

IAsD's mandate in relation to gender

Limited specific reference is made to gender in the practical direction of IAsD activities, which is ultimately something that PIDG may need to address. At present, the principal general source of direction with regard to social matters are the IFC guidelines (IFC, 2012), which refer to gender as follows:

1. "A number of cross-cutting topics such as climate change, gender, human rights, and water, are addressed across multiple Performance Standards" (IFC 2012: 2).
2. "This disadvantaged or vulnerable status [i.e. where individuals and groups that may be directly and differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status] may stem from an individual's or group's race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status. The client should also consider factors such as gender, age, ethnicity, culture, literacy, sickness, physical or mental disability, poverty or economic disadvantage, and dependence on unique natural resources" (IFC 2012:9).
3. Clients are not to make employment decisions on the basis of personal characteristics unrelated to inherent job requirements, including factors "Such as gender, race, nationality, ethnic, social and indigenous origin, religion or belief, disability, age, or sexual orientation" (IFC 2012:18); and
4. With regard to Affected Communities of Indigenous Peoples' resource use, "the assessment of land and natural resource use should be gender inclusive and specifically consider women's role in the management and use of these resources" (IFC 2012: 50).

Women are specifically referred to with regard to⁶: consultation with affected communities; employment; trafficking; occupational health and safety; land acquisition and resettlement, and; project development.

In the IAsD OPP, gender is explicitly noted only in the context of possible barriers to poor people benefiting from an infrastructure service or facility being developed by IAsD, specifically "poorly designed investment projects/service delivery which ... where relevant, create or fail to address barriers relating to gender, age or disability" (IAsD 2015:26).

Women are specifically mentioned in one instance: "Local people affected by construction, users of services relevant to the project and potentially marginalised people including poor people, minority ethnic & tribal groups, women, children and the elderly." (IAsD 2015: 24)

⁶See Annex 4: IFC regulations regarding women

While not directly relevant, it is noted that the OPP makes specific reference to a DFAT policy that “the Company and each Developer will comply with DFAT’s child protection policy to the extent that it is applicable to the Company and to the relevant Developer given the nature of their activities.” (IAsD 2015:8)

IAsD project types

IAsD can invest in a range of infrastructure development projects, including: start-ups or greenfield developments; partly developed projects where the incumbent sponsor is unable to bring the opportunity to financial close; abandoned projects; currently operating companies where the owners are unable to finance and implement major new investments; privatised or to be privatised projects/companies; and majority state-owned projects where the private sector is to participate in a risk sharing capacity (IAsD 2015:5).

To date, most projects completed or under development by IAsD have been where a private sector promoter commenced project development but had insufficient development capacity and/or funding to progress it to financial close. This approach has merit; the fact that a project has progressed to some extent suggests a need for it. The criterion of Additionality is also readily demonstrated under these circumstances given there is a strong chance these projects would have failed without IAsD involvement.

IAsD’s OPP delineates a **High Developmental Opportunity (HDO—also called High Developmental Value)⁷ as a specific category of project; these represent about 30 percent of IAsD’s projects.** These are agreed by the Board as having high pro-poor developmental impacts. It is generally expected that such projects will have at least one of the following characteristics:

- “(i) involve relatively small total capital investment requirements (less than US\$50 million);
- (ii) comprise an investment in water and sanitation sector, agriculture-supporting infrastructure or certain renewable energy technologies; and
- (iii) comprise an investment that directly facilitates productive investments by the national private sector (e.g. agribusiness) and where there is an intent to develop schemes that benefit poor people (e.g. out-grower schemes)” (IAsD 2015:27).

HDO projects are still required to offer strong prospects of commercial viability over their investment life, though may be pursued even where there is a higher level of financial risk than for other projects.

Project Development by IAsD (see Annex 5: IAsD development process)

Entry points for consideration of gender in the process is considered in Table 1 below.

Table 1 Gender Entry Points in the project development process

Step	Activity	Gender entry point
Step 1: Initial project screening and selection (items 1 and 2 in Figure 1)	Candidate projects are typically identified either by one of the project development companies that have been engaged by IAsD, or as a result of unsolicited or solicited approaches to IAsD by project sponsors. The initial screening of candidate projects is based on criteria such as the sector of the project, its location, potential commercial viability, additionality and development impact (including initial estimate with number of people who will potentially benefit from the project once complete)	The screening process currently does not include or require any specific consideration of gender equality or women’s empowerment to be done by candidate projects or project development companies. At this point, IAsD’s leverage (as a potential funder) is high and they are in a good position to set down ‘markers’ as to what is important for them and thus set the tone for their involvement in the project in terms of gender and women. This would be a good point to require qualitative and quantitative gender analysis as part of the initial potential project presentation as well as proposals for what measures should best be taken to address women’s empowerment through the investment.

⁷ Although the OPPs still show the HDO project, the concept has actually been incorporated through classifying projects as where IAsD involvement is ‘highly additional’, as discussed in the preceding section on Project Selection criteria and gender entry points around Additionality.

Step	Activity	Gender entry point
Step 2: Project investigation - establish a Memorandum of Understanding with the project promoter (items 3 and 4 in Figure 1)	The MOU establishes the condition to undertake compliance, legal, and finance and tax due diligence of the projects and the people and entities involved in them, and also to negotiate a Joint Development Agreement (which will entail scoping the project development activities required), Share Subscription Agreement and a Shareholder Agreements to manage future arrangements between the parties.	IAsD's leverage is strong at project screening and investigation phases, and careful thought on gender-related requirements must be in place by this point, informed by what is found during gender analysis. An MOU provides a potentially useful tool to establish and require elements that strengthen a gender approach, for example under the broader heading of Corporate Social Responsibility. This need not be narrowly confined to safeguarding-related measures, but could in fact be used to institute measures to strengthen the project's gender response, such as having a qualified Gender Specialist individual or team on board.
Step 3: Prepare/Develop the project (Items 5 and 6 in Figure 1)	Following the successful completion of Step 2, work is undertaken to develop the project. This covers a broad range of activities (prepare feasibility and other project preparatory studies, including engineering, environmental, social, financial and financing studies, structuring and negotiating commercial arrangements, securing necessary approvals, running procurement processes, raising debt and equity financing) and may span several years. This work may involve updating previous work undertaken by the project promoter to meet IAsD requirements or initiating new activities. Beneficiaries of projects are identified in the course of this work, covering the number of people who will benefit from the project in terms of access to improved infrastructure and employment that will be generated in the short term and long term, with the number of affected people below the poverty line, women and girls being identified.	To avoid the common pitfall of gender being an 'add on' taken forward <i>ad hoc</i> by those individuals who have the will and initiative, it is important to enshrine gender-related commitments in key official documents and agreements. Though IFC Performance Standards set out rules for environmental and social assessments (ESIA), it is possible—and not uncommon—to find nearly gender-blind ESIA that have nevertheless been granted approval. There is currently little or no gender analysis in preliminary project bidding and preparation documents. DFAT and PIDG would do well to consider going beyond IFC performance standards in spelling out its expectations that an ESIA include robust gender analysis, go beyond a 'do no harm' orientation and identify potential positive gender equality and women's empowerment impacts that an initiative could have. Where a project will later lead to an operational phase, particular efforts can be made to prepare women involved in project management to take on substantial roles in the next phase.
Step 4: Prepare documentation to secure financial close (Items 7 and 8 in Figure 1)	In parallel with Step 3, arrangements and documents needed for the project to be implemented are prepared. These include determination of engineering procurement and contracting arrangements, construction and subsequent operating contracts (including any conditions to be met by contractors with regard to social and environmental impacts), reviewing and securing all necessary agreements and permits with governments, securing all necessary financing and financing agreements including conditions for the eventual sale of IAsD's equity in the project and establishing all legal entities needed for project implementation.	At this stage IAsD still has a degree of leverage and can set conditions for contractors related to social impacts and women's empowerment, such as ensuring that commitments made during the initial creation and signing of MOU around gender have been fulfilled, and that operating contracts are cognisant of the needs of women employees, and actively support their participation in substantive, leadership and management positions
Step 5: Implement the project, oversee its operations and eventual exit (Items 9-12 in Figure 1)	Once financial close is achieved, the project is then implemented by a special purpose entity, which is typically a joint venture with project partners established to implement and manage the project. Typically, post financial close, IAsD is a minority shareholder in the project unless it has completely exited the project. IAsD manages its interest during the construction and operations phase through regular reports from the project company and representation on the project company board, until IAsD is able to sell its equity in the project.	As IAsD's direct leverage will have declined by this point, it is important to be realistic about what may be done. That said, it is still possible (and good practice) to monitor the extent to which women are engaged in project implementation and the nature of that engagement, as well as the extent to which the needs of women and girls are addressed in any complementary activities to project construction.

Monitoring and Evaluation (M&E)

IAsD monitors each of its projects using a quarterly reporting template and a PIDG-mandated Results Monitoring Sheet (RMS) that presents information on the status of the project, participants, anticipated sources of finance, country and sector criteria, the number and types of beneficiaries and people expected to be employed during and after construction, and other development impacts. Quarterly reports to PIDG summarize this information, describe progress relative to targets, indicates risks and present budgets.

The RMS and Quarterly report formats are gender-blind except for a requirement to disaggregate beneficiaries and those employed by sex. However, this need not be the case. PIDG could enhance its reporting by including a narrative on the quantity and quality of gendered targets and impacts. It could frame this narrative in the context of Additionality or around Gender Analysis undertaken during initial consideration of the project. Examples might include training for women (which happened in Vietnam as part of livelihoods replacement) or time-saving for women (for example where an access, auxiliary or other road is built, but in such a way that it helps women get to market). It may be that a space for 'gender-related results' could be filled in on a case-by-case basis, to reflect progress towards any results specifically targeted for women/equality.

The success of private sector investment is generally based on financial performance subject to the investment meeting social and environmental criteria set out in laws and regulations. Consistent with this approach, monitoring of IAsD projects following financial close focuses on financial performance and any social and environmental issues identified during implementation of the projects. Further consideration should be given as to how IAsD might practically mandate or incorporate monitoring and evaluation of gender impacts once it has exited and no longer has a financial stake in a project.

Project Beneficiaries

Determination of the number of beneficiaries of projects is influenced by the nature of the project and the availability of data. For the most part, IAsD reports on beneficiaries as a whole to PIDG, who then apply a tool devised for the IFC to determine sex-disaggregated numbers. (Beard, 2012)

The question of estimating beneficiaries accurately is a complex one even without gender considerations. For example: at the beginning of 2015, most IAsD projects with a signed JDA in place that had been completed or were expected to reach financial close by the end of that year involved generation of power to be sold on a wholesale basis to power transmission/retailing businesses (ASI, 2015). The power was to be mostly generated by hydro and wind sources, with one involving waste incineration. The project RMS prepared by IAsD noted that as these were generation projects, it was not possible to determine if the power generated would support new connections. The RMS estimated the number of people who would gain from improved service levels as follows:

- average power generated per person in the country was estimated by dividing total annual power generation in the country by its population;
- the number of beneficiaries of the IAsD project was estimated by dividing the annual power to be generated by the project by the average power generated per capita; and
- the number of beneficiaries that were poor and were women and girls was typically estimated based on the share of the total population of the country or region of the project in each of these categories.

In ASI's view, the resulting estimates are of limited technical merit. In the first instance, the IAsD projects do not fund any additional connections to the power grid. Instead, the additional power generated improves the quantity and reliability of power supply to everyone already connected to the network. It would also allow power retailers to, as part of separate potential investment projects, connect more users; however, this has not to date been part of the IAsD projects. In addition, residential use accounts for only a certain share of power consumed⁸ and hence attributing all power to individual use is misleading. Finally, the use of national or regional averages for the share of beneficiaries that are poor or are women and girls is a crude approximation.

ASI (2015) noted that this was a practical, albeit misleading, means to meet a PIDG-set requirement for the number of beneficiaries of projects, and that PIDG was working with other donors to identify improved means for addressing this matter.

As has occurred in the past, it seems likely that projects financed by IAsD will continue to involve the sale of their output to intermediaries rather than direct to the public at large due to substantial regulatory, social and commercial risks associated with projects that sell infrastructure services direct to the public. Furthermore, there are limitations in the markets where IAsD is mandated to work. Not being able to identify precisely the number and type of beneficiaries limits gender related analysis. Where it is possible to identify specific beneficiaries of a project, a more detailed gender examination can take place.

The number of women involved in implementing and subsequent operation of projects has, where estimated, generally been based on national labour force surveys or experience with similar projects in the countries or regions in which the projects are located. However, it should be recognised that such surveys are notoriously inadequate, particularly when it comes to harder-to-reach segments of the population, particularly women. There is an opportunity for more specific analysis of this matter with regard to IAsD projects and to build in gender-specific requirements into construction contracts and subsequent operational arrangements.

⁸ Broad-based data is not evidently available for developing countries, but in the USA, around 40 percent of power is used by residential and commercial buildings and the remainder by industry and commerce (US Energy Information Service).

Part III: Conclusions and Recommendations

Conclusions

Ideally—given the importance of women’s empowerment to development, and of infrastructure to women’s empowerment— infrastructure projects would be designed to:

- > Increase women’s economic opportunities
- > Provide appropriate services to women
- > Actively involve and empower women
- > Encourage women to take up decision making and leadership roles
- > Improve girls and women’s access to education and health care
- > Eliminate discrimination against girls and women

There are opportunities along each phase of the infrastructure investment cycle to go beyond risk mitigation and understand, address and monitor issues related to women’s empowerment and how these are (or are not) being addressed in the investment. However, this will not happen by accident or default; it requires both expertise and an articulated mandate to ensure that entry points are at least considered.

Opportunities for integrating a women’s empowerment approach may be within the main stream of work—for example in training, employment, governance and design—and they may be framed as a meaningful adjunct, a means of ‘benefit sharing’ for those whose benefit is likely to be unequal given a status quo. There is currently an opportunity for DFAT to act as a thought and practice leader in this arena, and for IAsD to build upon its commitment and experience to implement a stronger gender equality focus in its work.

Recommendations: IAsD

Within IAsD

1. Sensitise the **Board**, particularly the three-member **Investment and Divestment Committee (IDC)**, as well as IAsD staff on the relevance of gender to infrastructure: on both the efficiency and empowerment arguments for engaging with this cross-cutting dimension and their own corporate social responsibility to raise IAsD’s attention to gender equality and women’s empowerment. Get good practice and the gender-related mandates of IAsD’s donors (DFAT, DFID⁹ and SECO¹⁰) onto the discussion agenda.
2. **Training** for all **IAsD management staff** on the basics of gender mainstreaming. This is easily done as staff are few in number, highly capable, have an open mindset and an interest in development. IAsD staff is able to decline whatever projects do not meet IAsD’s mandate and criteria—they are the first ‘filter’ for both development and co-development projects. Training should include both good practice on gender as well as how women may be vulnerable to exploitation.
3. It would be useful to have a PIDG and/or IAsD **Gender Focal Point**. There is ample guidance online as to good, established Gender focal point practice, including providing this person/s with adequate time, compensation, clear guidance and managerial support (and capacity building, if necessary) to perform

⁹ DFID’s gender policy is currently committed to four pillars, along with an overarching mandate to mainstream gender and promote gender equality: improving maternal health and access to family planning; increasing the number of girls completing primary and secondary education; promoting the economic empowerment of girls and women through jobs and access to financial services; and piloting new approaches to eliminating violence. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67582/strategic-vision-girls-women.pdf

¹⁰ ‘The Swiss International Cooperation recognizes Gender Equality as a universal right and a prerequisite to effectively fighting poverty. Gender Equality was thus made a so-called cross-cutting issue. This means that every project has to be systematically analysed for its potential to advancing Gender Equality’. www.seco-cooperation.ch

the role; rotating the role amongst staff and maintaining a gender balance; and avoiding appointing only junior members of staff to play this role.

4. IAsD is one step closer to the field than PIDG, and management staff do make **field visits**. These should include consultation and follow up on gender-related issues and activities in local areas. IAsD staff should communicate their views on and experiences with gender mainstreaming to PIDG, including reflecting on key social and gender issues they (or developers or co-developers) become aware of during field visits.
5. When dealing with stalled projects, it may be the case (as in the case of Kabeli in Nepal) that an ESIA and ESMP is already in existence, with little new study planned. These are crucially important documents, and are not uncommonly gender-neutral, despite the requirement that they provide social analysis. Early on, IAsD will have to assess the extent to which gender equality and women's empowerment features in any existing documentation, determine if further investigation is needed, if any.
6. Require a narrative gender analysis in the **proposals** that project sponsors submit on **Additionality**, commercial viability and developmental impact. When IAsD management staff receive (or co-develop) a proposal, two things must be required: 1) a gendered situation analysis and 2) what the proposed project would do to empower women and promote equality. At a minimum, a gendered situation analysis would include a breakdown of women's economic condition in the area, labour market participation rates, health statistics, political participation, literacy/education/training, fertility, access/barriers to services and assets, land ownership and social norms around roles and responsibilities. A more sophisticated and informed analysis could include qualitative information on women's security/experience of **violence** and **time use** to understand and address women's burden of unpaid work. See Annex 8: Gender Analysis Tools for further discussion of gender analysis tools.
7. The **Results Monitoring Framework (RMF)** is owned by PIDG, who could therefore amend it as needed (see subsequent section on recommendations for PIDG). However, IAsD has a role to play in this process; staff can and should feed back to PIDG on restrictions presented by the RMS only including gender in a limited way (summarising how many men/women are employed and breaking down access by male/female) and make suggestions for how it might practically be strengthened to reflect gender dimensions.

Outside of IAsD

1. IAsD's captive and non-captive developers are key to the inclusion of a gender equality agenda being implemented in an infrastructure project. However, there is a relatively short period during which IAsD has adequate control over the direction the project takes. As such, IAsD should look at the **requirements it makes of its partners** during early stage negotiations on the investment terms about their capacity to ensure a gender perspective as well as **putting in place a mandate** to provide technical gender analysis. Is there language in any MoU/JDA or agreement to the effect that partners will have (or bring) gender technical capacity on board, and that at least one person will be tasked as a focal point to ensure that gender equality and women's empowerment-related activities are undertaken, tracked, monitored and included in reporting? Is there a requirement in any reporting for a narrative description of what gendered issues exist and how they are being addressed? How can IAsD's presence on any Board influence and ensure that gender equality and women's empowerment remains part of the conversation, even beyond the point where IAsD is a majority shareholder?

DFAT

The following are points for consideration, as DFAT was only indirectly the subject of this review.

1. DFAT should continue to **define its own vision specifically on gender and infrastructure**. DFAT is a leader in commitments to addressing gender equality and women's empowerment. However, if DFAT is seeking something substantive or transformative in infrastructure investment, it should set parameters, provide funding and ensure the impact and value of taking a gender transformative approach is measured, benchmarked against good practice and shared. Is the goal that all infrastructure projects are mainstreaming gender equality in a significant way (in order to qualify for

funding)? Should the focus be on a subset of projects (for example, the 30 percent of 'highly additional' projects in IAsD's portfolio)? Or both?

2. DFAT (and PIDG) should **consider how to go beyond the minimum of IFC performance standards** in spelling out its expectations that an ESIA include robust gender analysis and outline the strategic equality and women's empowerment impacts that an initiative could have, for example by requiring Gender Equality Action Plans. Such impacts would depend upon what is found in the locality in which the investment takes place, but examples could include reductions in violence against women, skills building/transfer, financial empowerment for women, community- and women-leadership of local infrastructure maintenance and management, and real feedback to government and private bodies as to the benefits of taking a transformative approach. The guidance for developers would need to make clear which elements would be *required* to be eligible for funding, and which would be *encouraged*.
3. The course of this Review has made clear that complete, start-to-finish case studies detailing good practice and the impacts of taking a gender-responsive approach to infrastructure investment are rare. DFAT could initiate good practice here by creating a **case study methodology** for documenting practices, challenges and impacts specifically in infrastructure, and then promoting it in the different groups to which DFAT is a party. Establishing case studies that track the process and impact of taking a gender equality/women's empowerment approach in infrastructure investment would address a serious gap in the market and could be a good practice benchmark.
4. None of the above entail remaining with the existing default; change takes time and, very often, money. DFAT will ultimately have to review its own guidelines and parameters for infrastructure investment, and **budget** accordingly if a stronger gender response is desired.

PIDG

Most of the following are questions more than firm suggestions, as PIDG was not the subject of this review, though it would ultimately be responsible for driving the changes required at the PIDG Facility level and coordinating between DFAT/other donors and each PIDG Facility.

1. **Monitoring ongoing and completed activities with gender aspects.** The Public-Private Infrastructure Advisory Facility (PPIAF)¹¹, a multi-donor trust fund not entirely dissimilar to PIDG, concedes that one hurdle to better understanding how to approach gender in their work is that they have limited history of considering the issue. In response to this, they have updated their application form and progress implementation report to include sections where gender can be tracked in order to build an understanding of where and how their work can promote gender inclusion. PIDG could change the project **proposal Template**¹² to require a narrative gender analysis and demonstration that Bidders possess gender capacity.
2. Look at the refined definition of **Additionality** through a gender lens and consider including language to make the measures gender specific ('men and women' instead of people, and the inclusion of language around women's empowerment in particular).
3. Ultimately, PIDG may wish to reconsider **Development Impact**, currently a dual quantitative measure of beneficiaries and employment, both disaggregated by sex. One suggestion is to break the Development Impact criteria into two:
 - a. Current development impact, which is related to how a project achieves impact for women and men by default / by virtue of providing infrastructure and services
 - b. The Additional gender impact that IAsD has due to its involvement and captured through specific actions under any of the Additionality types, and in particular, the Additionality type related to Development Impact. Some suggestions on this can be found in Annex 6.
4. It is worth noting that PIDG is in the process of reviewing the **Theory of Change**, or 'Route to Development Impact' with each of its Facilities. Through this process, more focus will almost certainly

¹¹ <http://www.ppiaf.org>

¹² IAsD project investment proposal template that both captive and non-captive developer teams use to submit proposals to IAsD for approval

be placed upon monitoring and reporting on the additionality of projects, rather than only the beneficiaries, providing a key opportunity to consider how to include the gender dimension explicitly. This also presents a timely opportunity to open and explore the question of gender equality and women's empowerment in the work of both Facilities.

5. Related to the above: what lessons on integrating a gender equality and women's empowerment focus can be drawn from **elsewhere** in PIDG's consortium? Is there scope and value in getting the two InfraCos (Asia and Africa) together to explore ways forward to strengthen their approaches on gender and women's empowerment?
6. Another possible tool for narrative reporting on the gender analysis and gender capacity is through the **Results Monitoring Sheets**. Facilities could be requested to provide information on (a) what has been done to embed gender considerations into the process to date (b) what will be the action points to embed them further, where feasible; and (c) what are the expected impacts on women.
7. PIDG determines key elements of the **IAsD Board** and approves its membership. What requirements could PIDG make that there be gender capacity on the Board? A measure of gender balance? (Although this is not as important as gender capacity.) How could PIDG encourage the Board to demonstrate leadership on gender?
8. The **Technical Assistance Fund (TAF)** may be a mechanism through which to positively influence gender considerations. This fund is being approached more and more by IAsD's captive developer teams for assistance that may fall outside of IAsD's focus. Often, the project's overall viability depends on TAF coming through with support. Also, the TAF approval process is faster than IAsD's as there is only one person who runs TAF, which has well defined application forms and processes. The possibility for TAF to incorporate gender considerations in their evaluations and require each developer to answer how they will address this dimension should be considered, along with softening the conditions of their assistance if gender plays a key role in any given project. Ultimately, any evaluation along the lines of gender impact (either by TAF or by IAsD) would ultimately rely on a robust M&E framework to assess the magnitude of the gender impact.
9. Consider whether there is scope to track, in addition to sex-disaggregated employment figures, something of the **nature of that employment** (type, pay rate), both to allow for a gendered analysis of how women are being employed and to ensure that projects are not reinforcing unfair or even exploitative pay practices.

Annex 1: Nepal Kabeli project

Methodology for reviewing the Nepal Kabeli project:

- Project document review
- Interview with Project Lead Vivek Gupta, formerly of Nexif, now Equicap, and Joint Venture (JV) Partner Anish Pradhan

Introduction

Only about 40 percent of Nepal has reliable access to electricity. Due to shortfalls in generation capacity, only about 50 percent of peak demand is met. At a macro level, this presents a serious constraint to Nepal's growth potential. At an individual and household level, it jeopardises women's safety, robs them of time and limits their access to information and potential for entrepreneurial activity.

The IFC and WB are lenders for Kabeli, a hydropower project for which social assessment and planning had been completed to World Bank standards before IAsD came on board. There is much scope for women to benefit directly and indirectly during and after this work, however their benefit, involvement or empowerment does not factor into project targets. Direct engagement with the local community is through representation in a coordination committee, and IAsD and its Nepalese partners are actively working on enhancing the representation of women in this coordination committee.

Typically for a hydropower investment, there are extensive requirements on the social and environmental front. Early assessment identified three major groups present in the project area as vulnerable: women, Dalits (or "untouchables") and the Adivasi/Janajati¹³. A Resettlement Action Plan (RAP—though there will be no resettlement with the project), Social Action Plan (SAP) and an Indigenous and Vulnerable Community Development Plan (IVCDP) were developed, with interventions specifically targeted to manage differential impacts over vulnerable groups. The IVCDP includes agriculture support, skills training, preferential employment, drinking water, health and sanitation programs and capacity building programmes focused on women, Adivasi/Janajati and Dalits.

Through a Joint Venture, IAsD and its Nepalese partner, Butwal Power Company, have taken on a role in supporting Kabeli. The hydropower plant ultimately resulting from the Kabeli project will go on for thirty years; IAsD is expected to exit once the project is sufficiently de-risked to attract a new private sector investor or to IPO. The likely timeframe for IAsD exit is post-construction completion.

Key Findings

All of the environment and social impact assessment (ESIA) for Kabeli had been done and verified before IAsD came on board. While it is not possible to say whether more could have been done in terms of gender and social analysis, it can be said that groundwork was laid for addressing social and gender concerns, both through the Corporate Social Responsibility framework and the requirements of the SAP, RAP and IVCDP.

¹³ "The indigenous nationalities (*Adivasi Janajati*) of Nepal officially comprise 8.4 million people, or 37.19 percent of the total population, although indigenous peoples' organizations claim a larger figure of more than 50 percent. Even though they constitute a significant proportion of the population, throughout the history of Nepal, indigenous peoples have been marginalized in terms of language, culture, and political and economic opportunities. 102 castes, indigenous peoples and religious groups, and 92 mother tongues were listed in the 2001 census." http://www.iwgia.org/images/stories/sections/regions/asia/documents/IW2011/nepal_2011.pdf

http://www.iwgia.org/images/stories/sections/regions/asia/documents/IW2011/nepal_2011.pdf

In Kabeli, IAsD and its JV partner are committed to fulfilling social (including gender) commitments and actively seek ways to commit to good practice such that by the time the project is taken over, commitments will have to be continued. One example of this is where they exceeded IFC performance standards in convincing banks, as part of building their capacity to deal with the financial modalities of this project, to open local branches as a way to enable and encourage women to save money. This is particularly critical for women in Nepal, who lack access to financial institutions especially in rural and remote areas.

The Project Lead and JV partner are both keen to see women's empowerment addressed through the project, for example through the building of a health facility, enhancing access to clean water and support to women-friendly banking. They are also realistic about the extent to which IAsD's influence can extend—it can guide, but not guarantee fulfilment of social and gender goals due to the limits of their role once IAsD exits or dilutes its shareholding to a minority role in the future. Kabeli will have around ten to twelve people on staff working at the project site and has outsourced all construction supervision, including environmental and social aspects. A dedicated Social Manager will look after the 'social aspect', including gender.

Social commitments cost

Infrastructure in developing countries does not always yield promised returns, so partners often look to cut costs in other ways, which can mean streamlining a social programme as much as possible. IAsD does not sacrifice environmental and social returns—but at some point, it does move out and a commercial partner moves in, so there is a limit to the control IAsD can exert post divestment of equity from a project. This underlines the importance of good early gender analysis and the inclusion of meaningful measures in Social Action Plans.

Project development can take from one year to a decade; the analysis and forecasting done on Day Zero is not set in stone. The longer the amount of time spent in development, the lower the returns. Of particular concern in Nepal are delays caused by public obstruction, known in some cases to stall government infrastructure projects for many years at a time. Communication and trust building with local stakeholders is one key to avoiding this issue, but does take time. Special measures to ensure that women are reached through communication channels that take into account limits to mobility and literacy are needed.

Because capacity building is part of their mandate, IAsD spends time (and therefore money) building financial and technical capacity. For example, in Kabeli, IAsD has taken time working with commercial banks to adjust their practice to work in a new way and align project implementation expectations with best international practices. Though IAsD are not mandated to build capacity on gender, it could certainly be integrated into their approach as one way to contribute towards institutionalising sustainable good practice.

Project elements that can empower women

Several project elements that are not central to the main job of building the hydropower plants address women's needs: increasing road access, addressing the need for clean water, support to women's banking and health care provision.

The project is implemented in remote hill areas that previously had no access before the project built 24 kilometers of road. The community consists of mostly subsistence farmers, where most workers are men who stay at home for four months a year for seasonal work, and otherwise serve as migrant workers or labourers in urban areas of Nepal and India.

It was assumed that the road will allow women access to markets for their farming, although it is unclear whether they face barriers to participating in markets beyond road access. Also, through its Corporate Social Responsibility mandate, Kabeli has built a community water tank for providing clean water to the villagers. Kabeli is also exploring possibilities to use water from its Project reservoir for irrigation purposes. The expectation is that women will save time that would have otherwise been spent collecting clean water.

IAsD are aware of WB/IFC advice on women's empowerment, for example through access to financial institutions. The project is requiring banks, which have no incentive to open a local branch in such a remote area, to open a local branch so women 'do not have to store their money under a mattress'.

Last, IAsD is building a small medical facility in one project area. Though this serves the interest of project implementers, who would otherwise be in a remote location with no access to health care, it will also be available to the local community and provides entry points to consider women’s health needs in particular. IAsD has purposefully promoted the medical facility to local stakeholders, in part to ensure accountability—if local people are aware that this has been promised, they will hold implementers to keeping it up.

Annex 2: Vietnam Coc San Project

Vietnam Coc San Hydropower project

Vietnam is keen to reduce reliance on thermal power generation and is encouraging the development of renewable energy, including hydro-electric. In 2013, IAsD took a majority equity interest in a Vietnamese joint stock company which owned the Coc San hydro power project, and had a commitment to design, finance, construct and operate a run of the river hydro power plant, selling the output under a 20-year Power Purchase Agreement to a subsidiary of the Electricity of Vietnam (EVN) electric company. The project commenced construction in 2011, but work was suspended due to lack of funding less than a year later. Aware of its significant development impact, IAsD spent considerable time and effort restructuring and rescuing the project. For various reasons, a significant grant (\$5 million) was needed to close the financial viability gap and earn a reasonable rate of return for investors. (TAF VGF Concept Note, IAsD)

The project is located in Lao Cai—one of the poorest provinces in Vietnam, with a population of about 64,000, nearly half of whom live below the poverty line. Not least, as a 20-year PPA means a decades' long relationship with the community, IAsD, ESIA consultants and Local Government developed a 'pro-poor' strategy to bring tangible benefits to poor households, targeting those with monthly incomes of between \$16 and \$22. IAsD's vision was to work directly with community members below the poverty line, particularly women, project-affected landholders and local people employed through the project. Activities envisaged would help generate jobs, diversify incomes, develop markets and provide livelihood training, and was expected to benefit 3,266 individuals—about a quarter of the project area. At a later stage, a second phased benefit would come in, providing pro-bono technical and project management support to the Commune Governments and funding for up to \$20,000 annually for developing 'socioeconomic projects' beginning in 2015. (ibid.)

Eight 'heads of village' and 25 affected households were given a questionnaire looking into socioeconomic status and awareness of the Project, including positive and negative impacts. It is not possible to tell what number of respondents were women or men.

They identified priority concerns and suggestions:

- An irrigation system for farming
- Road improvements for daily transportation
- Electricity access (only two villages in the area are connected, and in those cases, not all households are connected)
- Jobs for villagers, particularly those who lost land
- Support for vulnerable groups, defined as
 - Women-led / 'abandoned' households
 - Households where the main earner is above 70 years old
 - Households with differently abled, mentally ill or injured war veterans
 - Orphans
 - Poor households with small land holdings

Under the Environmental and Social Management Plan (ESMP) of 2013, sub-projects were set out by the Lao Cai Renewable Energy JSC—the developer of Coc San Hydropower Project—and local authorities in affected communes. In the ESMP, priority was given to households that lost income-producing land; other targets include the local minority population, especially women. The idea is to 'enable them to make choices and decisions on their own to improve their livelihood'.

The ESMP stipulates two areas in which community members in project areas directly benefit from 'sub-projects':

Livelihoods restoration, to restore sustainable livelihoods for people directly impacted through the loss of income producing land by the Coc San project (land was lost in three Communes). It also seeks to improve the livelihoods of other disadvantaged/vulnerable households in the communities affected by the project. Activities included sweet maize cultivation training (24 households, a projected \$4,520 over two years' contribution from the project, \$1,456 from local people) and construction/trade training in three communes (records of five men participating, \$4,480 from the project).

Community development to improve infrastructure and self-reliance in affected communities. Activities included upgrading a road (\$8,900), upgrading a kindergarten (\$3,900), repairing a primary school roof (\$1,680), providing scholarships (98 students of affected villages, mainly from land-losing and poor families in Coc San, Trung Chai and Tong Sanh Commune—a budget of \$5,380 for two years, \$2,130 of which was disbursed in 2015, an irrigation project¹⁴ (\$12,550 from the project, \$2,242 from local communities). Gifts were given during the Tet holiday to households that had lost land (one bottle of cooking oil and fish sauce and one MSG packet, a budget of \$542 in total).

Local communities

This information is drawn from a group discussion at the Tongsangh Commune with 18 women and two men of the Dzou ethnic minority. Though it cannot therefore apply exactly to all project-affected communities, it is safe to assume that there are many commonalities.

Men in the area work as farmers, migrating on a daily basis during the off-season to the Chinese border to try to find casual construction work with which they can earn about \$6 day. (Group discussion, Tongsangh Commune). Women sell maize in the market and forage in the forest for herbs and vegetables that they might sell in the market or roadside, earning \$1-\$1.50 per day. 'I have to go to the forest to find something useful to sell in the market. It's a hard job, but men don't want to do it'.

While families have motorbikes, the women with whom we spoke said they do not feel safe riding them with large loads, preferring to walk to the market despite carrying loads of up to 50kg. Women report using the money they earn to buy things for their children, and to give some money to their husbands with which they can buy alcohol. There was resounding agreement that men's use of alcohol was a significant problem in the area, contributing to a parallel issue of widespread domestic violence.

Though all of the women present in the discussion send their children to school, which they say is affordable, most are themselves uneducated, with only three of the women present able to read. Education in remote areas is reportedly decent. Education is free, with support measures (subsidy, fee waivers, rice support) for the poorest. Schools were built with teachers being incentivised with higher salaries and bonuses to teach in remote areas on a five-year, rotating stint. When they return to the urban area, they get a good role in a good school and can advance.

Key concerns for the group centred around the need for equality in terms of work—it was said more than once that 'women do everything'. Indeed, most of the Coc San trainings and public events held are attended by women, including a domestic training that Coc San took the initiative to do in response to the prevalence of abuse. The women in the discussion were exhausted, and worried that even with all of their efforts, their situations did not improve.

¹⁴ The plan is to construct an irrigation system for 156 households (587 people) as well as a 1,500 meter irrigational system and a 150 cubic meter water tank. A water irrigation system was begun in the area, but surveys were not done well and would not have led to a sustainable system. This caused issues of trust, as local contributors lost out when, due to improper surveying, it went bankrupt. Now Coc San would like to help, but recognises issues of community trust and is moving carefully, working for eight months to build trust and communication through meetings for hundreds of households. The view is that, for long-term sustainability, it is better to develop something together – people should put the work in and have ownership. Coc San reports that women are mostly the ones to attend the meetings, and that men tend to have obstructive attitudes about it.

Challenges for Coc San

Coc San's Financial Director/Deputy General Director is a woman. She is committed to doing good in the community and to building sustainable relationships. Coc San staff have interacted with women extensively and understand both that they are marginalised. They also understand the sources of their vulnerability. That said, Coc San staff are phenomenally busy. This was particularly the case during the six months prior to the launch of the hydropower station (May 2016). The staff must also deal with laws that are not entirely clear and are open to interpretation. In addition, periodically local bodies create problems in a system where corruption is endemic. There is more Coc San would like to do on the social and gender front, but time and manpower constraints limit this.

Good practice

The General Director of Coc San is now a woman. This is a rarity in the industry, and in Vietnam. In addition, one of the small team of operators is a woman (see Box). While these examples are few in number, they are nevertheless important in terms of potentially creating space for more women in leadership and technical positions, and in Coc San modelling good practice.

Coc San has, both through livelihoods restoration and community development initiatives committed to in the ESMP and through its own initiative (providing two domestic violence community training sessions), attempted to engage with communities to ensure that benefits are shared and that those who need it most—particularly women—benefit. On the downside, in real numbers these investments are relatively tiny. However, the point was made that working through the inertia of much of the Local Authority system puts a drag on plans and accomplishments.

Lesson: Coc San demonstrates how crucial the ESIA and ESMP are in laying down early markers—they provide the roadmap that will be followed regarding social and gender commitments, including stakeholder consultation and any sort of benefit sharing, even when projects are handed over to new investors and, eventually, new owners. Where they are gender-neutral—or, as is often the case, group women into a general 'vulnerable' category, they offer little scope for meaningful engagement for women's empowerment and risk 'tick box' solutions that provide too little support to too few women.

Though community leaders are crucial, they do not always 'speak on behalf of the people', particularly when it comes to voicing women's needs and concerns. Coc San has done well in speaking to women's groups and Unions and to an extent to women directly, but it nevertheless operates within existing power frameworks, which tend to reflect patriarchal dominance and can serve to minimise women's needs and potentialities. It requires ongoing commitment to work around and with official structures that are entrenched in, and have a vested interest in, an unequal status quo.

Thuin, 29, is the only woman on a 20-operator team at the Lao Cai hydropower plant. She got into her line of work when she took a course at the local Electric City Vocational School, prompted by a desire not to go into agriculture. Her family was supportive, and she enjoyed her course.

After seven years working at another hydropower project, Thuin joined the Lao Cai plant. She and her husband, another operator, take turns working shifts so that one of them can be home to provide some support to their parents, who help by looking after their two- and six-year old children. Their family home is 24 kilometres away from the hydropower plant and dam, her commute includes a combination of motorbike, boat and walking—a daunting and potentially dangerous prospect for her after a late shift.

Her biggest issue is transportation. She would love to be able to take advantage of the on-site accommodation being built, but does not see how this would be possible with two children, one of whom will be going to school.

Thuin feels well supported by her colleagues and enjoys her work, though it seemed in discussion with Coc San that there had been some resistance and slight hostility on the part of some of her co-workers that had to be overcome. She would like to see the company succeed and develop, and ultimately to take the next level degree so that she could become a Shift Manager.

Annex 3: Sri Lanka Biomass Project

Sri Lanka Biomass

The Biomass Group is a renewable energy company which is in the process of securing support from IAsD for an agro-to pelletization project, using fuel sourced from (mostly women) small farmers and plantation owners in an innovative partnership. IAsD support is requested as below and may be refined further:

- Support expansion plans for Biomass supplies, IT system, carbon registration and verification of Biomass supplies + mobile chippers
- Support for feasibility studies, RFQ, pre-engineering work, capital raising, legal contracts for pellet plants

The project is based upon the use of *gliricidia*, a quick-growing, wild, short-rotation and high quality fuel wood, often used for 'live fencing'. In the first instance, farmers who have registered to participate plant a triple-row of *gliricidia* around the border of their farms. The first row is used for fuel, while leaves can be used for fertiliser, pesticide and fungicide. Branches from the second and third row will ultimately be purchased by Biomass to make energy pellets. Eventually, more supply will be provided by Plantations when small farmers alone are not able to meet full-scale demand.

The model of this project does not involve obtaining land—a 'nonstarter' in Sri Lanka—but rather the initiative will work with small farmers who grow *gliricidia* on their own property. Of the 35,000 farmers registered as growers thus far, 89 percent are women.

Capacity-building is part of the project; farmers receive training on plantation as well as how to use *gliricidia* products to make fertiliser, pesticide and fungicide. They are not paid to become involved in the scheme. Rather, they make money in the first instance by saving expenditure on agro-chemicals, and later by selling branches that will be chipped and used for making pellets. Pellet plants will be established in Sri Lanka; the *gliricidia* pellets produced will be sold to export markets such as Japan (which is establishing multiple biomass power plants which will use the pellets).

Later phases involve co-firing the pellets in coal-fired power plants (which require no modification to use *gliricidia* pellets) and expanding the small farmer portion of the project to the formerly conflict-affected areas of Jaffna, Mannar and Trinco, in the northern province of Sri Lanka. These areas were ravaged by war for 26 years, which served, among other things, to stunt economic opportunity. According to the project Sponsor, preliminary consultations indicate that stakeholders in those areas, including Tamil women who are 'known for their willingness to work' are keen to take part in the *gliricidia* scheme. There are also significant health related benefits to the community in reducing the use of agro-chemicals, the use of which has led to significant incidence of deaths in the community due to kidney disease.

Profile of Small Farmers

Local farmers typically cultivate a plot of between half an acre and four acres, bringing in a monthly income of about \$12-\$20 per month from the land. While in some cases the land may be inherited, for the most part it is government-owned and granted for farmers' use. In light of these meagre returns, annual savings of between \$30 and \$140 on fertiliser, fungicide and pesticide is a considerable reward for participating in the project.

During the field trip to inform this Review, an impromptu group discussion was held in Bisa-uyana village, in the Polonnaruwa District with women participating in the Biomass project. According to participants, most men in the area do padiculture, which leaves the women to tend home farmland. Other jobs in the locality include working in the rice mill or in a government job (for example, teaching). Others rely on remittances, for example from a son in the army or a daughter working as a domestic servant abroad in the Middle East. One participant, whose daughter is making about \$200/month in this way, commented that there is simply no way for a woman to make anywhere near that sort of money locally. Challenging expenditures were said to include children's education, food, social 'dues' such as funerals, monthly payments to farmers' and paddy societies

and weddings. (For instance, the woman who hosted the discussion in her garden pointed out the teak trees planted in addition to the *gliricidia*, one of which would be cut down and sold to cover wedding costs when each of her daughters married). All of the women said they were saving about \$3 on fertiliser each week, with which they buy vegetables. All said they save with local banks, and periodically take loans from microfinance banks when necessary. The women all reported that husbands are in charge of discretionary household spending.

All of the women said that they are the ones who attend the Biomass training sessions and plant the trees. Although their husbands are supportive, their main job is padiculture, and they have neither the time nor the energy to take on this task, which is seen more as domestic labour, and therefore women's work.

One participant in the discussion had made extra money by singlehandedly hand-chipping over a ton of *gliricidia* into wood-chips when potential Japanese investors required samples to ensure that they could produce quality chips (and eventually pellets from those chips).

Conclusions

While the applicability of the Biomass project is hampered by the limitation that it is far from a traditional infrastructure project of the type most under consideration in this Review, it nevertheless offers lessons for consideration.

First, the Sponsor of the project is passionately committed to twin goals of development and environmental conservation. She is aware of women's constraints and capacities, and is highly supportive of their empowerment. As such, she looks for opportunities in the project where women can earn and benefit, and was receptive to conversations about IAsD potentially taking on a more articulated focus on gender equality and women's empowerment in its infrastructure investment in future. According to the IAsD Project Lead, Sponsors such as this are not unusual; they are often driven by what they see as issues in-country and may well have a personal commitment to social goals of equality and women's empowerment. It should not be assumed that just because sponsors and developers are driven by the bottom line, they do not share equality and empowerment goals and a receptiveness to integrating them.

At the same time as this phase of the project is undoubtedly benefiting the women taking part, it also offers a cautionary note. Because women are more often relegated to unpaid domestic work or ill-paid and vulnerable informal work, they may present a source of cheap, easy labour, the returns on which (to investors/employers) may be much greater. Those who plan, manage and implement infrastructure investment, in line with international standards of decent pay for decent work, must ensure that women's labour is recognised and remunerated in such a way as to contribute to economic empowerment as substantially as possible and to avoid exploitation of any kind. For future projects, it would be good to:

- > raise awareness of gendered factors that can contribute to exploitation among project sponsors, developers and IAsD management staff
- > ensure that language in any ESIA, SAP or similar document defines exploitation and outlines specifically how it will be avoided
- > adjust the monitoring of sex-disaggregated employment figures to track women's remuneration in relation to men's

Annex 4: Case studies

1. The Project Monitoring Development Facility (PDMF) of the ADB Capacity Development Project PPP, Philippines

Introduction: sound legislative framework for gender equality

In line with Constitutional recognition of women's equal rights, the **Republic Act Number 9710** of 2008, poetically termed the '**Magna Carta for Women**', sets out unequivocally the Philippines' position on women and gender equality:

Recognizing that the economic, political, and sociocultural realities affect women's current condition, the State affirms the role of women in nation building and ensures the substantive equality of women and men. It shall promote empowerment of women and pursue equal opportunities for women and men and ensure equal access to resources and to development results and outcome. Further, the State realizes that equality of men and women entails the abolition of the unequal structures and practices that perpetuate discrimination and inequality. To realize this, the State shall endeavour to develop plans, policies, programs, measures, and mechanisms to address discrimination and inequality in the economic, political, social, and cultural life of women and men.

The Magna Carta takes on a range of issues, including women's rights to land ownership, decent work and livelihood, credit, capital and technology. Infrastructure is included both in terms of the marginalisation that results from a lack of infrastructure/access¹⁵, and as a right, particularly in the context of food and agriculture¹⁶. It commits to monitoring infrastructure from a gender point of view, albeit from a protectionist perspective: 'Monitor and evaluate gender design features in housing and urban development and all other kinds of infrastructure plans and strategies to ensure that all housing projects, whether undertaken by the government agencies or the private sector, are able to secure the privacy and safety of women and children'. **Joint Circular 2012-01** sets out commitments for Gender and Development (GAD) analysis and planning in support of the Magna Carta.

The Philippines **Republic Act 7192** of 1992 sets out women's equal rights to participate in and benefit from development and nation-building in the Philippines. It commits the responsible agency (the National Economic Development Agency, or NEDA), to ensure that Government programmes enhance women's status and participation, including 'an assessment of the extent to which their programs and/or projects integrate women in the development process and of the impact of said programs or projects on women, including their implications in enhancing the self-reliance of women in improving their income'.

The commitment to women's empowerment in policy is underpinned by practical guidance in the **National Government Agency Public-Private Partnership Manual (2014)**, which requires that 'gender-responsiveness analysis' be undertaken 'to ensure that the project considers and addresses the needs of both women and men, and the decision-making process and subsequent implementation of the project puts high priority on gender equality goals'. It goes on to set out quite specific, desired gender equality results for the Infrastructure Sector, providing a helpful framework against which to consider issues and possible actions:

- > More time for rest and productive activities due to shorter travel time to and from markets, basic service facilities, or sources of water and fuel;
- > Improved women's access to safe and affordable public transportation services and infrastructure;

¹⁵ "Marginalized" refers to the basic, disadvantaged, or vulnerable persons or groups who are mostly living in poverty and have little or no access to land and other resources, basic social and economic services such as health care, education, water and sanitation, employment and livelihood opportunities, housing, social security, physical infrastructure, and the justice system" (Magna Carta for Women)

¹⁶ Right to Resources for Food Production. – The State shall guarantee women a vital role in food production by giving priority to their rights to land, credit, and infrastructure support, technical training, and technological and marketing assistance. The State shall promote women- friendly technology as a high priority activity in agriculture and shall promote the right to adequate food by proactively engaging in activities intended to strengthen access to, utilization of, and receipt of accurate and substantial information on resources and means to ensure women's livelihood, including food security. (Magna Carta for Women)

- › Greater inputs of women to the design and operation of the infrastructure;
- › Increased capacity of women and their organisations to influence decisions about the design, operation and maintenance of public services and facilities;
- › Increase employment of women at all levels (actual construction, technical and management) in infrastructure projects or services
- › Increased numbers of women employed in non-traditional occupations; and
- › Improved capacity of infrastructure agencies to plan, design, implement, and monitor programs and projects that address gender issues and the concerns of different groups of women users or women resettled involuntarily

Tools to inform this analysis, as set out in the Manual, include census, socioeconomic survey, focus group discussion ('to determine (i) local development and gender issues, (ii) core problems of the community, and (iii) recommendation on how the proposed...infrastructure project can help in solving or providing solutions to the core problems of the community'), and time-use surveys.

Learning case for institutionalising gender practice in infrastructure: the Project Monitoring Development Facility (PDMF)

The **PDMF** is a \$60 million fund with three elements: 1) a fund available for implementing agencies to develop bankable PPP projects and ensure effective monitoring of project implementation, 2) a revolving facility to ensure sustainability of funding, and 3) an integrated package of services across a project's life cycle to ensure successful delivery of projects. Eligible projects include infrastructure or development projects normally financed by the public sector but which will be wholly or partly implemented by the private sector as authorised by the appropriate agency, and priority projects as specified in national, regional, and local development programmes.

DFAT has supported the ADB "Strengthening Public Private Partnership Program" in the Philippines since 2011, which includes the PDMF. The PDMF provides a useful learning case of good practice in institutionalising measures to ensure analysis of gender equality, from which planning, implementation and measurement may then flow, and to putting appropriate technical resources in place to do so.

A recent internal report sets out the ways in which gender is institutionalised the PDMF and its processes: "The investment funds gender expertise to achieve the gender equality related outputs of the investment. At the ADB activity level, analysis of gender equality gaps, opportunities, and risks is addressed by a gender specialist. At the individual PPP project level, the gender analysis, preparation of gender assessment plans, and assisting of implementing agency staff to integrate gender in project activities and operations, are part of the scope of work of each transaction advisory team (which include gender specialists) funded by PDMF. Thus, all PPP project reports, including quarterly progress reports, pre-feasibility, feasibility, bidding documents, and draft contracts, require a discussion of GAD concerns and mainstreaming of gender in project implementation. Three of the four gender mainstreaming-related output targets in the ADB Design and Monitoring Framework have been achieved: (a) completion in 2014 of the National Government Manual for PPPs which includes a dedicated section on gender responsiveness; (b) more than 100 staff members in NGAs and (c) more than 100 LGU staff have been successfully trained on PPP, including gender mainstreaming in PPP."

How it Works

Partially overlapping with IAsD's mandate, the PDMF finances project preparation work (pre-feasibility, feasibility, draft contracts, draft bidding documents, etc) and assists with bidding processes until the point of financial close. The PDMF is required to ensure that all projects are gender-responsive.

Within the PDMF, teams of '**Transaction Advisers**' include a **Gender and Social Specialist**. Part of the **feasibility study** for a potential project prepared by Transaction Advisers includes a **gender assessment study**, which raises gender issues and makes recommendations on how to address them in a Gender Action Plan; recommendations then flow into bidding documents. The Minimum Performance Standards and

Specifications (MPSS) mandates all bidders to comply with minimum standards in design elements. **Gender Action plans** and **assessment studies** figure into MPSSs. In some projects, gender responsiveness is included as a minimum standard. If gender responsiveness is part of the MPSS (and thus bid and contract), then it must be implemented and monitored.

Although most PPP projects incorporate gender-related amenities, social infrastructure projects (for example schools, airports, integrated transport, prisons and hospitals) are more likely to contain this element than, for example, expressways or toll roads.

The PDMF's good practice in institutionalising gender has not gone unnoticed. Earlier this year, the Facility made a presentation on IFC compliance and their approach to gender. The IFC was impressed, and is considering making their approach a template for the area.

What are the results of institutionalising gender in the PDMF's work?

Examples provided to this Review included the Southwest Integrated Transport System project, a combination of a bus terminal and a system to connect passengers to other mass transit. The requirement to collect sex disaggregated data, conduct gender analysis, prepare gender-sensitive indicators and a social development strategy resulted in provision for a play station for children and facilities for persons with disabilities and the elderly as well as diaper changing and breast feeding facilities. Stakeholder consultations were held with women-organised groups to monitor gender-responsiveness. Another example was correctional facilities that included a nursing room and site conjugal visit area, separate dorms for women and men employees and facilities for persons with disabilities.

One **challenge** that the PDMF faces is that of sustainability: how is it possible to ensure good practice after the point of financial close?

Conclusions and lessons to be learned

The main lesson is that it is both important and doable to have **a detailed, official process** for identifying gender-related issues, ensure appropriate **gender capacity** is in place, and scope for **identifying and implementing responses** to gender-related issues beginning from the very earliest stages of project formulation.

It would also be appropriate to consider how the outcomes of these institutionalised, gender-responsive practices could be more transformational. While the PDMF's processes undoubtedly result in physical amenities that address women's needs, these results do not approach meeting the full range of desired, more strategic gender equality results set out in the national PPP manual. That said, the manual is relatively new and change—not least in a complex sector such as infrastructure—takes time. The institutional measures that the PDMF has put in place, in the context of conducive national legislation, will ensure that gender equality is not left off the infrastructure agenda.

2. Odebrecht—Brazil: training women to address skills shortages in remote areas¹⁷

This case illustrates both good practice, and what is frustratingly absent in trying to find comprehensive cases of good gender practice in infrastructure: impact.

Odebrecht is one of Brazil's leading engineering, procurement and construction (EPC) companies, with a portfolio of large-scale construction and infrastructure development projects throughout Latin America, Africa, North America, Europe and the Middle East. Recently, it led the consortium constructing the US\$7 billion Santo Antônio hydro-electricity plant near Porto Velho, in the remote north-west region of Brazil.

To enhance workforce stability and community engagement, Odebrecht has a policy of trying to recruit as much as possible of its workforce from local communities near its sites. This means that recruitment procedures need to be highly organized and often innovative, given that the local labour pool can be small.

¹⁷ International Finance Corporation. (2013). *Investing in Women's Employment: good for business, good for development*. Washington DC: IFC.

From the outset, one of the major challenges associated with the Santo Antônio project was the need to recruit thousands of workers within a short space of time. Given the limited local labour supply, Odebrecht managers realized that it would be highly inefficient to disregard half of the local population of potential workers: women.

Odebrecht decided to launch a free local pre-hire skills training program, *Acreditar*, to provide a needed gateway to jobs at the site for local women and men alike. It was also cost-effective; by training and recruiting local people rather than paying for workers to fly in and out from other regions, investment costs outweighed per capita annual savings by a ratio of around 9:1.¹⁸ In addition, the company considers that high levels of local employment on the site have resulted in a positive relationship with the local community, allowing the project to proceed smoothly.

According to Odebrecht, having gender diversity on its construction sites changed the way in which workers relate to each other, making it a more agreeable environment for both women and men. The value of these changes, such as widespread perceptions of less “machismo” on site or having more organized worksites, is difficult to quantify. However, Odebrecht managers reported that the change in workplace culture positively affects productivity, retention and the company’s reputation as an employer of choice in the local area.

Acreditar was not intended to be a social program, but was part of a significant business operation. Based on the success of the program in Porto Velho, *Acreditar* has been rolled out to other sites; Odebrecht has launched the *Acreditar* programme in Angola, Argentina, Colombia, Cuba, Guinea, Liberia, Mozambique, Peru and Venezuela.

What this teaches us

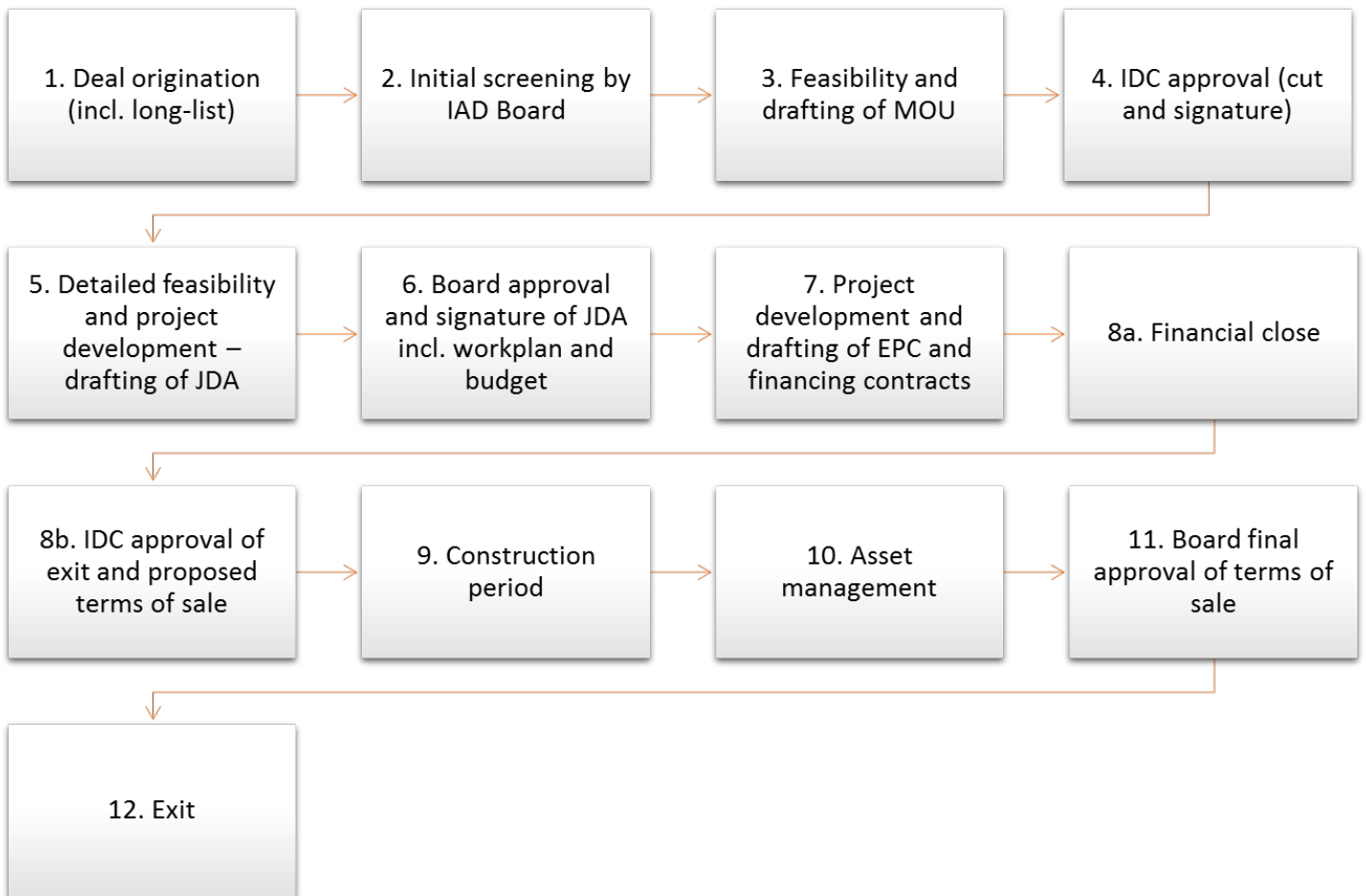
Despite the fact that the IFC uses the *Acreditar* programme as an example of good gender practice in infrastructure, there are two key elements of this case that give room for pause: a solely efficiency approach and no real discussion of impact or processes of change.

While building women’s capacity is undoubtedly an empowering practice and one of the ways in which gender equality can and is addressed in infrastructure investment, the rationale and approach for this strategy in the Odebrecht case is narrowly defined as a commercial efficiency measure, something done to enhance a needed talent pool. While this argument is objectively valid, it serves to limit the approach that might otherwise be taken. A more transformative approach considers the factors underlying women’s relative lack of skills and training, takes women’s own viewpoints into direct account, and engages with processes of change to attitudinal and structural barriers to women realising their full potential.

Secondly, this example illustrates a not uncommon case in identifying good gender practice in infrastructure: a lack of analysis of impact. While it is possible to find good practices (eg. training, consultation with women, promotion of women in community-led infrastructure), sound analysis of the impact, including commercial, of gender-responsive measures is rare. How did *Acreditar*’s training of the women impact upon the project? The women themselves, and their communities? Once women were trained, how many took up jobs, and what impacts did this have on the project, the women themselves and their communities? Were there savings to the project? Unanticipated benefits?

¹⁸ Ibid p-12

Annex 5: IAsD development process



Annex 6: Additionality

As discussed in the section on Additionality as a gender entry point, IAsD (and PIDG) should consider building upon the process of refining the definition Additionality to incorporate a gender focus. The Table below summarises the Additionality types, measures (as currently defined), and provides some direction on how these types and measures look when applying a ‘gender lens’.

It is important to note that, before IAsD and, later, the IDC or Board ever receive a project proposal, co-developers or developer services will have already pulled together a significant amount of information, background and detail for consideration. It is entirely possible to require that their submission provide qualitative and quantitative gender analysis as well as a narrative outline of exactly what the proposed project will do for gender equality and women’s empowerment (in specific relation to identified issues) and, importantly, how it will do this.

Additionality Type	Measure	Gender dimension
Finance	Providing financing that the project is unable to obtain elsewhere	This default Additionality criterion must be met.
	Raising the financing or accessing the grants required to achieve financial close	No scope to incorporate gender.
Design	Pioneering a new technology or innovative approach for the first time so that it can be replicated in future	<p>Significant scope to incorporate gender.</p> <p>Infrastructure design must address the needs, roles and economic opportunities of women, and the barriers they face in accessing the goods and services, based on meaningful consultation with women. Women play key roles in household, business and community management and are critical to sustainability in infrastructure. There is clearly scope for pioneering innovative approaches that reduce economic and time burden on women and empower them in infrastructure investment that, when well monitored and documented, can be replicated.</p> <p>The questions to ask are, how will IAsD’s involvement in the investment:</p> <ul style="list-style-type: none"> • address the needs and roles of women and save them time and costs? • support innovative measures that empower women?
	Improving the design of the infrastructure service such that it is either more efficient, more effective or more sustainable	
Regulatory and Policy	Enabling governments to create, update or amend their regulatory regime to better facilitate private sector involvement in future infrastructure investment	<p>Significant scope to incorporate gender in the second measure.</p> <p>Because of gendered roles that women play, the barriers they face and the demands on their time in the domestic, community and economic sphere, they often lack access to public influence and networks, formal labour markets and the private sector. They may lack access to financial services and formal negotiation skills. However, these conditions need not be permanent. Development projects are required to build the capacity of local stakeholders for both women and men, and introduce special measures to identify capacitate women to participate meaningfully in the infrastructure management and governance arrangements.</p>
	Equipping local stakeholders with the skills, experience or tools needed to better engage with the private sector and equitably share in project benefits and risks	

		The question to ask is how can IAsD's involvement in the investment lead to equipping local women with skills, experience and tools, especially to participate in decision making, management and governance, above what a private investor would?
Standards and procedures	Enhancing the corporate governance regime of a project such that integrity, transparency and accountability is improved	The assumption is that most, if not all, projects will demonstrate this type of additionality. Significant scope to incorporate gender in the first and last measures.
	Improving the environmental standards of a project	Ample evidence from the business world supports the understanding that diversity in corporate governance, including women's participation, leads to more successful companies.
	Improving the social standards of a project such that it demonstrates good labour, working and health and safety practices	The questions to ask are how can IAsD's involvement in the investment ensure women are equipped with skills, confidence and opportunity to participate in decision making around service standards and performance, monitoring, management and governance, and ensure 'decent jobs' including fair and equal pay and conditions and access to training for women? Ensure that 'health and safety' encompasses protection from sexual harassment and contributions towards ending violence against women?
Social and Economic impact (also referred to as Development Impact in this document)	Directly improving people's livelihoods, living standards, access to opportunities or health through additional measures.	Significant scope to incorporate gender. IAsD projects can and do contain instances where, through the inclusion of additional measures such as building a health facility (Nepal Kabeli). However, such measures are generally outside of the main set of project targets, which do not include articulated equality targets. As such, their impact is not measured—and certainly there is much scope to incorporate gender analysis at an early stage to refine the question of what measures would be beneficial to gender equality and empowering to women. The question to ask is: how can IAsD's involvement in the potential investment lead to improved design, implementation and delivery by instituting measures <i>that take account of women's particular needs, constraints and capacities</i> , beyond what a normal private investor would do?

(InfraCo Asia and InfraCo Africa, 2015)

Annex 7: IFC regulations regarding women

Consultation with Affected Communities: ‘the consultation process should (i) capture both men’s and women’s views, if necessary through separate forums or engagements, and (ii) reflect men’s and women’s different concerns and priorities about impacts, mitigation mechanisms, and benefits, where appropriate” (IFC 2012: 14).

Employment: “The client will take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to women” (IFC 2012: 19).

Trafficking: “The client will not employ trafficked persons”, noting that “trafficking in persons is defined as the recruitment, transportation, transfer, harboring, or receipt of persons, by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Women and children are particularly vulnerable to trafficking practices” (IFC 2012:20)

Occupational health and safety: “the client will provide a safe and healthy work environment, taking into account inherent risks in its particular sector and specific classes of hazards in the client’s work areas, including physical, chemical, biological, and radiological hazards, and specific threats to women” (IFC 2012:20).

Land acquisition and involuntary resettlement: “disclosure of relevant information and participation of Affected Communities and persons will continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement to achieve outcomes that are consistent with the objectives of this Performance Standard” noting that “the consultation process should ensure that women’s perspectives are obtained and their interests factored into all aspects of resettlement planning and implementation. Addressing livelihood impacts may require intra household analysis in cases where women’s and men’s livelihoods are affected differently. Women’s and men’s preferences in terms of compensation mechanisms, such as compensation in kind rather than in cash, should be explored” and “documentation of ownership or occupancy and compensation arrangements should be issued in the names of both spouses or heads of households, and other resettlement assistance, such as skills training, access to credit, and job opportunities, should be equally available to women and adapted to their needs. Where national law and tenure systems do not recognize the rights of women to hold or contract in property, measures should be considered to provide women as much protection as possible with the objective to achieve equity with men” (IFC 2012:34).

Annex 8: Gender Analysis Tools

Tools for Gender Analysis and Social Assessment ¹⁹

Tool	Objective of the Tool	Notes
Desk Review	To gather the existing documented information on the specific topic. This tool is very relevant in getting background information on the specific topic. Specifically when implementing Gender Analysis, this tool aims to understand the extent of sex disaggregated data available in the country as well as the wider context (political/legislative, economic, social norms, position of women, etc).	Qualitative and Quantitative Involves detailed review of relevant documents and research. This tool provides an introduction to the existing knowledge of the topic, and very often reveals important gaps in data and analysis as it relates to gender.
Household Interview	To gather quantitative information directly from beneficiaries on their socio-economic characteristics. The quantitative data analysis answers questions of how much, how often, how many as well as revealing statistical trends over time, but must be taken together with qualitative data and analysis gathered through other sources in order to address underlying questions of <i>why</i> that are key for gender analysis.	Often quantitative, but can include open-ended (qualitative) questions Typically household interviews are led by quantitative study experts and carried out by trained enumerators. Interviews include a sequence of focused questions in a fixed order, often with pre-determined, limited options for responses. They are carried out among the direct beneficiaries. The unit of study is the household. An average duration of such an interview is estimated to be one hour. It is important to note that conceptualizing the household as a gender-neutral space where women as well as men freely voice their opinions and information in research is fundamentally flawed. The design of household interviews must take into account both women- and men-headed households, as well as the need to incorporate measures to ensure that women within households can respond freely and safely to interview questions.
Focus Group Discussion (FGD)²⁰	Used to discuss the perceptions, attitudes and views of primary stakeholders on the objective and strategy of the proposed project and to understand their particular barriers, constraints, ideas and	Qualitative, but can include quantitative measures such as time-use FGDs carried out by qualitative study experts are relatively low cost and involve a small group (six to twelve participants plus facilitator—though some also use a ‘mini-FGD’ approach with only 3-

¹⁹ Adapted from <http://siteresources.worldbank.org/INTGENDERTRANSPORT/Resources/2toolsforgenderanalysis.htm>

²⁰ See http://research.apc.org/images/2/2f/A_Qualitative_Framework_for_Collecting_and_Analyzing_Data_in_Focus_Group_Research.pdf for a thorough discussion of FGD methodology and data analysis—however it should be borne in mind that this reflects FGD in an academic research rather than development context, where there is often more time and scope for rigour. There are many online guides for doing FGD in development contexts, for example <http://policy-practice.oxfam.org.uk/publications/conducting-focus-groups-578994>, <http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/conduct-focus-groups/main>, http://pdf.usaid.gov/pdf_docs/Pnaw110.pdf.

	<p>opportunities. Focus groups help to answer 'who', 'how' and 'why' questions and allow researchers to draw out respondents' feelings, beliefs, attitudes, experiences and reactions in a way that is often not feasible using other methods. They are useful to enrich and support existing data.</p> <p>FGD can also be a way to build consensus and understanding in communities about projects and changes within projects and plans.</p>	<p>4 participants, when they have specialized knowledge or experiences to discuss). (Anthony Onwuegbuzie, 2009) The participants of FGDs are homogenous, belonging to the same category of the beneficiary population. Separate FGDs with male and female participants is good practice in order to explore gender differences in attitudes, feelings, and preferences.</p> <p>The facilitator should be experienced in gathering qualitative data to lead FGDs and the know-how to facilitate equal participation from all participants to avoid discussion being monopolized by a vocal few. An average duration of a FGD is 1.5—2 hours, and should not run longer than 2.5 hours. Light refreshments should be served depending on the duration of the FGD.</p> <p>Other tools such as trend analysis, social mapping and time use/activity log analysis can be carried out as part of FGDs to capture information on specific topics of interest. (See next table.)</p>
Direct Observation	To perceive the existing situation in a selected locality	<p>Qualitative and quantitative</p> <p>This technique involves counting behaviors, observing dynamics and expressions, and registering notable facets of a particular situation. This could be carried out in selected locations that enable the researcher to understand and capture data on the activities of the beneficiaries of an intervention.</p>
Semi-structured interviews	To provide a forum for one-to-one discussion in a relaxed atmosphere on specific topics with direct beneficiaries and secondary informants. Specifically it aims to provide an opportunity for self-expression to populations who are shy or otherwise resistant to opening up in front of others	<p>Qualitative</p> <p>Also called conversational interviews, carried out by the qualitative study experts, these provide a framework within which respondents can express their own understanding in their own terms. It is often structured around a number of pre-determined topics. They are structured by interview guide with a limited number of preset questions with the flexibility to elaborate on specific topics if desired by the person interviewed. This kind of guide ensures that the interview remains focused on the issue while allowing enough conversations so that the participants can introduce and discuss topics that are relevant to them. These tools are deliberate departure from survey-type interviews with lengthy, predetermined questionnaires. These interviews are carried out with secondary informants and direct beneficiaries. The average duration of such an interview is estimated to be one hour.</p> <p>It is important to note that the interviewer plays an important role in this technique, in that s/he may or may not ask probing questions to elicit</p>

		deeper information. For good gender analysis, it is best to have interviewers who are well versed and fully on board with the agenda of getting gender specific information, to tailor probing questions to understand participants' experience <i>as men and as women</i> .
Case Study	To study individual cases relating to the topic. These case studies will help in dramatizing / highlighting problems and issues of an individual or a household within a community.	Qualitative with some quantitative elements Case study stories bring out the individual's or household's major needs, issues/problems, and their perception of the solution to these problems through conversations in a relaxed atmosphere. This method also documents the individual's personal details such as name, place of residence, employment status, marital status, number of children, etc as well as in some cases triangulating information (such as legal records, school enrolment and attendance, etc). Sample population will be selected purposively based on the key topic studied. They are undertaken by qualitative study experts. The average duration of a given conversation can last between 2-2.5 hours, though the time invested in putting a case study together can vary tremendously.
Stakeholder workshops	To provide an open forum to discuss and build consensus and ownership of the field findings and recommendations and thus arrive at an agreement on the next steps. This is a powerful tool for reaching a consensus when there are contradictions among the information gathered from different sources.	Stakeholder workshops are held at the end of fieldwork. All levels of stakeholders are encouraged to participate in the workshops. The workshop is an effective way to discuss common findings in the field, to disseminate field findings, to create ownership of the findings, and to decide on next steps. Participants can include both direct and indirect beneficiaries along with government representatives, NGOs and private organizations. Workshops can range from half a day to a full day. Stakeholder workshops can also be used to discuss and come to consensus on specific topics such as developing transport strategies, monitoring and evaluation of gender issues in project implementation, etc. In this case, a series of such workshops will be carried out in one or more locations on different recommendations from various studies.

Additional tools to be used as part of Focus Group Discussions

Tool	Objective of the Tool	Notes
Trend Analysis	To provide a sequence of changes from a chosen period to the current date.	Trend analysis involves requesting participants to discuss various changes that have occurred within the community over a period of time such as role of women in households, rate of labor participation of women, rate of female children attending schools and universities, etc. Often important events are used to identify the period as people often cannot relate if only dates are provided.
Time-Use Analyses / Activity Logs	To gather information on the various activities of an individual during a typical day. This tool is a useful component of gender analysis in that it can help logistically (for example knowing when men and women are free to attend training or project events) and conceptually (time is an important resource and women and men often have different access to it).	<p>Time use analyses/Activity Logs involve gathering detailed information on the type of activities performed by women and men in a set period of time (typically a day or a week). It documents when these activities are performed and the average time spent on each. This tool helps to understand men and women's roles and the time they invest in carrying them out (as well as what free time they have, and when).</p> <p>Some typical activities covered include time spent on: collecting water/firewood, waiting for public transport, accompanying children to school, travelling to work place, domestic work such as cleaning and cooking, leisure activities, paid work, caring for others, etc.</p> <p>This tool is carried out as part of FGD and can be done by having women and men (separately) complete a table of what they do at various times of the day/week.</p> <p>An alternative approach, and one that attempts to account for participants' estimation errors, is having participants complete a 'diary' over time, filling out their activities and how long they spend on each over a set period of time (such as a week or a month).</p>
Social Mapping	To provide a visual display of community members' perceptions of the physical dimension of their community in social and economic terms.	<p>Social Mapping helps to develop an inventory of resources within the community (types of available roads, modes of transport on these roads, wells, hand pumps, schools, public service buildings, etc); an inventory of type of households (whether slums/poor or non-poor or both); and location of community resources in relation to the households of differing wealth levels.</p> <p>Maps can be drawn on regular paper by participants, or even on the ground. If on the ground, the participants could use different objects like twigs, stones, leaves, etc to differentiate various types of resources, and if on regular paper, the participants could use color markers to differentiate various types of resources. Maps on regular size paper are useful as they could be included as part of the annex in the specific site report. This tool is carried out as part of the FGD.</p>

Annex 9: Ways of enhancing women's participation in infrastructure projects

As decision-makers

- › Set targets for women's and men's participation
- › Ensure that project committees, implementing organisations, and management and monitoring arrangements are gender responsive and that gender balance is addressed in their own structures, decision-making processes and selection processes
- › Ensure equal pay and safe, decent working conditions in line with national employment and labour laws
- › Prevent and address sexual harassment and other forms of violence against women through establishing (if necessary) and implementing policy, including awareness raising for both women and men and the provision of effective, safe grievance and reporting mechanisms.

As workers

- › Create job opportunities and train women so that they can benefit from the job opportunities and the direct income benefits that construction and maintenance work generates
- › If necessary, use quotas to increase women's employment ratio
- › Provide on-the-job training to so that women are able to develop their technical skills
- › Support and promote women role models in positions such as supervisors, contractors and drivers
- › Provide support services so that women are able to take up employment opportunities - e.g. childcare, health care, a school close to the construction site, and accessible transport to and from the project site
- › Design the work to make it easier for women to work within their cultural or social contexts by, for instance, allocating some tasks to women only or by forming female only work groups
- › Ensure that the design of construction camps is responsive to the needs of women workers and their children, including through the provision of facilities such as safe housing, separate dormitories, health care and child-care facilities
- › Take measures to reduce occupational health and safety and to wider health issues such as preventing the spread of HIV/AIDS
- › In self-help public works schemes, ensure that women are not relegated to "secondary chores" such as carrying water, wetting bricks, mixing mortar, or tidying verges
- › Ensure that infrastructure programmes which rely on community participation do not place unrealistic demands on women's voluntary labour

As technicians, supervisors and managers

- › Work with partner agencies to overcome gender stereotyping, reduce occupational segmentation and to create and expand women's job opportunities in technical and managerial positions. It may be necessary to strengthen the institutional capacity of the partner agencies by establishing a mechanism to address key issues that affect women employees
 - › Actively recruit women for positions as technicians, supervisors and managers and provide them with the necessary resources to effectively carry out their role
 - › Support technical education and training programmes, including on the job training, for girls and women
-

- > Provide appropriate and safe office and field facilities for women professionals and technicians and actively address transport and security issues that can be a barrier to women's employment
- > Ensure that anti-harassment policies are in place, promoted and implemented at institutional levels and that accessible, anonymous grievance mechanisms are available
- > Positive discrimination may be necessary to gradually achieve a critical mass of women supervisors and professionals; seek opportunities in longer-term projects to build up this critical mass

(modified from OECD, 2007)

Annex 10: Infrastructure and impact on women's time poverty

One of the indirect ways in which infrastructure investment can address women's empowerment is by reducing women's 'time poverty'²¹. The gender division of labour—that which is socially expected of women and men—and social norms influence who will spend how much time doing what. Globally, women work more hours than men; men spend more time in paid work, whereas women bear the burden of unpaid household tasks such as fetching water and collecting firewood; cooking; agricultural work for personal consumption; and caring for the family. This results in time poverty for women, reducing their time for paid work, and depriving them of time for social or community activities to improve their status or leisure time necessary for wellbeing.

In designing basic infrastructure projects, the assumption is that they will have positive impacts on the social and economic welfare of beneficiaries, including time savings. However, time use as an indicator is not often included in monitoring frameworks, nor analysed in most evaluations. *Changes in time-use patterns are, however, important indicators to understand the contributions that infrastructure makes to improved gender equality and women's empowerment—not only measuring time saved, but also how that savings is reallocated in ways that can empower women and increase their agency.*

An ADB desk review explored links between infrastructure development and women's time poverty in Asia and the Pacific, asking three questions: (i) What contribution does infrastructure make in reducing women's time poverty, and how is this being recorded? (ii) Are women's time savings resulting from increased access to infrastructure used for productive work that also reduces consumption poverty? (iii) Can infrastructure projects more effectively reduce both time and consumption poverty for women?

It found that **basic infrastructure** has the potential to reduce the time spent on housework and care work and influence the gender division of labour. However, infrastructure projects rarely include interventions to address this directly, even when reducing time burdens was a stated aim of the project. The review also found that the impacts of improved infrastructure on women's time poverty significantly differ across types of infrastructure.

- Improved **water** supply has significant impacts on reducing the time women spend doing burdensome unpaid work but has little impact on the gender division of labour in the household or on women's participation in paid work.
- For women and girls without access to improved **sanitation**, the amount of daily time needed to find a place to defecate, or to accompany children, is significant but has been largely invisible until recently. Beyond a time cost, there is also a negative impact on self-esteem, security risks and increased chances of girls missing school or even leaving education due to a lack of sanitary facilities during menstruation when sanitation facilities are lacking.
- **Electricity** tends to reduce time spent on care work and sometimes has an impact on the amount of time women spend on paid work. An important impact of electricity is on the empowerment of women through increased access to information.
- Improved **transport** infrastructure results in significant changes in the lives of women and girls, which impact on how their time is allocated to different tasks. However, the impacts of travel time on time poverty of women are complex due to the new opportunities that are opened up, adding new demands on women's time in addition to that demanded by their traditional roles.

(Asian Development Bank, 2015)

²¹ Necessary time has been defined as is that needed to earn sufficient money to meet consumption needs and meet essential personal and household needs. Discretionary time is any additional time over which an individual can make choices as to how it is allocated. Time poverty is when there is no discretionary time, and perhaps not even enough necessary time available to a person, and choices need to be made over allocation of time between essential activities. (ADB, 2015)

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Annex 12: Persons interviewed and met

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Tracey Austwick, former Assistant Director, Infrastructure Policy Section, Trade, Investment and Economic Diplomacy Division

Annemarie Reerink, DFAT Gender Advisor

Shannon White, Director, Infrastructure Policy Section, Multilateral Development Division

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