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U.S. TRADE AND DEVELOPMENT AGENCY

July 23, 2024

VIA EMAIL

Re: Freedom of Information Act ("FOIA") request 2024-042:

Thank you for your FOIA request to the U.S. Trade and Development Agency ("USTDA"), dated April 18, 2024, in which you asked for:

> *A copy of the USTDA Gender and Social Inclusion Framework documents. These were produced recently with the help of Sibley International LLC.*

In accordance with FOIA, USTDA has conducted a reasonable search for the requested records. All responsive records are being released in their entirety and are enclosed. No other responsive records were found.

Thank you again for your inquiry. There is no charge for processing this FOIA request. If you have any questions or would like to contact the FOIA Public Liaison, please e-mail foia@ustda.gov or call (703) 875-4357 and ask to speak with Brian Rivers or with me.

Sincerely,

Dozie Okpalaobieri
D. Okpalaobieri
Assistant General Counsel

BEST PRACTICES REPORT

USTDA Gender and Social Inclusion Framework

This publication was written by Carol Tyroler, produced by International Development Group LLC, for review by the US Trade and Development Agency.

USTDA Gender and Social Inclusion Framework

Best Practices Report

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DISCLAIMER

The views and opinions expressed herein are those of the authors and do not necessarily represent those of USTDA or any other U.S. Government entity.

List of Acronyms

ADB	Asian Development Bank
ADS	Automated Directives System
AfDB	African Development Bank
BII	British International Investment
BRT	Bus Rapid Transit
CSR	Corporate Social Responsibility
DEG	German Development Finance Institution
DEIA	Diversity, Equity, Inclusion, and Accessibility
DFC	US International Development Finance Corporation
DFI	Development Finance Institution
DFWED	Division of Foodborne, Waterborne, and Environmental Diseases
DOC	US Department of Commerce
EHS	Environmental, Health, and Safety
EXIM	Export Import Bank of the US
FY	Fiscal Year
GA	Gender Analysis
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GPI	Global Procurement Initiative
IASC	Inter-Agency Standing Committee
ICT	Information and Communications Technology
IDB	Inter-American Development Bank
IDG	International Development Group LLC
IFC	International Finance Corporation
ILO	International Labor Organization
IMO	International Maritime Organization
ITF	Entity International Transport Forum
ITU	International Telecommunications Union
LMIC	Low- and Middle-Income Countries
MCC	Millennium Challenge Corporation
M&E	Monitoring and Evaluation
MEL	Monitoring, Evaluation, and Learning
MENA	Middle East and North Africa
OECD	Organization for Co-operation and Development
PGII	Partnerships for Global Infrastructure Investment
PIC	Pacific-Island Countries
PS	Private Sector
PPP	Public-Private Partnerships
SDG	Sustainable Development Goals
STEM	Science, Technology, Engineering, and Math
UN	United Nations
UNODC	United Nations Office on Drugs and Crime
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development

USTDA	United States Trade and Development Agency
VAC	Violence Against Children
WEE	Women's Economic Empowerment
WELLTI	Women Empowered Leave Legacies through Trade and Investment
WHO	World Health Organization
WUA	Water-Users Associations

I. Executive Summary

Introduction

Infrastructure investments are important for all nations in providing facilities and services that offer electricity, digital connectivity, health services, transportation, potable water, irrigation, sanitation, schools, and housing, but also through multiplier effects that can provide employment, reduce poverty and promote economic growth and trade. Access, usage, and opportunity across infrastructure sectors is not ubiquitous, resulting in disparities across the world, particularly in low- and middle-income countries. Women, girls, men, and boys have different infrastructure needs and use and benefit from infrastructure unequally. Inclusive infrastructure is designed to offer amenities and services that satisfy the requirements of all users. To achieve inclusive infrastructure, supply-side technical design specifications that guarantee safety and quality must be combined with demand-side concerns about who uses infrastructure, for what purposes, how it is paid for, and the implications for all people (women, girls, men, and boys). While inclusive infrastructure is becoming a more standard approach to programming, the field continues to be male dominated.

Why Gender-Inclusive Infrastructure Matters

There is a positive correlation between gender equality, increased female labor force participation, economic growth, and improved social outcomes. Gender equality and social inclusion (GESI) considerations can have effects on improving individual, community, and societal welfare by reducing gaps in access and use of infrastructure. However, infrastructure development has commonly taken a 'gender-blind' approach, disregarding the unique infrastructure needs and uses of women, girls, men, and boys. This has resulted in infrastructure that disregards the various duties, roles and needs that each may have in a given situation and how this may influence their capacity to utilize or access infrastructure.

What GESI in Infrastructure Can and Can't Do

Greater social power structures, norms, and a country's legal and regulatory system all influence whether women and men, girls and boys, are able to benefit equally from infrastructure facilities and services. While inclusive infrastructure is not a panacea for gender equality or women's empowerment, inclusive programming can assist with access and use for marginalized communities. Many industry stakeholders understand the importance of gender inclusion in the workforce, yet this is not always included in strategic outlooks, budgets, or staffing.

Organizations Working in Inclusive Infrastructure

Organizations at every level continue to make progress on deepening gender inclusion in the infrastructure space. International development organizations like the World Bank, the InterAmerican Development Bank (IDB), the African Development Bank (AfDB), and the Organization for Economic Co-operation and Development (OECD) are investing in gender-inclusive frameworks, protocols, and policies. Additionally, donor entities like the U.S. Millennium Challenge Corporation (MCC) and the United States Agency for International Development (USAID) are increasing attention to GESI considerations. Furthermore, public-private partnerships (PPP) are increasingly committing to inclusive infrastructure investments and outcomes.

Barriers to Inclusive Infrastructure

Despite increased attention to GESI considerations, barriers remain that inhibit the development and implementation of inclusive infrastructure programming. Weak gender knowledge and capacity across stakeholders lead to improper considerations of inclusive infrastructure in

programming. Implementers may lack reliable data and standards to fully understand the gendered impact of their work. Gender roles and societal norms may also be reinforced through national laws and policies. Governments may also lack a strategic vision for gender-responsive infrastructure and provide insufficient coordination between stakeholders which is compounded by absent gendered budgeting. Finally, technical capacity constraints include a lack of representative perspectives, insufficient attention to project life-cycle planning, and gender-blind approaches.

Best Practices

In spite of the challenges to inclusive infrastructure development, gender effective best practices exist. While not an exhaustive list of best practice trends and patterns, many of the best practices presented in this report can be applied to infrastructure programming in the major sub-sectors that USTDA works in. These include: 1) conducting gender analyses and stakeholder consultations; 2) working with governments to incorporate a strategic vision of inclusive infrastructure into national development plans; 3) adopting evidence-based approaches founded on a solid foundation of sex, age, and other socioeconomic disaggregated qualitative and quantitative data; 4) applying a project life-cycle approach; 5) increasing education and leadership opportunities for marginalized populations to increase women's decision-making ability; and 6) training all staff in basic GESI principles at all levels of programming. Exploring the intersection of gender and other inequalities can help stakeholders understand how infrastructure investments affect people dynamically. Finally, financiers have the ability to catalyze the implementation of GESI considerations in projects by conducting a gender analysis and including GESI terms and conditions in their conditions for financing.

Sub-Sector Specific Challenges and Best Practices

Agriculture: GESI challenges confronting the agriculture sector include access to information, markets, and support services; the control of income and money for inputs; land tenure rights; the development of appropriate tools and technologies; and irrigation and water source access. Best practices are focused on irrigation and water infrastructure design and management, market-led adjustments (to establish buy-in from power holders, address cultural norms, and address those gaps for improved inclusion) and the expansion and improvement of rural road networks.

Information and Communication Technology (ICT): Under ICT, GESI barriers include social and cultural norms, gender-neutral cyber laws, affordability, and the need for skills training and digital literacy. To mitigate these challenges, industry stakeholders can boost the affordability and usability of ICT products, improve the understanding of the unique and intersecting needs of women and other marginalized groups in access and ICT use, and publish and share data on gender-related research.

Healthcare Systems and Infrastructure: Individuals have different health outcomes relating to behavior, biology, and access to healthcare infrastructure. Disparities exist worldwide including limited access to information, low education levels, or power relations within households that limit women and girls' ability to seek care, among others. In order to address these disparities, healthcare facilities should be designed to serve all intended beneficiaries both at the project inception and design phase, and during operation by ensuring financial and human resources are allocated to developing and incorporating GESI considerations, collecting sex and gender-disaggregated data to assess gender differences in the use of the facilities, developing transparent decision-making processes, incorporating GESI considerations, facilitating capacity-building, and committing to implementing and monitoring with specific GESI indicators.

Energy: The energy industry is one of the least gender-inclusive sectors and women face formidable barriers, including access to household energy, as well as clean/alternative energy, and employment in the male-dominated energy sector. Some best practices include making clean energy more accessible; identifying legal barriers to women's employment; increasing female participation in the workforce through capacity building and increasing science, technology, engineering, and math (STEM) education; and creating supportive legislation and regulations to encourage energy agencies and utility companies to incorporate GESI into their energy projects.

Transportation: Transportation facilities and services have historically been developed as gender blind. This is despite mounting evidence of gendered differences in travel patterns; usage of transportation modes; time usage; access to resources, mobility, and safety; as well as differences in employment in the sector. To address these challenges, it is important to prioritize sustainable transportation, build technical capacity for transport planners and implementers, and promote innovation through exploring intermodal transport systems; increasing the availability, reliability, safety, affordability, and quality of transport; increasing the capability of transportation organizations and service providers; increasing awareness of local cultural constraints; developing gender-informed monitoring and evaluation; and establishing gender criteria and norms for facilities and their services.

Recommendations for Gender Inclusion

Taking these nuances and the dynamics of each sector into account, this report offers an inventory of options, recommendations, and approaches, rather than prescriptive or blueprint solutions, and recommends that all projects are adapted to local contexts. These include: 1) creating a Gender Policy; 2) building capacity for all staff on GESI approaches and programming; 3) conducting a partner analysis; 4) engraining gender mainstreaming into the project life-cycle; 5) generating and sharing more gender-sensitive data and evidence; 6) focusing infrastructure interventions on holistic and coordinated approaches; 7) adopting a GESI procurement and solicitation process; and 8) creating a business case for inclusive infrastructure with future partners. While the best practice recommendations are not an exhaustive list, what is presented are common areas where development practitioners, donors, the aid community, financiers, governments, and the private sector are moving towards more equitable inclusion of women and other underrepresented groups in infrastructure across sectors.

I. Understanding Terminology

Understanding gender terminology is important to ensure readers work from the same lexicon. The following terminology is used throughout this report and is provided below as a reference.

Table 1: List of Terms

TERMS	DEFINITION
Diversity	Any dimension is used to differentiate groups and people from one another and empower people by respecting and appreciating differences in age, gender, ethnicity, religion, disability, sexual orientation, education, and national origin[1].
Empowerment	Refers to increasing the personal, political, social, or economic strength of individuals and communities. The core of empowerment lies in the ability of a person to control their own destiny. This implies that to be

[1] Global Diversity Practice. 2022. "What is Diversity & Inclusion?" https://globaldiversitypractice.com/what-is-diversity-inclusion/

	empowered, women and girls must not only have equal capabilities (such as education and health) and equal access to resources and opportunities (such as land and employment), but they must also have the agency to use these rights, capabilities, resources, and opportunities to make decisions[2].
Gender	Denotes the social characteristics assigned to men, women, boys, and girls in a society or culture. A person's internal, deeply felt sense of being male or female or something other or in between may or may not correspond with the sex they were assigned at birth. These social characteristics are constructed based on different factors, such as age, religion, national, ethnic, and social origin. They differ both within and between cultures and define identities, statuses, roles, responsibilities, and power relations among the members of any culture or society[3].
Gender Analysis	The systematic gathering and examination of sex and age disaggregated data and information to identify, understand, and redress gender inequalities. Gender analyses should be integrated into assessments and situational analyses and inform the planning, implementation, monitoring, and evaluation of all types of interventions [4].
Gender Blind	Person, policy, or institution that does not recognize that gender is an essential determinant of the life choices available to us in society[5].
Gender Equality	The equal enjoyment by women, girls, men, and boys of rights, opportunities, resources, and rewards. It does not mean that women and men are the same but that their enjoyment of rights, opportunities, and life chances are not governed or limited by whether they were born female or male[6].
Gender Equality and Social Inclusion (GESI)	Where women, girls, men, and boys have equal opportunity to benefit from and contribute to economic, social, cultural, and political development; enjoy socially valued resources and rewards; and realize their human rights7. The concept also aims to improve the social inclusion and the dignity of people who are disadvantaged because of their identity so they can participate fully and equally in society. Social inclusion assumes that men and women are not homogeneous but are stratified by age, race, religion, ethnic origin, beliefs and practices, and socio-cultural contexts.
Gender Lens	Like gender mainstreaming, using a gender lens takes into account how distinct social, cultural, economic, and political situations and backgrounds assign men, boys, women, and girls different roles and duties[8].

[2] Malhotra, Anju, Sidney R. Schuler, and Carol Boender. 2002. "Measuring Women's Empowerment as a Variable in International Development." Background paper prepared for the World Bank Workshop on Poverty and Gender: New Perspectives, June 28, 2002, 6. http://siteresources.worldbank. org/INTGENDER/Resources/MalhotraSchulerBoender.pdf.

[3] UNDP, 2019. "Gender and Recovery Toolkit: Advancing Gender Equality and Women's Empowerment in Crisis and Recovery Settings."

[4] Ibid."

[5] Neason, Elizabeth. 2017. "Gender Integration Continuum: Training User's Guide". USAID Inter Agency Gender Working Group. www.igwg.org/wp-content/uploads/2017/12/17-418-GenderContTraining-2017-12-12-1633_FINAL.pdf

[6] United States Agency for International Development. 2007. "Gender Terminology". https://pdf.usaid.gov/pdf_docs/Pnadl089.pdf.

[7] Ibid.

[8] Ibid.

Gender Mainstreaming	A strategy for making women's and men's concerns an integral dimension of the design, implementation, monitoring, and evaluation of policies, plans, and programs in all spheres—political, economic, social, and environmental—so that all benefit equitably[9].
Gender Roles	Refers to social and behavioral norms that, within a specific culture, are considered to be socially appropriate for individuals of a specific sex. These often determine the traditional responsibilities and tasks assigned to women, men, girls, and boys. Gender-specific roles are conditioned by household structure, access to resources, specific impacts of the global or local economy, occurrence of conflict or disaster, and other locally relevant factors such as ecological conditions[10].
Gender Transformative Approach	An approach that seeks to fundamentally transform relations, structures, and systems that sustain and perpetuate gender inequality. This approach requires: 1. Critically examining gender roles, norms, power dynamics, and inequalities; 2. Recognizing and strengthening positive norms that support gender equity and equality and an enabling environment; and 3. Transforming underlying power dynamics, social structures, policies, and broadly held social norms that impact women and girls, men and boys, and gender-diverse individuals and perpetuate gender inequalities[11].
Gender-Based Violence (GBV)	Refers to violence that targets individuals or groups based on their gender.
Gender-Sensitive	Gender-sensitive programs recognize the specific needs and realities of women and men based on the social construction of gender roles but do not necessarily seek to change or influence gender relations[12].
Gender-Sensitive Indicators	Criteria are used to assess gender-related change in a condition and to measure progress over time toward gender equality. Indicators used can be quantitative (data, facts, numbers) and qualitative (opinions, feelings, perceptions, experiences)[13].
Inclusion	An organization's effort and practice of welcoming, socially accepting, valuing, and equitably treating groups or individuals from different backgrounds. Inclusion often means a shift in an organization's mind-set and culture that has visible effects, such as participation in meetings, how offices are physically organized, or access to particular facilities or information[14].
Inclusive Infrastructure	Infrastructure development enhances positive outcomes in social inclusivity, and ensures that no individual, community, or social group is

[9] UN Women. 2021. Gender Equality Glossary. https://trainingcentre.unwomen.org/mod/glossary/view.php?id=36&mode=letter&hook=G&sortkey&sortorder&

[10] USAID. 2022. "Gender Equality and Women's Empowerment | 2022 Policy 37". https://www.usaid.gov/gender/genderpolicy.

[11] Ibid.

[12] Ibid.

[13] Canada International Development Agency. 1997. "Guide to Gender Sensitive Indicators". https://eugender.itcilo.org/toolkit/online/story_content/external_files/TA_Edu_CIDA.pdf

[14] Global Diversity Practice. "What is Diversity and Inclusions?" Retrieved November 2022. https://globaldiversitypractice.com/what-is-diversity-inclusion/.

	left behind or prevented from benefiting from improved infrastructure.[15] Inclusive infrastructure considers the needs of everyone, including marginalized and vulnerable groups[16].
Intersectionality	An intersectional analytical lens acknowledges that singular oppressions exist but focuses on the ways in which overlapping identities (e.g., sex, sexual orientation, gender identity, gender expression, class, race, age, disability, or nationality)interact with systems of oppression and discrimination and the need to address the impact these have on systemic privilege and access[17].
Sex	Biological characteristics of males and females. The characteristics are congenital, and their differences are limited to physiological reproductive functions. These biological and physiological characteristics do not change from culture to culture[18].
Sex-Disaggregated Data	Data cross-classified by sex, presenting information separately for men and women. Sex-disaggregated data reflect roles, real situations, and general conditions of women and men, girls, and boys in every aspect of society. For instance, the literacy rate, education levels, business ownership, employment, wage differences, dependents, house, and land ownership, loans and credit, or debts. Sex-disaggregated data is necessary for effective gender analysis[19].
Women's Economic Empowerment (WEE)	The process by which women increase the exercise of and their access to management and enjoyment of, economic resources. This includes their power to make and act on economic and financial decisions that benefit themselves, their families, and their communities[20].

2. Introduction

2.1 Background

Importance of Infrastructure. Sound infrastructure is a critical investment for all nations and has multiplier effects on trade and economic growth, general well-being, sustainable development, and poverty reduction. Lack of access to basic infrastructure is consistently associated with worse developmental outcomes. For instance, the inability to access healthcare facilities has been linked to higher mortality and morbidity from treatable illnesses. Inadequate access to or availability of proper sanitation facilities can impact adolescent girls' school attendance due to stigmas associated with menstruation[21], affecting their overall economic potential. On the other hand, well-planned infrastructure enhances a person's quality of life by providing access to services and

[15] Global Infrastructure Hub. 2023. "Inclusive Infrastructure – Overview." https://inclusiveinfra.gihub.org/overview/

[16] UNOPS. 2023. "Building a World that Leaves No One Behind." https://www.unops.org/news-and-stories/insights/addressing-inequalities-by-building-a-world-that-leaves-no-one-behind

[17] USAID. 2022.

[18] UN Women.2021.

[19] World Bank Group. 2022. "Preliminary Findings Report on Gender-Inclusive Approaches in Private Participation in Infrastructure." http://documents.worldbank.org/curated/en /099520111082218500/ IDU0491c55960383c 045880a2440291443992454.

[20] Ibid..

[21] OECD. 2019. "Gender Equality and Sustainable Infrastructure." https://www.oecd.org/gov/gender-mainstreaming/gender-equality-and-sustainable-infrastructure-7-march-2019.pdf, retrieved

facilities in areas such as energy, transportation, markets and employment, irrigation and storage facilities, health services, schools, housing, potable water, sanitation, electricity, and information.

While the potential for productive and social infrastructure development is universal—access, use, and opportunity are not. According to the World Bank, 840 million people live more than two kilometers from accessible roads, one billion people live without electricity, and four billion lack access to the Internet[22]. In addition, nearly half of the world's population lacks access to sanitary facilities at home. Of those, 494 million people defecate in the open[23], and 2.3 billion individuals lack access to basic hygiene supplies like household water and soap[24]. In 2018, over one billion people were living in informal settlements, lacking essential amenities, including safe drinking water, sanitary facilities, and lights. According to the United Nations, three regions—Southeast Asia, sub-Saharan Africa, and Central and Southern Asia—are home to more than 80 percent of the affected individuals[25]. These regional disparities are compounded by inequities between rural and urban communities, economic status, and men versus women, as further described below.

Investment Needs. To meet the world's infrastructure needs, the Global Infrastructure Hub[26] estimates that $94 trillion is needed through 2040[27] including substantial private investment and the creation of projects under PPP arrangements. Estimates vary by region, and the availability of reliable statistics, with the greatest need in low- and middle-income countries (LMICs). In Asia and the Pacific, the Asian Development Bank (ADB) estimates that through 2030, these regions must invest $26 trillion in infrastructure to maintain regional development, reduce poverty, and address climate change. The AfDB released new projections that place the continent's annual infrastructure requirements at $130–170 billion, with a financial deficit of $68–108 billion28.

Improved design and access. How infrastructure facilities and services are designed and where they are located significantly impacts an individual's overall productivity, use of time, and particularly important for women—their safety. Infrastructure is therefore not gender-neutral, and gender is crucial, but usually ignored, factor in the design and implementation of infrastructure work, as highlighted in World Bank Vanuatu Aviation Project below. As practitioners think about how infrastructure projects affect women and men and those in rural and urban and other varied contexts, it becomes apparent that most infrastructure investments are planned, developed, built, and operated in a gender-biased and non-inclusive manner.

Gendered differences. Women and men have different infrastructure needs and use infrastructure differently due to their societal roles, relationships, economic status, political context, cultural and social norms, and personal preferences[29], and therefore benefit unequally. For example, women and girls are frequently more active users and contributors to social infrastructure in education, health, childcare, and other social services, as well as public spaces such as parks and recreation centers, due to their traditional care roles and sector employment

[22] The World Bank Group. 2022. "Infrastructure." https://www.worldbank.org/en/topic/infrastructure

[23] Center for Disease Control and Prevention. 2022. "Division of Foodborne, Waterborne, and Environmental Diseases (DFWED)." https://www.cdc.gov/ncezid/dfwed/index.html

[24] Ibid.

[25] PWC. "Global Infrastructure Trends." https://www.pwc.com/gx/en/industries/capital-projects-infrastructure/publications/infrastructure-trends/global-infrastructure-trends-financing.html

[26] The Global Infrastructure Hub (GI Hub) is a not-for-profit organization, formed by the G20, that advances the delivery of sustainable, resilient, and inclusive infrastructure.

[27] Oxford Economics. 2017. "Global Infrastructure Outlook: A G20 Initiative."

[28] Africa Economic Outlook. 2018. "Ch. 3: Africa's Infrastructure: Great Potential But Little Impact on Inclusive Growth." https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2018AEO/African_Economic_Outlook_2018_-_EN_Chapter3.pdf

[29] OECD. 2019.

patterns. In LMICs, in particular women, are typically responsible for domestic duties such as fetching water and wood, child and elderly care, and spending more time and effort using transportation. In addition, women are more vulnerable to safety and security hazards[30].

As the COVID-19 crisis has highlighted, inadequate infrastructure access and use have been particularly challenging for women in both developed and developing countries[31]. It has accentuated not only society's reliance on women at home and in the workplace but inequities in the burden of unpaid care; in the labor market; the overrepresentation of women in the informal economy; in the lack of infrastructure and access to digital, financial and property assets; in discriminatory or weak laws protecting women's rights; in the surge of sexual and gender-based violence; in mental health; and in the challenges to women's sexual and reproductive health rights—all of which have immediate as well as long-term economic effects on women and girls' futures. The pandemic has also dramatically increased the poverty rate for women, widening the poverty gap between men and women and threatening decades of progress for women and girls[32].

What is Inclusive Infrastructure? *Inclusive infrastructure* fuses demand-side concerns about who uses infrastructure, for what reasons, how it is paid for, and the implications for all people (women, girls, men, and boys), households, and communities, with supply-side concerns about technical design requirements that ensure safety and quality. The relationships between these two priorities—one pushed by areas with a greater social focus and the other by disciplines in technology, engineering, and finance—are frequently misunderstood, disregarded, or poorly defined. To be truly inclusive, government and private sector investments need to guarantee that infrastructure planning, decision-making, and delivery procedures not only take into consideration different needs and uses, but also advance gender equality policy goals, enhance women's empowerment, and address issues such as GBV and safety[33].

Women and men of all ages and regardless of sexual orientation should have equal opportunities to exercise their human rights, participate in and gain from political, social, cultural, and economic growth, and realize their full potential. The premise of gender equality is not just about women and girls but is when women, girls, men, and boys and the roles they play, are valued equally by society for their similarities and differences. It also acknowledges that women, girls, men, and boys belong to intersecting and dynamic groups.

Inclusive infrastructure inconsistently addressed. While inclusive infrastructure is gaining momentum as a priority for many governments, it is not consistently integrated into programming design, budgeting, implementation, and monitoring. The infrastructure field continues to be male dominated, hindering women's full involvement. According to the Brookings Institute, in the US, only 18 percent of infrastructure workers are women, and less than 5 percent of people in 20 of the largest infrastructure occupations are women. They also note that there is a lack of diversity in terms of race and gender in the infrastructure workforce and that women in infrastructure positions face a gender wage gap[34]. The linkages between socially inclusive infrastructure development, economic growth, and improved well-being are well understood, but gaps remain in translating this understanding into policy, practice, and investment. Women and girls, along

[30] UN. 2010. "Gender Equality and Sustainable Urbanisation". https://www.un.org/womenwatch/feature/urban/factsheet.html

[31] UN Women. "Sustainable Infrastructure Tools- Gender-responsive Infrastructure". https://sustainable-infrastructure-tools.org/gender-responsive-infrastructure/

[32] McKinsey & Company. 2020. "COVID-19 and gender equality: Countering the regressive effects". https://www.mckinsey.com/featured-insights/future-of-work/covid-19-and-gender-equality-countering-the-regressive-effects#

[33] Serrano, Lorena C. et al. 2021. "Selected Stocktaking of good practices for inclusion of women in infrastructure".

[34] George, Caroline and Joseph Kane. 2021. "Reversing America's poor track record on inclusivity in infrastructure jobs". https://www.brookings.edu/research/reversing-americas-poor-track-record-on-inclusivity-in-infrastructure-jobs/

with other underrepresented groups, continue to bear a disproportionate share of the burden of a lack of access to and use of basic infrastructure facilities and services, resulting in stifled economic prospects and poor development outcomes across sectors. To make infrastructure function for everyone, it is important to adjust how infrastructure projects are designed, implemented, and administered.

As the following case highlights, infrastructure design and development are more than physical infrastructure. This World Bank project underlines the importance of investigating contextual norms, practices, and protocols required by inclusive infrastructure—in this case addressing the placement, requirements, and processes to ensure safety and address gender-based violence[35].

Addressing Gender Based Violence at Work Sites for Inclusive Infrastructure Design
World Bank Vanuatu Aviation Project Introduces Codes of Conduct and Takes Local Context into Account to Reduce Gender-Based Violence (GBV).

The Republic of Vanuatu is one of the eight Pacific Island Countries (PIC), which have some of the highest rates of GBV in the world. Partner and non-partner violence against women affects more than half of the PIC nations. GBV is frequently linked to poverty, ill health, homelessness, and increased stress on children's growth, education, and nutrition. In designing the Vanuatu Aviation Investment Project, the Bank intended to make significant modifications to increase safety and efficiency, by ensuring that local contextual issues were required in project procedures to reduce the risks of GBV. The Bank embedded clauses in bidding documents for civil works that required the contractor to take responsibility for implementation, enforcement and monitoring of a code of conduct covering GBV. Subsequently the project established "The Codes of Conduct and Action Plan to Prevent GBV as well as Violence Against Children (VAC)," which were used in the Vanuatu project, in other civil works projects in Tuvalu and Samoa. The aim of these documents was to introduce: "a set of key definitions, core Codes of Conduct, and guidelines that establish mechanisms for preventing, reporting and addressing GBV and VAC within the work site and in its immediate surrounding communities. These Codes of Conduct are to be adopted by those working on the project and are meant to: (i) create common awareness about GBV and VAC; (ii) ensure a shared understanding that they have no place in the project; and (iii) create a clear system for identifying, responding to, and sanctioning GBV and VAC incidents."

The initiative also developed a working connection with a local group to handle referrals and service delivery for GBV patients through the contractor. The World Bank team noted that it was crucial to get support for these requirements from both the customer and the contractor. In order to gain the contractor's support, it was made clear that this obligation would be free of charge to the contractor because the cost of this additional GBV awareness raising and training was included, and that requiring staff to attend GBV and VAC training would not negatively impact their bottom line.

2.2 Purpose and Audience of the Best Practices Report

2.2.1 Purpose of the Report

This report provides highlights of best practices in GESI infrastructure relevant to USTDA, offers an inventory of options and approaches rather than prescriptive or blueprint solutions, and recommends that all projects are adapted to local contexts. As certain infrastructure sub-sectors grow and advance, additional concepts and ideas will need to be explored to push the boundaries and continue defining best practices for infrastructure development.

2.2.2 The Audience for the Report

This report is targeted at staff and contractors working with USTDA to foster transformative strategies, actions, and activities that will improve GESI outcomes in USTDA-supported infrastructure programs and or projects. This report can also be helpful for USTDA's partners who

[35] World Bank. 2016. "International Development Association Project Paper." https://documents1.worldbank.org/curated/ar/958521484276488499/pdf/Vanuatu-Aviation-PP-12222016.pdf.

are trying to improve GESI outcomes as part of their infrastructure programs and projects.

2.2.3 How to use this Report

Given the wide scope and diversity of infrastructure projects in diverse and complex environments, the application of this report for USTDA may vary. The report provides a summary of relevant GESI programming and requirements of international organizations, including development, bilateral, and multilateral finance institutions. The findings from the literature review will also be used to create a Gender Reference Guide whose goal is to incorporate USTDA GESI action areas in its infrastructure investments including various types of project preparation assistance, international partnership-building activities, training grants, monitoring and evaluation, and in its special initiatives, like the Global Procurement Initiative (GPI).

2.3 Methodology

This report was developed through a desk review of documents provided by USTDA to familiarize IDG with USTDA's mission, program funding, and systematic processes. This was coupled with a systematic desk review of available literature on infrastructure, inclusive infrastructure, and GESI components with a focus on practice-oriented sources, such as publications of international, regional, and national organizations as well as academic sources where relevant. A complete list of all documents is in **Section 11** of this report. The IDG team looked for trends, patterns, and outliers (within and across sectors, organizations, regions, and countries), and applied the following questions to guide our research.

Literature Review Questions

1. What is being done by lead entities in the application of a GESI lens in infrastructure development?
2. What is infrastructure's role in closing the gender gap?
3. What mechanism and processes can be used to ensure that infrastructure projects "do no harm" and create positive/equitable benefits for women and underrepresented groups?
4. What are the frameworks, methods, and tools that can help promote meaningful consideration of gender equality in infrastructure projects?
5. What are the trends and patterns in social inclusion and infrastructure programming for major development and financial institutions?
6. What are the challenges to inclusive programming? What are the opportunities?
7. Do infrastructure gender frameworks exist specifically for infrastructure organizations who are trying to guide their institutions capacity and programming?
8. What are the gaps and opportunities in alignment with USTDA programming?
9. What are the systemic changes necessary to achieve sustainable inclusion in infrastructure and economic growth programming?

3. Why Gender-Inclusive Infrastructure Matters

There is a positive correlation between gender equality, increased female labor force participation, economic growth, and improved social outcomes. When women earn money, they are more likely to reinvest in their households, families, and communities—they send them to school, feed them, and invest in their health, education, and welfare[36]. Investing in GESI serves as a multiplier effect to improving family, community, and societal welfare. Women, girls, and other underrepresented groups (e.g., persons with disabilities, impoverished, rural, ethnic, and religious minorities) are disproportionately impacted by infrastructure access gaps. For example, the placement of

[36] OECD. 2010. Investing in Women and Girls. https://www.oecd.org/dac/gender-development/45704694.pdf.
In addition, while the 90% investment that is commonly cited for women and 35% for men, it is also criticized as not evidence-based; however, there is evidence that due to women's caregiving roles in most societies that they do reinvest in higher percentages than male counterparts in their household, children and education

infrastructure facilities (e.g., markets, healthcare services, schools, transportation service routes, or sanitation services) is frequently less likely to be responsive to the requirements of women (safety, access, lighting, affordability) because men dominate those decisions and designs are aimed to best fit their needs with the assumption that all needs are the same. Well-planned improvements to service delivery and infrastructure design can enhance gender equality results. For example, better sanitation and water services can reduce women and girls' time fetching water, freeing that time for economic or educational pursuits[37]. In Japan, during rush hour, specific sections of trains are reserved just for female passengers to prevent sexual harassment[38] — allowing women to get to their jobs, manage household responsibilities, and travel without fear of being harassed.

Gender-blind infrastructure disregards the demands of women, girls, and other vulnerable groups which can restrict their access to vital resources like clean water, adequate health and sanitary services, transportation services, and modern communications technology. Gender-blind infrastructure can exacerbate inequality, make women and girls more vulnerable, and possibly endanger their lives during times of upheaval when combined with regional traditions and constraints.

Research shows that promoting gender equality and women's empowerment in infrastructure operations creates economic opportunities and assists in altering sociocultural biases, as seen in the case study to the right[39]. In the information and communications technology (ICT) field, women are underrepresented in top management and ICT occupations. Changing this paradigm requires an emphasis on promoting STEM education and female role models. Research from the Organization for Economic Co-operation and Development (OECD) shows that "on average across OECD countries, only 0.5 percent of girls wish to become ICT professionals, compared to 5 percent of boys." Furthermore "twice as many boys as girls expect to become engineers, scientists, or architects. Changing gender-specific expectations about professions is key, including fostering female role models in STEM[40]."

Training Women in Rwanda to Lead in Traditionally Male-dominated Careers Alters Economic Potential

In Rwanda, the African Development Bank's financed the water treatment plants (expected to deliver treated water to 500,000 homes) and trained women in the process, resulting in women's leadership roles in traditionally male-dominated career fields. Gisele Akimana states that working as an electrician has given her more self-assurance and increased capacity for supporting her family. "I feel valued and proud to be in this profession," says carpenter Charlotte Nyirangarukiyimana, "unlike before where it was known to be a man's job only." Steel bender, Florence Ntibazankwirwa, used the money she made working at the water treatment plant to buy a cow that gives milk to her baby. She anticipates having enough money saved to buy a house in two years.

In a project in India called *Wireless for Communities,* women were encouraged to become network engineers and wireless entrepreneurs in local communities. By demystifying technology and passing the control, administration, and ownership of the technologies to the females in the community, this initiative increased women's empowerment. It helped build safe places while promoting women as change agents for social and economic

[37] K., Elena. "Women-only Train Cars Sidestep the Root Issue of Gender Inequality". Best of SNO, 2022. https://bestofsno.com/57483/opinions/women-only-train-cars-sidestep-the-root-issue-of-gender-inequality/.

[38] Ibid.

[39] African Development Bank Group. 2020. "Women take leading roles at a Rwandan water treatment plant." https://www.afdb.org/en/news-and-events/multimedia/video/women-take-leading-roles-rwandan-water-treatment-plant-36443

[40] OECD. 2018. "Bridging the Digital Divide.". https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf

development through internet-based social enterprises and entrepreneurship[41].

In ADB's *Pakistan Access to Clean Energy Investment* project—centered in one of Pakistan's poorest provinces where an estimated 38 percent of the population lives below the national poverty line—one of the goals of the project was to ensure the project's design was inclusive. Therefore, during the project's initial assessment, women and men were interviewed to understand their energy needs, uses, and barriers to access. By gathering this data, the project's design was more inclusive and resulted in designing a project that addressed these various needs, uses, and challenges[42].

By incorporating gender considerations throughout the investment process (including project planning and preparation) and involving women and other underrepresented groups in the decision-making processes, governments and private investors can identify gender impacts of infrastructure decisions and prevent one group from disproportionately benefitting at the expense of disadvantaging others.

Making the Business Case. In addition to the myriad of social benefits to GESI infrastructure, women's participation and expertise in infrastructure projects can be advantageous from a business growth perspective. In the private sector, when women are in senior management positions and bring their distinct views, there is an association with higher business productivity and improved business performance. According to the InterAmerican Development Bank's (IDB's) research in Latin America, those companies (who participated in their study) showed that when women made up more than 30 percent of top management, the businesses fared noticeably better in terms of profitability and revenue.[43] Gender-diverse businesses are more lucrative than the national industry average, according to a McKinsey & Company survey of 1,000 businesses across 12 countries[44]. Furthermore, according to research by Catalyst, companies with more women in managerial roles had a 35 percent higher return on equity than companies without gender diversity[45].

In addition, there is tremendous potential for boosting economic growth by reducing gender inequalities. Generally, a country's GDP rises by 3 percent when 10 percent more girls enroll in school[46]. According to S&P Global, "increasing women's labor force participation could add hundreds of billions of dollars to the global economy—and trillions of dollars to equity markets." In the United States for example, "a modest increase in women in the workforce could add $511 billion to GDP over the next ten years. Similar increases are possible in most developed economies.[47]" The White House National Strategy on Gender Equity and Equality, released in October 2021 notes, "estimates show that closing gender gaps in the workforce would add

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[41] 1 World Connected. 2016. "Partnering for Change through Community Networks: The Wireless for Communities Project." https://1worldconnected.org/post/asia_unlicensedwisp_digitalskills_gender_wirelessforcommunitiesindia/

[42] ADB. 2019. "Gender in Infrastructure Lessons from Central and West Asia". https://www.adb.org/publications/gender-infrastructure-central-west-asia

[43] Walziers, Benedicte and Olga Morales. 2020. "How to Integrate a Gender Approach in the Infrastructure Sector?" https://internationalwim.org/wp-content/uploads/2021/06/How-to-Integrate-a-Gender-Approach-in-the-Infrastructure-Sector-Infrastructure-for-Development-Special-Number-No.-2.pdf.

[44] McKinsey & Company. 2018. "Still looking for room at the top: Ten years of research on women in the workplace". https://www.mckinsey.com/featured-insights/gender-equality/still- looking-for-room-at-the-top-ten-years-of-research-on-women-in- the-workplace.

[45] USAID. 2021. "Developing a Business Case for Gender Equality". https://www.usaid.gov/engendering-industries/gender-equality-guides/business-case.

[46] USAID. 2015. "Why Invest in Women?" https://www.usaid.gov/infographics/50th/why-invest- in-women.

[47] Bovino, et al. 2019. "Women at Work: The Key to Global Growth" https://www.spglobal.com/en/research-insights/featured/special-editorial/women-at-work-the-key-to-global-growth.

between $12 and $28 trillion in global GDP over a decade and addressing the gendered economic effects of the COVID-19 pandemic alone would generate up to $13 trillion in global GDP by 2030." The evidence is clear, "advancing gender equity and equality is, therefore, both a moral imperative and a strategic one; its pursuit drives the growth, development, and security of communities, nations, and the global economy. To build back better, everyone—regardless of their gender or gender identity—must have the opportunity to realize their full potential[48]." This strategy is the first-ever U.S. national gender strategy, produced by the White House Gender Policy Council, which will guide its implementation. In support of this strategy, in December 2022, Vice President Kamala Harris unveiled new promises to increase women's economic involvement in Africa at the U.S.-Africa Leaders' Summit, including the revival of the African Women's Entrepreneurship Program and the African Women's Trade and Investment Project. In January 2023, Secretary of State Antony Blinken launched the first-ever U.S. Strategy on Global Women's Economic Security, which has the goal of "creating a world in which all women and girls everywhere can contribute to and benefit from economic growth and global prosperity."

Financiers can catalyze positive change in GESI infrastructure investments by incorporating GESI considerations and targets in their financing terms offered to project developers. The 2X initiative, launched at the G7 Summit 2018, is a commitment to inspire development finance institutions (DFIs), international finance institutions (IFIs), and the broader private sector to invest in the world's women; it is also an example of setting the industry standard for gender-lens investing amongst financiers. Some of the criteria of the businesses that qualify under the 2X initiative include those that are founded by or have majority ownership by a woman, or 30 percent of women in senior leadership or the board, or a business that supplies products or services that disproportionately support women, In addition to the U.S. Development Finance Corporation, other global DFIs such as the German Development Finance Institution (DEG), The British International Investment (BII), and Proparco (French DFI), are making investments incorporating principles of the 2X initiative. Many infrastructure investors may still need GESI considerations at the forefront of proposed business models. The breadth of influence and degree of gender awareness varies depending on how deeply investors and lenders participate in the infrastructure project cycle and whether their engagement is direct or indirect. Due to their late 'entry' into a project and focus on the project's financing, many investors and lenders, including some commercial banks and institutional investors, play a relatively small role in project development. In other cases, financiers and investors, such as project developers and multilateral development banks (MDBs)/DFIs, who enter during the midstream period may take a more active role in project evaluation, development, procurement, structuring, and execution. Financiers' involvement throughout the project life cycle presents another opportunity for which the GESI considerations of a project could be assessed and improved. As illustrated in the box, incorporating GESI into business models can lead to better results across the company[49], which could lead to improved economic outcomes of a project for all project stakeholders, including for financiers.

[48] The White House. 2021. "National Strategy on Gender Equity and Equality."

[49] USAID. "Engendering Industries Guide Business Case". https://www.usaid.gov/engendering-industries/business-case

THE GLOBAL BUSINESS CASE FOR GENDER EQUALITY: Gender equality in work benefits everyone. Equal representation of men and women in the workforce generates significant returns on investment and is linked to:

- **Better organizational performance and profitability.** Profits are 47% greater for businesses in the top 25% of male-dominated industries with the most gender-diverse senior leadership teams.
- **Greater economic expansion and productivity.** Women's exclusion from the labor market results in unproductive economies, uneven growth, and lost possibilities for advancement. According to McKinsey, attaining gender parity in the workforce may boost the global economy by up to $12 trillion.
- **Resilient national economies and improved workplaces.** When there is a crisis or market instability, companies with gender-diverse boards do better than those without any women. Companies with more female employees are better able to attract and keep top talent, which helps them become more adaptable.
- **Improved capability of organizations to bring in talent and retain personnel.** Strongly gender inclusive organizations had lower staff turnover and absenteeism rates and higher employee satisfaction.
- **Results for sustainable development.** According to studies, financially independent women are more inclined to spend their money on the family's education, health, clothes, and nutrition. As a result, sustainable development benefits are produced.
- **Fosters Innovation. When women are included in management teams and decision making in companies showed** a 59.1% rise in creativity, invention, and openness as well as a 37.9% improvement in consumer demand assessment are all results of inclusive company cultures.

4. What Gender Equality and Social Inclusion in Infrastructure Can and Can't Do

Inclusive infrastructure is not a fix-all for gender equality or women's empowerment. Greater social power structures, norms, and a country's legal and regulatory system affect whether women and men, girls and boys, can benefit equally from infrastructure facilities and services. Changing these systemic issues (both cultural and civic) can take generations to alter. However, inclusive infrastructure can mitigate gender inequalities and assist with access, improved design, and use, and this in and of itself can provide links to improved employment, transportation, energy, telecommunication, and agriculture supply chain and systems. And this presents a chance to change gender norms and subvert power structures.

Many government actors are aware that equally represented female and male views are important when choosing which technological solution to implement or which infrastructure to build, and this can result in better outcomes for end users. In addition, infrastructure providers in both the private and government sectors are cognizant of the need to increase the proportion of women in the workforce, the number of goods and services they purchase from women-owned companies and improve the gender balance on their boards and target women customers. However, this isn't always part of targeted strategies, budgets, or staffing in planned infrastructure projects. Although there are several opportunities to do so during the infrastructure development process, altering institutions and norms is complicated. Better outcomes for end users are supported by promoting the fair presence of both female and male voices when deciding which infrastructure to create or what technical solution to select. The danger of inadequate or absent consideration of gender-based inequalities in infrastructure design may not only prevent women from participating in and benefiting from infrastructure projects but, moreover, exacerbate their already disadvantaged social situations. Gender concerns must be considered to reach women and all recipients intended to benefit from the investment.

5. Organizations Working in Inclusive Infrastructure

The space for inclusive infrastructure continues to grow and evolve. This includes global entities such as organizations like the World Bank, IDB, and OECD, along with donor entities like the AfDB, MCC, and USAID, and governments around the world that are investing in GESI solutions, protocols, and policies. The United Nations, their Sustainable Development Agenda 2030, and the Sustainable Development Goal 9 (SDG9) focused on building resilient infrastructure, promoting sustainable industrialization, and fostering innovation. Because infrastructure systems are intricately linked and have cross-cutting significance to all of the SDGs, it considers the relationships between various infrastructure industries, project phases, locations, and sustainability-related factors (i.e., environmental, social, and economic), in addition to SDG5, which is focused on gender equality. It also considers institutions and governance frameworks that support multidisciplinary collaboration and coordination at various policy levels (sub-national, national, and international). More companies, particularly large multinational corporations, have corporate social responsibility statements that include GESI protocols and commitments. In addition, the number of PPPs that commit to inclusive infrastructure investments and outcomes is growing globally. Examples of these are briefly illustrated in the table below:

Table 2: Examples of Inclusive Infrastructure Initiatives

SAMPLE ENTITIES	EXAMPLE OF INCLUSIVE INFRASTRUCTURE
U.S. Department of Commerce (DOC)	The Equity Action Plan: DOC Diversity, Equity, Inclusion, and Accessibility Council is committed to implementing Executive Order 14035 and has developed the DOC Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan 2022-2023; gender-focused programming through Women Empowered Leave Legacies through Trade and Investment (WELLTI);[50] the Women's Global Trade Empowerment program (the International Trade Administration's premiere resource for women entrepreneurs who want to grow their businesses into new markets); and the recent announcement of nearly $100 million through the Minority Business Development Agency to expand opportunities to underserved entrepreneurs.
U.S. International Development Finance Corporation (DFC)	Supports the White House's National Strategy on Gender Equity and Equality in that it is using this as its guide to further its efforts to support gender in low and middle-income countries. DFC also makes investments aligned with the 2X Challenge, which was launched at the G7 Summit in 2018 to inspire DFIs and the private sector to invest in women. DFC has invested $13.5 billion in projects owned or led by women, or in products or services that empower women.
Export-Import Bank of U.S. (EXIM)	A "Women in Business" subcommittee of the agency's Advisory Committee provides ways EXIM can reach more women and meet equity goals set by the agency's strategy; EXIM follows the environmental and social guidelines set forth by IFC performance standards and the EHS Guidelines of the World Bank Group.

[50] WELLTI. 2023. "WELLTI Resource Library". https://www.trade.gov/women-empowered-leave-legacies-through-trade-and-investment

Partnership for Global Infrastructure Investment (PGII)	A gender working group was established under PGII and a gender equality action plan working document is being developed in support of priorities of the Biden-Harris Administration's National Strategy on Gender Equity and Equality, pursuant to Executive Order 14020, and U.S. Strategy on Global Women's Economic Security; Advances gender-specific domestic trade and investment outreach, including hosting trade missions and reverse trade missions to promote U.S. exports and engage industry in PGII.
World Bank	As a large global organization, the World Bank has and continues to support GESI through its programs, partnerships, strategies, and documents. The World Bank has a plethora of documents, lessons learned, statistics, strategies, and diverse partnerships mandated to support GESI. The World Bank's 2016-2023 Gender strategy, which includes the IFC, includes four major objectives: 1) Improving human endowments, including health, education, and social protection 2) Removing constraints for more and better jobs 3) Removing barriers to women's ownership and control over assets 4) Enhancing women's voice and agency and engaging men and boys In addition, the Gender Equality and Infrastructure Primer highlights specific gender and infrastructure issues.
International Finance Corporation (IFC)	The IFC has initiatives to improve gender equality in Corporate Leadership; Disruptive Technologies; Employment; Entrepreneurship; Finance; and Insurance. As an example, the IFC's Infrastructure and Natural Resource Gender Inclusion Team applies the project life-cycle approach to improve GESI inclusion in its investments and programs and has published various documents including: - Best Practices for Incorporating Gender Equality in Infrastructure; - Integrating Gender in Transport Operations.
MCC	MCC requires social and gender assessment personnel within their Department of Compact Operations and core team in partner countries. MCC's Gender Policy, first adopted in 2006 and recently updated in August 2022, requires MCC and its partner countries to consider its Gender Integration Guidelines with its strategies at each step of the program cycle. MCC applies gender analyses to inform Compact programming; Uses a social and gender integration roadmap to identify milestones and steps; Invests to reduce barriers to women's economic advancement to leverage policies and institutional reform. Three of the 20 indicators on the MCC country evaluation scorecard relate to gender.

Inter-American Development Bank (IDB)	The IDB Group Gender and Diversity Action Plan 2022-2025 includes promoting female leadership in business, ensuring better access to employment for women at all levels, persuading companies to include initiatives led by women in their value chains, and, thirdly, raising awareness of women's influence in specific markets to ensure that a specific product offer exists.
African Development Bank (AfDB)	A commitment to gender mainstreaming throughout all activities/projects across Africa; Gender Strategy (2021-2025) lays out AfDB's mission, goals, and milestones; Pillar 3 of this Gender Strategy focused on inclusive infrastructure. AfDB has several initiatives that offer targeted investment for women entrepreneurs including the Affirmative Finance Action for Women initiative, the Africa Digital Financial Inclusion Facility financing vehicle, and the African Women in Business Initiative.
USAID	USAID is committed to GESI through policy documents and programmatic requirements including USAID's 2022 Gender Equality and Women's Empowerment Policy; ADS Chapter 205: Integrating Gender Equality and Female Empowerment in USAID's Program Cycle; Biden's Executive Order on Establishment of the White House Gender Policy Council; gender and COVID commitments and resources; and the Women Prosper initiative, among others.

At the 2021 G7 Summit, President Biden and G7 leaders declared their intention to create a values-driven, high-impact, and transparent infrastructure partnership to meet the enormous infrastructure needs of LMICs and to advance the economic and national security goals of the United States and its allies. As such, the PGII was launched whose goals include mobilizing funds to deliver high-quality, sustainable infrastructure that improves people's lives, strengthening and diversifying supply chains, opening up new opportunities for American workers and businesses, and strengthening national security. The U.S. plans to raise $200 billion for PGII through grants, federal finance, and private sector investments and mobilize $600 billion in investments in global infrastructure through G7 partners by 2027[51]. Gender is a specific pillar of the PGII and is envisioned to be cross-cutting as well (e.g., all PGII projects should seek, where possible, to be gender-aligned). Other U.S. government agencies, such as the DFC, have commitments that include applying a gender lens to every project to ensure women benefit; the U.S. Department of Commerce has commitments to fair trade and inclusive economies investments, its Equity Action Plan and its Diversity, Equity, Inclusion and Accessibility Council; and finally, EXIM has created "Women in Business" as a subcommittee of the agency's Advisory Committee to reach more women and better consider equity goals set by the agency's strategy. This is in addition to environmental and social guidelines set forth by multilateral organizations such as IFC's performance standards and the Environmental, Health, and Safety (EHS) Guidelines of the World Bank Group. These are just a few examples of entities working in inclusive infrastructure from various vantage points. For a more complete list, see **Annex 12.1.**

[51] The White House. "Fact Sheet: President Biden and G7 Leaders Formally Launch the Partnership for Global Infrastructure and Investment." 2022. https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/26/fact-sheet-president-biden-and-g7-leaders-formally-launch-the-partnership-for-global-infrastructure-and-investment/.

6. Barriers to Inclusive Infrastructure

The following section outlines common barriers to inclusive infrastructure development across sectors and geographies. Barriers should be reviewed comprehensively, as a set of challenges that donors, investors, and project managers, among others, need to address in order to improve inclusive infrastructure. Understanding and acknowledging the diverse issues that impede women's and other underrepresented groups' advancement, coupled with innovative and transformative mechanisms that empower them in a context-specific manner, can foster catalytic and sustainable inclusive infrastructure design and implementation that benefits everyone.

Weak Gender Knowledge and Capacity

- A weak understanding of gender-specific issues and their connections to infrastructure and data to inform decisions is common,[52] often resulting from the lack of a gender emphasis throughout the planning stage for both public and private sectors. This is true for diverse stakeholders and may result in 'gender' as an 'add-on' consideration after the project planning resulting in gender-blind infrastructure development.
- Gender considerations are not properly recognized as a necessary and essential element of sustainable infrastructure development by policymakers and business leaders[53].

Financier Challenges:

- **Absence of financier standards:** When vetting investments for their potential gendered impact, the lack of universal standards often leads to a reliance on varying national laws and policies to provide frameworks for environmental and social compliance, which may be insufficient in addressing more holistic GESI requirements. Additionally, there is a wide spectrum amongst investors on their level of focus on GESI-related considerations when making an investment.
- **Lack of reliable data:** Many financiers may be reliant on external parties assessing GESI-related risks and may be less conversant with the nexus of gender and infrastructure. Projects may not have access to sufficient or relevant data that shows how GESI inclusion may enhance the financial success of investments.
- **Cultural obstacles:** While some investors may have GESI goals, policies, or action plans, the ability to implement them locally is often constrained by cultural obstacles. As an example, in certain LMICs, investors may be confronted with a patriarchal social structure where women are expected to take a larger role in the home and men a larger role in public based on gender inequity.
- **Lack of female decision-makers:** Women are notably underrepresented among private equity and venture capital firms' investment decision-makers and in the leadership of the businesses that receive these investments. Only 10 percent of senior roles are held by women globally in private equity and venture capital companies, and less than 3 percent of venture capital was invested in women-led businesses in 2017[54]. Only 15 percent of senior investment teams have a balanced gender makeup, while

[52] OECD, 2021.

[53] UNOPS. 2020. "Infrastructure for Gender Equality." https://www.oecd.org/gov/infrastructure-governance/gender-in-infrastructure/OECD-Selected-stocktaking-of-good-practices-for-inclusion-of-women-in-infrastructure.pdf

[54] Chandrashekar, Shuti and Heather Kipnis. 2019. "Moving Toward Gender Balance in Private Equity Markets". https://www.ifc.org/wps/wcm/connect/79e641c9-824f-4bd8-9f1c00579862fed3/Moving+Toward+Gender+Balance+Final.pdf?MOD=AJPERES

over 70 percent are entirely male. As a result, most capital allocation and investment choices are being made by male-dominated teams[55]. Moreover, a correlation exists between the success of gender-balanced investment teams and greater returns. When fund size is considered, the association between gender balance and performance holds across investment strategies and geographies, as well as when controlling for fund size[56].

Country Laws, Policies, and Norms

- **Perceptions of gender-appropriate roles:** These are influenced by societal and cultural conventions that impact people's basic decisions resulting in women being underrepresented in careers and opportunities deemed appropriate for males, such as in renewable energy, transportation, or ICT sectors.
- **Formalizing social norms:** Country laws and policies may unintentionally formalize societal norms that are firmly based on archaic or patriarchal gender stereotypes, therefore restricting the autonomy of women and other underrepresented groups in access to and use of infrastructure. For instance, resettlements brought on by infrastructure projects disproportionately harm women. This is because women in rural areas typically rely on their land as a source of income, however, land ownership is frequently registered in men's names, preventing women from having a legal claim to resettlement payments. Resettlement also involves displacement and severing community networks that are essential for vulnerable women in rural areas, migrants, or households headed by women. Despite the implementation of infrastructure initiatives to promote gender equality, new or existing regulations may make it difficult for women to fully benefit from public investment.

Government Challenges

- **Lack of a strategic vision for gender-responsive infrastructure at the country level:** Governments often lack a strategic vision that prioritizes gender integration into their infrastructure investment process, partly due to a lack of capacity and buy-in. In OECD's 2020 Survey on the Governance of Infrastructure, only 29 percent of the OECD countries questioned, claimed to have specific alignments between long-term national infrastructure plans and gender mainstreaming policies[57].
- **Insufficient coordination between government entities and leveraging investments:** Poor coordination among government stakeholders and levels exacerbates geographical differences in access to infrastructure, which worsens gender inequality among the most disadvantaged women. This is significant as stand-alone initiatives might not focus on the most urgent infrastructure requirements of women and men from various backgrounds. As a result, various programs and projects meant to address gender issues will be implemented without any connection to or mutual support of other initiatives, leading to a disjointed approach to gender-responsive infrastructure expenditures[58].

[55] Ibid.
[56] Ibid.
[57] Serrano, Loren C. et al. 2021.
[58] Ibid.

- **Budgets lack a gendered framework.** Gender budgeting[59], when properly implemented, can increase gender equality, and promote inclusive infrastructure growth. The institutional capabilities, skill sets, and organizational cultures found in central budget authorities do not always correspond to changing societal requirements, such as gender equality[60]. Despite commitments to address GESI on paper, allotted budgets are far below where they should be, with a focus on 'urgent' needs rather than more costly gender analysis to understand and address complex issues. Infrastructure that is gender-responsive is frequently thought to be time-consuming and expensive. However, the World Health Organization (WHO) and the World Bank estimated that for new projects, complete compliance with accessibility requirements (one consideration of inclusion) only requires around 1 percent of the entire cost[61]. While it does take more time to ensure the 'right' stakeholders are included in data gathering and analysis, the costs of not including this are far more costly to society than including these 'extra' steps and costs at the project design and assessment phases.

Technical Capacity Constraints and Challenges in Development Practice

- **Corruption in infrastructure:** Although corruption has detrimental effects across industries, public infrastructure corruption is particularly harmful to low-income nations. The GDP proportion of infrastructure is larger, and institutional frameworks might not be as solid. Construction, which comes after procurement, is estimated to lose up to 45 percent of construction expenditures to bribes for low-income countries[62]. Discussion of the linkages between GESI and corruption has gained momentum worldwide and, while there is still much to be learned about how countries can improve corruption outcomes, research by organizations such as the United Nations Office on Drugs and Crime (UNODC) is highlighting that women's leadership, gender equality, and inclusion are key to combating corrupt practices and advancing not only women's rights but the rights of all people[63].
- **Blueprint gender-neutral and fragmented approaches:** Because infrastructure development programs are commonly viewed as gender-neutral, they are often framed with blueprint approaches. Infrastructure responses need to address who will benefit and how, including understanding and addressing the specific barriers and appropriate context-specific responses, commonly identified through a gender analysis, which takes time and resources. This is often coupled with fragmented investments, poor coordination, and focus on short or immediate-term challenges over addressing long-term solutions for sustained impact.

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[59] Gender budgeting is a way for governments to promote gender equality through the budget process. It can be a particularly powerful tool to promote women labor market participation, which can have a great overall economic impact. (OECD, 2016)

[60] Downes, Ronnie & Scherie Nicol. 2020. "Designing and implementing gender budgeting – a path to action". https://www.oecd.org/gov/budgeting/designing-and-implementing-gender-budgeting-a-path-to-action.pdf.

[61] UNOPS & UN Women. 2019. "Guide on Integrating Gender Throughout Infrastructure Project Phases [...]". https://asiapacific.unwomen.org/en/digital-library/publications/2019/03/guides-on-integrating-gender-into-infrastructure-development

[62] Hawkesworth, Ian. 2020. "As countries sit on shaky foundations, tackling corruption is key." https://blogs.worldbank.org/governance/countries-sit-shaky-foundations-tackling-corruption-infrastructure-key

[63] UNODC. 2020. "Women as Agents of Change in the Fight Against Corruption." https://www.unodc.org/romena/uploads/documents/Publications/ENGLISH/WDO-UNODC_EN_WomenAgainstCorruption_Web-V5_25112021.pdf

- **Lack of female and underrepresented perspectives, voices, and inclusion:** The uneven or absent involvement of women as leaders in infrastructure decision-making and policy development hampers the inclusion of GESI priorities as required components of public investments. This includes the inclusion of policy makers, government leaders, beneficiaries, and stakeholders for planning, designing, and building infrastructure. As pointed out in OECD's working paper by Natalia Nolan-Flecha, sectors such as transport, telecommunications, finance, budget, and housing sectors contain fewer women decision-makers than in areas such as energy, public works, and territorial planning. One of the biggest obstacles to growing diversity in the public sector workforce is non-inclusive organizational cultures, unconscious prejudices, and a lack of inclusive leadership capabilities across all levels of public sector institutions[64].
- **Insufficient monitoring, evaluation, accountability, and learning:** Despite a rising body of guidance, there remains an insufficient number of cross-country and regional studies that explore why inclusive infrastructure is critical, what works in these approaches, and what deters governments and the private sector from prioritizing GESI. Various factors make assessing and evaluating the gender impacts of infrastructure work challenging. These include a lack of reliable sex-disaggregated data, a lack of qualitative analysis, and the absence of baselines and set targets against which to measure change. All infrastructure projects should involve some type of cost-benefit analysis that identifies beneficiaries and the magnitude of the benefits they will receive[65]. However, monitoring, evaluation, accountability, and learning should go further and take place throughout the project life cycle. By better understanding, the needs of women and other underrepresented groups, the aid community, governments, and partnerships with the private sector will be better able to decide how limited resources are distributed and devise targeted strategies for ensuring those disadvantaged groups are included equitably and inclusively.

7. Best Practices

Despite the plethora of challenges to more inclusive infrastructure development, gender-effective interventions in infrastructure best practices exist. These include adding women's names to land titles during infrastructure projects, using social mobilization to amplify women's voices, and incorporating women into assessments of infrastructure and product design (e.g., using "pregnant" or even female crash dummies to test car safety), requiring women to serve on infrastructure project committees, or ensuring a gender analysis and stakeholder consultations are done prior to program design. Generally, initiatives that engrain gender mainstreaming throughout the entire life cycle of a project and invest time and money into thoughtfully considering how they may close gender disparities tend to provide better gender equality results.

A World Bank review of 15 years of infrastructure investment tracked the use of gender methods in over 1,200 projects and found that consultation was the most frequently used gender method

[64] Nolan-Flecha, Natalia. 2019. "Next generation diversity and inclusion policies in the public service: Ensuring public services reflect the societies they serve". https://www.oecd-ilibrary.org/governance/next-generation-diversity-and-inclusion-policies-in-the-public-service_51691451-en

[65] UNOPS. 2020. "Gender Equality Advisory Services for Infrastructure Programs Gender Review". https://content.unops.org/publications/UNOPS-Infrastructure-for-Gender-Equality-and-the-Empowerment-of-women.pdf

(17 percent of projects), followed by targeted gender activities (13 percent of projects)[66]. A review of nine of ADB's infrastructure projects in 2019 found that interventions such as consultations with men and women stakeholders during the project's feasibility study were instrumental for designing a gender-inclusive project; empowering communities through training and engagement; training women in leadership positions to run and manage the infrastructure services (irrigation and water use, for example); along with understanding (through a gender analysis) the roles and responsibilities of women and men in communities—were all monumental in how projects were designed and implemented. Such benefits included reducing the amount of time and effort women spend on care responsibilities, improving the health of their families through the use of cleaner fuel, increasing their income through opportunities for work, improving their skills through education and training, and developing their leadership through participation in decision-making bodies.

There is still a long way to go in articulating and ensuring GESI in infrastructure projects are regularly included. For the private sector, there is a need to reinforce the business case so that the private sector investments, whether through direct investment or through a PPP, recognize the need to incorporate GESI considerations for an improved economic outcome. The following are examples of best practice trends and patterns for improving inclusive infrastructure. While not an exhaustive list, these represent common areas where development practitioners, donors, the aid community, governments and the private sector are moving towards more equitable inclusion of women and other underrepresented groups in infrastructure across sectors. Not all organizations follow all of these trends or do so consistently for all projects. These best practices can be further strengthened by systematically addressing the barriers cited above (**Section 7**) and can be applied to all infrastructure sub-sectors discussed in **Section 9.**

1. **Conduct a Gender Analysis.** Gender analysis enables the creation of interventions that pinpoint the unique requirements of men and women and present remedies for gender gaps and inequities, allowing for more effective use of resources[1]. This should ideally be done at the start of the project design to align findings and inclusivity requirements.
2. **Conduct Stakeholder Consultations.** To understand diverse and often conflicting needs, preferences, and challenges, it is essential to collaborate with all stakeholders to design, implement, monitor, and evaluate infrastructure projects. It is also critical to strengthen the capacity in different sectors (e.g., non-governmental and governmental organizations, including women's organizations) and at different levels (local, regional, and national) to bring perspectives and contributions to policy development, program management, and administration, human resource planning, service delivery, management information systems, and accountability for all infrastructure programs. This should ideally be done at the start of the project design to align findings to inclusivity requirements.
3. **Work with Governments to Incorporate a Strategic Vision of how Inclusive Infrastructure will be Integrated into National Development Outcomes.** Having a strategic vision for how to include GESI in all infrastructure investments that are updated annually coupled with a reliable road map is a critical first step toward creating gender-responsive infrastructure. A long-term and strategic vision for infrastructure can assist governments in establishing an appropriate institutional framework, implementing clear governance arrangements, defining needs and targets, setting standards for private sector

[66] A targeted gender activity refers to one that specifically targets women/girls or other marginalized groups that are meant to have improved outcomes/impacts.

tenders, coordinating across stakeholders, and developing reliable action plans[67]. Best practices also include a whole-of-government approach to gender-responsive investments, which enhances coordination across sectors and levels of government by ensuring that gender equality goals permeate all public operations instead of being seen as a separate or isolated issue.

4. **Adopt an Evidence-Based Approach.** Infrastructure development decisions should be founded on a solid comprehension of the distinct needs of women and men using data (qualitative and quantitative) that is analyzed. This can be done through government statistics and collaborative efforts with the commercial sector, academia, and civil society. A comprehensive needs assessment is the first step in setting goals, identifying trade-offs, and data gaps, and deciding how to solve them. The analysis should be based on socioeconomic data that is gender- and age-disaggregated and relates to the disparities in access to infrastructure between men and women, the different usage and preference patterns between men and women, as well as the quantifiable advantages and possible challenges that a specific infrastructure project poses to women and girls[68]. Regular data collection and sharing is an important first step in increasing gender diversity.
5. **Apply a Life-Cycle Approach.** Mainstreaming gender is not a singular activity or intervention but a dynamic and complex process that should be an integral component of project design, implementation, monitoring, evaluation, and learning. The use of a life-cycle perspective fosters investments that are efficient and effective in progressing gender equality and helps to ensure that women's and other underrepresented populations' needs are engrained at all stages of the investment and delivery process. A life-cycle perspective is considered a best practice for making public investments efficient and successful in advancing GESI.
    a. **Assessment and Analysis:** A gender analysis (GA) can serve as the foundation for effectively and systematically integrating gender throughout the project life cycle to ensure the project design is not based on incorrect assumptions and stereotypes, but on the real-life situations of women, men, girls, and boys in a particular context by identifying key constraints and prioritizing entry points to advance GESI objectives[69]. Stakeholder analyses can identify which stakeholders are at risk of exclusion or who are underserved by program activities. These analyses may be informed by disaggregated data (e.g., sex, income, age, location, occupation, expenditure profile, education, disability) and descriptive statistics that help to explain the status of men, women, girls, and boys in society.
    b. **Program Design:** Findings from the analyses should be applied across all areas in the project's design, including framing the project's goals and objectives, selecting interventions and approaches, and identifying any relevant measurement indicators. Even where no gender equality goal or objective is stated, the analyses will assist in identifying any general inclusion measurement indicators as applicable. The right approach is context specific and should evaluate the laws governing the country, the political and economic context, and dominant social and cultural norms.
    c. **Program Implementation:** Activities should guarantee all intended users may equally access infrastructure resources and services, equally engage in project

[67] OECD. 2020. "Recommendation on the Governance of Infrastructure". https://www.oecd.org/gov/infrastructure-governance/recommendation/

[68] Borgonovi, et al. 2018.

[69] OECD. 2004. "Why Gender Matters for Infrastructure".

activities and decision-making processes, and equally benefit from project capacity-building activities. From a GESI perspective, this means asking key questions like:

i. Who will plan how interventions will be implemented?
ii. Are partners competent in GESI methodologies?
iii. Does the program address barriers to increasing access?
iv. Have risks in implementation been addressed and how?
v. Is GESI integrated into the monitoring system and how?

d. **Program Monitoring, Evaluation, and Learning (MEL):** This is a process of regular collection and analysis of key data (qualitative and quantitative) to identify shifts and progress achieved. It ensures that project outputs and outcomes promote equal benefits for all, and gender inequality is not reinforced. Because GESI is multidimensional, it is impossible to create a universal set of indicators for all projects. A project should only measure what it will realistically change for evaluation purposes. MCC, for example, commonly applies a percentage increase in female employment in construction for its infrastructure programs[70].

6. **Train Women and other Underrepresented Groups to be Leaders and Managers.** Another strategy to encourage a more significant involvement of women in infrastructure management and governance is to identify obstacles that prevent women from participating in leadership roles in infrastructure sectors. This signifies improved outreach, training, and educational opportunities and helps ensure that female decision-makers are consulted and involved in programming.
7. **Enhance to Education.** Women must have access to the education and training required to take advantage of the job possibilities that innovation has brought to the industry. For instance, gender discrepancies are evident in some of the most innovative industries, such as remotely piloted aircraft systems (i.e., drones), and STEM industries. To overcome these issues, a comprehensive strategy that takes governance, terminology, and education into account is required.
8. **Train all Staff in Basic GESI Principles.** Basic training in GESI principles should be provided to all staff involved at any level in infrastructure. This includes how to mainstream gender equality in infrastructure projects and how to include gender concerns in tender specifications and contract implementation terms.
9. **Apply an Intersectional Approach[71].** This signifies understanding the intersection of gender with other inequalities (e.g., sexuality, gender identity, ethnicity, religion, immigration status, disability, or poverty) that form the complex and dynamic drivers that hinder or enhance gender equality. Using an intersectional lens of any one of these inequalities, such as disability, to examine how infrastructure investment may affect equitable development is not a question of either/or but rather applies the critical interplay between, these various dimensions and how inequities are manifested.
10. **Best Practices for Financiers**
    a) Project sponsors developing infrastructure projects seeking external financing should address how they will ensure GESI considerations are met. This includes conducting gender analysis, quantifying who will benefit, and ensuring a gendered mainstreaming approach to terms and conditions of winning a bid.
    b) Raise awareness, establish norms, and provide incentives for gender lens investing and gender equality for MDBs/DFIs to take the lead. MDBs/DFIs can help

[70] Conversation with MCC, January 11th, 2023

[71] 'Intersectional' refers to the ways in which people's dynamic social identities overlap and intensify experiences of discrimination.

governments expand their legal and policy frameworks, develop their expertise in the intersection of infrastructure and gender equality, and create gender action plans that make clear the strategy, techniques, and funding needs for particular projects.

c) Lenders and investors should promote gender equality in their company policies and strategies concerning internal human resources procedures, partnership agreements, investment decision procedures, and financing terms. Investors can incorporate GESI considerations in their investment mandates, and also look to updating internal policies to ensure that their own hiring procedures, communications strategy, and organizational structure are optimized to ensure institutional processes prioritize GESI considerations.

d) In order to support gender-informed decision-making and ensure the consistent application of policies, strategies, and action plans, investors and lenders should create tools and internal resources. This includes taking gender aspects into account when screening and monitoring investments, concentrating on both gendered risk (negative screening) and opportunities to advance gender equality (positive screening)[72].

11. **Highlight the Business Case.** Promote the business case for inclusive infrastructure and development to show how businesses can not only do good but increase their profits by ensuring facilities and services are gender inclusive.

8. Sub-Sector Specific Challenges and Best Practices

The following section presents sub-sector-specific challenges and best practices in the agriculture, healthcare, ICT, transportation, and energy sectors. Across all sub-sectors, larger socio-cultural and political-economic frameworks are intrinsically related to gender inequality and social exclusion. Additionally, each infrastructure sub-sector is inherently linked and reliant on other infrastructure sub-sectors, acting as a system of systems. Best practices indicate that when well-planned, strategically placed, and economically designed systems consider gender equality and social inclusion, societal improvements are demonstrated that can increase system sustainability and resilience.

8.1 Agriculture

Inclusive agriculture involves and depends on the adequacy of multiple infrastructure sectors, especially those that aid in agricultural productivity. Available literature focuses mainly on inclusivity within agriculture value chains, including considerations that ensure women and other underrepresented groups benefit from and have access to improved facilities (storage and processing), technologies, and market opportunities (roads, ICT, market facilities) relevant to their current or upgraded roles and responsibilities in production systems, processing, and marketing. As the following case study shows[73], investing in infrastructure that includes all users and ensures a contextual understanding is critical for GESI.

[72] World Bank Group. 2022. "Preliminary Findings Report on Gender-Inclusive Approaches in Private Participation in Infrastructure." http://documents.worldbank.org/curated/en /099520111082218500/ IDU0491c55960383c 045880a2440291443992454.

[73] Sharma, Jaya. 2016. Inclusive Irrigation is Transforming Nepal's Rural Areas. Asian Development Blog. https://blogs.adb.org/blog/inclusiveirrigation-transforming-nepal-s-rural-areas

Changing Land Tenure and Inheritance Rights in Nepal: In Nepal, participation in water users' associations (WUAs) is required to receive water from irrigation systems. However, only those who have a land ownership certificate are eligible to join. Usually, it is men who hold these positions. Although equal inheritance rights are addressed in Nepal's new constitution, women continue to be denied equal tenancy rights to family land. In the male dominated WUAs, a woman occasionally has the ability to stand in for a man but has limited power to influence choices. Tenant farmers are even worse off because they aren't represented in the WUAs and hence don't have any voice in any water management choices. Moreover, small farmers generally have very little opportunity to make decisions, particularly those from ethnic minorities, the Dalit caste, and women.

To address these challenges, ADB invested in the Community Managed Irrigation Agriculture Sector Project to rehabilitate and improve 155 farmer-managed irrigation systems in the eastern and central regions of Nepal. Each irrigation scheme developed and executed a gender equity and social inclusion (GESI) action plan as part of the project to increase the involvement of women and socially disadvantaged groups in WUAs. The Khutti Madyan project's GESI action plan stipulated that the executive committee of the water users' association must have 33% female participation and must reflect the ethnicity and caste of the community it serves. In order to guarantee that every home in the region was represented, it also accepted either the husband or the wife as an eligible member of the water users' organization. WUAs were obligated to ensure that everyone's needs were met, regardless of their farms location along the irrigation system. Now, Kimaya's WUA is made up of 64% of those from the Thakuri community, 18% Mahatos, 9% Yadavs, and 9% Dalits, much more representative of the makeup of the community.

Investment in agricultural infrastructure has primarily gone towards irrigation, transportation, electricity, and agricultural markets. These investments are meant to lower farmers' expenses, accelerate output, and create more opportunities in the agricultural sector while stimulating growth. While men and women both interact with various value chains, their roles and responsibilities follow different patterns. Acknowledging and understanding these differences is important for developing gender-appropriate infrastructure. Women confront mobility issues including unreliable transportation, higher risk to security, and lack of cash for transportation—all making them more reliant on traders or local markets that buy their products and often at low prices. Further, women are often bound by gender-restrictive norms that may not allow them to interact with men and businesspeople, particularly in public spaces. Men, on the other hand, are more likely to own bicycles, have greater access to cash for transportation, and have more freedom to negotiate in public. When thinking about ways to improve farmers' access to markets and connecting along the value chain, it would be important to consider transportation mechanisms that could help women reduce their overall risk and increase improved access, such as shared transportation or pooling resources to buy a vehicle for women farmers.

Information Avenues and Access to Support Services. Overall, women have less access to information, including what constitutes quality, pricing along value chains, negotiation skills, and technologies that reduce their time burden but are appropriate for their size, scale, and strength. Their access to support services is limited due to the heavy burden on their time, insufficient linkages with farming support mechanisms, and blanketing of non-gender-specific information and media outlets. An agricultural study in Bangladesh found that men received their information from agricultural service providers, government extension workers, field days, traditional forecasters, television, newspapers, and school, whereas women obtained most of their information from the radio and neighbors, followed by traditional forecasters. Infrastructure planning must address how women and men can effectively receive and engage with information.

Control of Income and Money for Inputs. Just because a woman may grow an agriculture product, does not mean that she controls the income derived from sales. Rural women's decision-making power differs across cultures, countries, and households. By understanding these

dynamics, researchers and technology innovators are better positioned to develop infrastructure that increases women's returns from agriculture and makes the necessary connections to other sub-sector infrastructures like digital deposits and mobile banking services.

Land Tenure: Compared to men, women's land rights are less secure and often layered with social dynamics, legal barriers, and a lack of voice in decision-making. Lack of land tenure affects women's credit and access to extension services, which can result in exclusion from agricultural programming. Given that women are heavily involved in on-farm labor and are typically the major producers of food for household consumption, these constraints also limit total household agricultural output and food security.

Development of Appropriate Tools and Technologies: Identifying technologies and practices that are inexpensive, do not require outlays of large lump sums, and are accessible to women and men can aid in appropriate infrastructure facilities and their uptake. Some ideas for appropriate technologies include:

1. improving drying and storage practices and equipment and technologies at the household, community, and larger levels that meet the needs of female farmers,
2. investing in shared storage infrastructure facilities that can aggregate products to help farmers sell to processors to receive improved prices and reduce individual risk, and
3. investing in sustainable cold chain methods that can be adapted to off-grid communities to maintain higher yields and reduce post-harvest losses brought on by a shortage of storage space. Post-harvest losses would decrease, and farmer earnings would rise by expanding cold chain systems[74].

Affordable processing technologies are important to cash poor farmers, particularly women who have less cash on hand. In the development of new infrastructure technologies and services, women should be involved both as clients and providers of innovation because of their different roles along agricultural value chains. The case study below[75] shows the power improved storing and drying facilities and inclusive access and use can have on smallholder farmers.

[74] Opey, Abednego Brandy, et al. 2022. "How to support inclusive climate-smart agricultural growth in Africa". https://blogs.worldbank.org/youth-transforming-africa/how-support-inclusive-climate-smart-agricultural-growth-africa.

[75] AFEX. "About us" https://africaexchange.com/about.

Building an Agricultural Warehousing and Exchange Market: Africa Exchange Holdings
The African Exchange Holding (AFEX) is a regional commodities exchange. AFEX oversees a storage facility and exchange in Nigeria where farmers may profit from the highest commodity prices while preserving the value of their product. The system aspires to create a network of warehouses and a steady supply from farmers - challenging due to fragmented markets and informal and small-scale agricultural output. Particularly female farmers may lack the necessary information, resources, and access to markets and warehouses. The restricted freedom of movement for women in northern Nigeria is another issue.

The Propcom Mai-Karfi initiative collaborated with AFEX and Palladium to increase access to storage for the nation's small-scale farmers, especially farmer cooperatives for soy and maize managed by women. The partners employed two alternative strategies to achieve this: 1) the alliance helped cooperatives organize, formalize, and scale business transactions with AFEX to show their capacity to assist local communities. This resulted in farmers access to different markets with higher prices and avoidance of expenses of frequent, small-scale transactions; and 2) AFEX prefinanced the cooperatives' payment for the farmers' products they purchased.

More than 45,000 farmers have joined AFEX's storage and exchange system since its initiation. AFEX committed efforts to educating female farmers about the program through cooperatives and showed that the average profit margin for farmers who used AFEX services +2%. The greater access to commodities markets that were previously out of reach due to geography and social mores helped women in particular. And due to having access to enormous quantities of goods for sale at their warehouses, AFEX also profited. Targeting individual farmers became less expensive by working with the cooperatives, and access to isolated rural communities was made possible.

Irrigation and Water Source Access. Not all farmers are able to access irrigation systems. Even when farms are close to a water source, farmers often lack the means to pump water to their farms and therefore rely on boreholes or must carry water over large distances to irrigate their crops. For women, this can pose additional physical challenges of carrying water and strains on their already limited time resources. Differences in access are caused by top-down design; limited capacity to build and maintain an equitable irrigation system; lack of a clear ownership structure and sustainable financial models; and poor market access for high-value irrigated produce, limiting farmer interest in investing in these crops. The following case study[76] highlights access is not universal even when a water source is near and obvious.

Gender differences in water access in the Upper East Region of Ghana. While men are able to dig deep into riverbeds to access water to irrigate small plots near the river, women do not have the same access to land near the river nor the labor needed to dig the wells. While some women use their own labor to irrigate their husband's plots using buckets or jerrycans, other women cannot. When it comes to using and profiting from irrigation infrastructure, women confront unique difficulties and uneven possibilities. Those responsible for carrying out development projects need to consider approaches that take into account the distinctions between the agricultural roles played by men and women as well as context-appropriate ways to reach women farmers in order to address these differences and ensure agriculture infrastructure projects benefit both men and

Best Practices in Gender-Inclusive Agriculture Infrastructure

1. **Irrigation and Water Infrastructure Design**

- Ensure communities, stakeholders, and investors have a participatory role in irrigation system design and management. Hold stakeholder meetings to identify roles and responsibilities for water management and use.

[76] Bryan, Elizabeth and Hagar El Didi. 2019. "Considering gender in irrigation: Meeting the challenges women farmers face in technology adoption". https://www.ifpri.org/blog/considering-gender-irrigation-meeting-challenges-women-farmers-face-technology-adoption

- Design irrigation schemes with farmers and community members (including women and youth) that include a clear exit strategy and allow for the transfer of the technical, organizational, and capacity skill sets needed to manage and maintain the system.
- Ensure expectations of long-term governance and maintenance of the irrigation system.
- Incorporate water use mapping at the design stage to identify existing water resources, infrastructure, uses and users, and institutional arrangements for construction, operation, and maintenance.

The following case study highlights the importance of simple technologies that can add value and economic potential to connect farmers to more profitable markets. [77]

First mile cold storage solutions for agriculture value chains. InspiraFarms has been creating market-leading first-mile cold storage solutions for agricultural value chains in sub-Saharan Africa with the help of the Shell Foundation and the UK's Foreign, Commonwealth and Development Office (FCDO) through their CASEE initiative. This initiative adds to the research on inclusion and how to accelerate the participation and impact of smallholder farmers within value chains. This case study showed that the fledgling but expanding first-mile cooling industry can offer off-takers the confidence to operate more remotely and buy products from a larger variety of smallholder growers due to cold storage's capacity to boost the quantity and value of fresh produce sourced from smallholders, lower logistical expenses, and enable producers and distributors to access higher value export markets, all of which increase the commercial viability of this infrastructure investment. By maximizing the quantity and quality of fresh product sold built farm's negotiating position and increased smallholders' earnings. Although the stakeholders interviewed agreed that having access to cold storage gives smallholders and agribusinesses a competitive edge, the research also showed that pricing and accessibility were significant obstacles that remained unsolved - highlighting the importance of access to funding as a significant barrier for smallholders' access to and use of cold storage facilities.

2. **Market-Led Adjustments.**

- Facilitate market-led adjustments to market centers to make them functional aggregation, post-harvest packaging/processing, and storage centers.
- Conduct an assessment to identify private actors to manage the centers as well as appropriate partnership models.
- Explicitly incorporate gender equity goals (and where indicated, youth engagement) in the design of value chain programming.

3. **Support the Expansion and Improvement of Rural Road Networks.**

- Rural road development and upkeep increase farmers' capacity to sell their goods, fostering more stable circumstances for agricultural trade as well as other social and economic prospects. The general public, which depends on the commodities and services that these communities provide, also benefits from maintaining and enhancing rural infrastructure.

4. **Investors.**

- Require investors to submit business plans for review that include their expected relationship with the community, smallholder farmers, women, and other marginalized groups.

5. **Facilitate PPPs.**

- In addition to these, there is room for PPPs to assist in the development of infrastructure, such as electricity, information and transportation infrastructure are important for agriculture as well.
- Ensure PPPs meet the needs of both women and men in infrastructure facility design and services by consulting with stakeholders and using the information obtained.

[77] Ciubotaru, Marcela. 2021. "Inclusive sustainable business practices in supporting dairy supply chains." https://www.emerald.com/insight/content/doi/10.1108/EJMS-04-2021-0031/full/pdf?title=inclusive-sustainable-business-practices-in-supporting-dairy-supply-chains

- Conduct an affordability analysis specific to each gender.
- Incorporate gender considerations into the output specifications for the private sector.

8.2 Information and Communication Technology

According to a 2021 International Telecommunication Union (ITU) publication, 95 percent of the world's population now resides within the range of a mobile broadband network with 4.9 billion internet users worldwide. Nearly 800 million individuals have reportedly joined the internet since 2019, with usage rates in Africa and the Asia-Pacific region jumping by 23 and 24 percent, respectively during the COVID-19 pandemic. In Asia, the Pacific, and the UN-designated Least Developed Countries, internet penetration climbed by an average of more than 20 percent[78]. However, there are large discrepancies between geographies, users who are male versus female, rural versus urban, economic status, youth versus elderly, and those most marginalized populations, among others. As in other infrastructure sectors, potential does not necessarily equate with opportunity.

In rural Africa, for example, close to 30 percent of the population remains without access to mobile broadband. In South Asia and Africa, these proportions are 70 percent and 34 percent, respectively[79]. In all regions of the world, more men than women are using the Internet. The gender gap is larger in developing countries, especially in what is considered least developed, and has continued to grow in the Arab States[80], Asia, the Pacific, and Africa. Given that mobile phones are the most frequently used means of accessing the Internet, addressing this gender gap could help to reduce the Internet user gender gap.

According to the ITU[81] data, over 50 percent of women globally are offline. And in developing countries, the internet usage rate for adult women compared to men is 41 percent to 53 percent[82]. Women are generally 26 percent less likely to own a smartphone than their male counterparts, with an estimated 327 million fewer women than men who own cell phones and have access to mobile Internet[83]. These statistics commonly result in women's inability to access information, education, and employment opportunities along with survival services (e.g., cash transfers via digital platforms currently being used by some governments in response to the COVID-19 pandemic[84]). A generational divide exists as well. In terms of overall internet usage, 71 percent aged 15 to 24 use the internet compared to 57 percent of those older than 24[85]. The greater uptake among young people bodes well for connectivity in areas where the demographic profile is skewed towards youth, such as the least developed countries where the majority of populations are less than 20 years old. The benefits of women in rural areas getting ICT access are highlighted in the case study below.[86]

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[78] International Telecommunications Union. 2021. "Measuring Digital Development Facts and Figures".

[79] OECD, 2018.

[80] This consists of 22 countries in the Middle East and North Africa: Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen.

[81] The International Telecommunication Union is specialized agency of the United Nations and responsible information and communication technologies.

[82] Broadband Commission for Sustainable Development: Working Group on the Digital Gender Divide. 2017. "Recommendations for Action: Bridging the Gender Gap in Internet and Broadband Access and Use."

[83] Waqar, Maria. 2021. "Mainstreaming Gender in Infrastructure: Desk Review."

[84] CWEEE. 2020. "COVID-19 and Women's Economic Empowerment". https://reliefweb.int/sites/reliefweb.int/files/resources/cweee_covid_and_wee_brief_final.pdf

[85] International Telecommunications Union, 2021.

[86] OECD. 2018.

Why does improved ICT parity matter and what opportunities are lost?

For women and girls to be able to engage in society on an equal footing with men and boys, access to ICT is essential. The growing digital gender gap has enormous ramifications for society, enterprises, and economies as well as for women's economic empowerment. The benefits of addressing this gender disparity are enormous. For example, adding 150 million more women and girls online could:

- Expand access to better information, skills, and rights for 600 million additional women.
- Enlarge the world's almost three billion households' horizons.
- Open a market with a 50–70 billion USD potential.
- Raise the GDP of underdeveloped countries by an estimated 13–18 billion USD annually[87].

Obtaining life-saving information in Kenya. ICT can open up learning opportunities for those where access to in person learning is absent. In rural Kenya distant learning assisted underprivileged rural populations and those seeking a second opportunity at education to gain access to the University of Nairobi where women learned about health (malaria) and innovative research on agriculture. Seventy percent of women who participated in these programs were able to apply their learning to new approaches and methodologies.

To guarantee that women can fully benefit from the digital revolution, it is essential to improve their access to communications infrastructure, from mobile to broadband networks. As with other sectors, it is critical to evaluate, understand, and address those contextual social, economic, and cultural barriers that prevent their meaningful access such as cost, relevant content, skills, and ensuring safety and security.

Gender Barriers to ICT Access and Use.

- **Social and cultural norms** can restrict women and girls' education, mobility, access to knowledge and information, and access to economically productive roles.
- **Illiteracy.** Women and girls make up nearly two-thirds of all illiterate people worldwide, restricting their access to and use of ICT.
- **Most cyber laws are gender neutral.** Women and girls are more likely to be victims of cyber violence than men. Governments and the commercial sector have been delayed or hesitant in their responses to online violence. It's common practice to implement new internet regulations using protectionist frameworks without consulting women or GESI experts. Women require access to digital security technologies, and gender-based online abuse must be addressed.
- **Affordability.** Despite a steady decline, the cost of connecting remains high in developing countries. The Broadband Commission for Sustainable Development released a target cost of entry-level broadband services of less than 2 percent of monthly gross national income per person by 2025. That goal has not been reached in roughly half of the economies for which data are available, meaning that many, particularly those in marginalized communities, cannot afford to access ICT, further restricting access to information, economic opportunities, and education.
- **The need for skills training and digital literacy.** Lack of capacity to use digital technologies prevents many people from using the internet and impairs others' ability to make the most of their gadgets and services. People with low levels of digital literacy are

[87] Gill, Kirrin. 2014. "Towards Gender Equality in Education Policies and ICTs: An Action Brief and Toolbox".

also more vulnerable to problems such as fraud, fake news, and hazardous information. Ensuring that ICT infrastructure development links skills training and digital literacy are critical. The example on the right highlights the importance of distant learning and skills training.[88]

- **Science and technology are viewed as more suitable for boys and men**. This may inhibit girls from studying computer science or adopting new technologies. However, this is not clear cut: in some countries of South and West Asia[89] computer science is viewed as a women's field.

Best practices in gender-inclusive ICT. Like other sectors, ICT infrastructure projects should be viewed as parts of systems requiring capacity building, learning, data, and monitoring and evaluation processes.

1. **Boost the affordability and usability of ICT products and services**.
- Initiate an action plan to achieve gender equality in access to broadband by 2030.
2. **Improve the understanding of the unique needs, circumstances, and preferences of women**.
- Understanding the factors limiting women's access to and use of the Internet, including cultural and social norms is critical in enabling effective and appropriately focused policies and strategies.
3. **Publish and share data and research:**
- Develop flexible and responsive policies and strategies that keep pace with technological development that characterizes ICTs and are driven by accurate, up-to-date information that is shared between stakeholders.
4. **Improve relevant and local content.**
- Develop native software, websites, and mobile apps in indigenous languages, and information systems for rural women and men.

8.3 Healthcare Systems and Infrastructure

In all countries, men, women, girls, and boys have differential health outcomes, related to their biology, individual behavior, reflective of societal norms, environmental influences, and access to health care infrastructure and services. Structural inequalities rooted in gender norms, including differential exposures and vulnerabilities to diseases, disabilities, and injuries, access to medicines and treatments, cultural norms and values, and biases in health services and systems, commonly have negative impacts on men's and women's health, contributing to inequitable outcomes. How women and men, and boys and girls are valued reflected through laws and policies and societal norms has a profound effect on the infrastructure facilities that are developed, the services offered, where they are built, and service affordability. Health services are also developed and used in different ways by women and men, depending on their life situation, and therefore require a nuanced approach, and consideration of issues such as working status, age, income, household type, and caring responsibilities.

Why gender inclusive healthcare systems matter? Gender disparities in health exist globally and vary across health systems. Ignoring the role of gender in health and infrastructure programming may cause inefficient use of resources, jeopardize patient-centered care, and

[88] Kituyi-Kwake, A. and Adigun, M.O. 2008. "Analyzing ICT use and access amongst rural women in Kenya."

[89] West Asia includes Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen. Asia Society, https://asiasociety.org/countries-regions/west-asia, retrieved November 20, 2022.

ultimately impact health outcomes[90]. Women, men, girls, and boys face gender-related challenges in accessing needed health facilities, medical supplies, services, and technologies. Targeted health policies could be designed and put into effect more easily if end consumers' needs for health services were better understood.

Gender Barriers to Healthcare Access and Use. Socioeconomic and cultural factors are key drivers that can inhibit (or promote) access to and use of services. These can include:

- Apply a **one-size fits all** approach to healthcare facilities and services. Like other infrastructural sectors, the manner in that men and women use health care services and facilities vary based on their personal circumstances. The demand for these services is influenced by a variety of factors, including working status, age, home type, income, and care obligations.
- **Access to health facilities** may also be limited by a person's ability to get to a facility, and/or financial restrictions to pay for a product or service.
- **Time restrictions**, such as clinic hours not aligning with working hours, may deter or prevent an individual from accessing a healthcare clinic. For women in particular, their traditional caretaker responsibilities may limit their time and ability to travel to and receive goods/services.
- **Lack of autonomy** may mean that an individual does not have the resources/permission to travel to receive healthcare services.
- **Cultural norms** may not prioritize the health needs of women and girls. Decisions made at the family, community, and societal levels can often lead to underinvestment in their healthcare.
- **Safety concerns** may also prevent individuals from seeking healthcare goods/services. When travel to services may be unsafe or expose them to potential violence, individuals, and women in particular, will forego these goods/services to avoid potential threats to their safety.
- **Income restrictions** may mean that women do not have the resources to afford the services.

Best Practices in Gender Inclusive Healthcare.

Best practices in healthcare infrastructure and services need to go beyond the inclusion of gender and promote gender-transformative approaches. These can include:

1) Ensure **financial and human resources** are allocated to developing and maintaining healthcare programming that incorporates GESI considerations. Gender-sensitive budgets and planning with beneficiaries can positively impact the services a facility offers, the types of doctors who serve the facility, and the kinds of technologies and pharmaceutical medicines offered.
2) When building **political commitment,** include a long-term vision and approach to addressing differentiated healthcare needs.
3) **Prioritize** transparency in decision-making processes, including who are the decision-makers, what criterion is considered, and how programming is envisioned to be implemented.
4) Collect **sex and gender-disaggregated data**. Gender-specific health data can be used to generate studies and documentation of promising practices and inform health

[90] The Lancet. 2019. "Gender Inequality and Restrictive Gender Norms: Framing the Challenges to Health." https://www.thelancet.com/series/gender-equality-norms-health

policies aimed at improving the health of women and families through improved infrastructure design. Additionally, gender statistics can be used to identify inequalities resulting from existing laws or policies, and for the development of healthcare infrastructure that meets the needs of intended beneficiaries in a more targeted manner.

5) Facilitate **capacity building** of staff at facilities through training and the involvement of diverse stakeholders.
6) Design **context-specific healthcare** facilities that serve intended beneficiaries.
7) Commit to **implementing and monitoring specific indicators** to measure and inform improvements where indicated. Including gender-sensitive indicators in program monitoring plans can help the implementation team track gender disparities.
8) Consider **engineering design with social considerations**. Buildings should be designed with patients' comfort in mind while also considering practical engineering and clinical design aspects.

The following two case studies show how ensuring access to and use of health supply chains and pharmaceutical supplies along with considerations of affordability are critical to infrastructure investments.[91,92]

A. Importance of Healthcare Access and Affordability: The Example of Medical detentions:

What is known as medical detentions are happening around the world, where those unable to pay are detained. Although the full scope of these medical detentions, is unknown, the academic research conducted thus far indicates they potentially affect hundreds of thousands of individuals annually in numerous sub-Saharan African nations and regions of Asia. Detention at medical facilities puts pregnant women who need life-saving emergency caesarean sections and their newborns in significant danger. The poorest people of society who have been taken to the hospital for emergency care frequently become victims of medical detention, and incarceration can make matters worse for them and their families. While they are being held in medical institutions, they could also experience verbal and/or physical abuse. These types of medical detentions are taking place in both public and private medical institutions. The practice of holding patients in hospitals for unpaid medical bills discourages the use of healthcare, worsens medical poverty, and violates international human rights norms, notably the right not to be imprisoned as a debtor and the right to adequate medical treatment. **This type of research finding is important because when health facilities are developed and planned, incorporating accessibility in terms of payment and affordability is a critical piece of fostering GESI**.

B. Designing Inclusive Health Facilities in Kenya: UNOPS:

In order to lower maternal mortality and newborn fatalities, UNOPS improved maternity and child healthcare in five counties in Kenya. The project includes modernizing the hospital infrastructure, evaluating the facilities, and instructing healthcare professionals. After the UNOPS evaluated 98 healthcare facilities, 31 maternity units were renovated, 11 maternity units were established from scratch, and 9 operating rooms were added. In order to enable the off-grid facility to be completely functional on solar energy, decrease electricity use, and give access to water services, the health facilities were renovated including a variety of green technology retrofits and solar powered solutions. More than 14,000 people received training over nearly 500 days for community volunteers and healthcare professionals. **With access to better medical facilities across the five counties of Garissa, Homa Bay, Kakamega, Nairobi, and Turkana, the health care centers stand to assist an estimated 1.6 million people.**

8.4 Energy

The energy industry is one of the least gender-inclusive sectors, with women making up just 25 percent of industry workers, even though women make up 48 percent of the worldwide

[91] Chatham House. 2017. "Hospital Detentions for Non-payment of Fees: A Denial of Rights and Dignity." https://www.chathamhouse.org/sites/default/files/publications/research/2017-12-06-hospital-detentions-non-payment-yates-brookes-whitaker.pdf

[92] UNOPS. 2022. Country Profile: Kenya. https://www.unops.org/kenya

workforce[93]. An economy's ability to compete, prosper, and create jobs is significantly influenced by its energy infrastructure. More women than men experience energy poverty in developing nations because they do not have the same opportunities as men to take advantage of new developments that provide energy access[94] and lack the technical and professional skills to be hired for new energy projects.

In rural communities, women are largely in charge of obtaining and consuming energy and spend considerable time and physical energy collecting conventional fuels to boil water and make meals. As a result, women and girls are more vulnerable to health and safety hazards. Women also encounter systemic obstacles to working in the electricity sector, such as underrepresentation and exclusion from technical, higher-paying jobs and gender-insensitive work environments. Like other forms of infrastructure expansion, technological innovation in the energy sector will necessitate international collaboration, knowledge transfer, and capacity building through research (higher education and think tanks), investments by both public and private sectors, and the inclusion of digital technologies and communications.

Energy Access (Household Energy and Rural Electrification). In 2020, 91% of the world's population gained access to electricity, up from 83 percent in 2010, yet regional gaps remain prevalent[95]. Less than half of the population in Sub-Saharan Africa has access to electricity, compared to more than 98 percent in Latin America and the Caribbean, East Asia, and Southeast Asia[96].

Clean Energy and Alternative Energies Use and Access. The fastest expanding industry in terms of investments in new research and development is the field of renewable energy technologies which includes hydro, solar, wind, and geothermal technologies. Alternative energy technologies have great potential to lessen the workloads of women, enhance their health, and increase the availability of efficient energy. However, there tends to be less focus on developing new technologies and investing in ways to make women's work less time-consuming and safer because women's economic input is often devalued, underacknowledged, and underpaid.

UN SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.

"Access to affordable, reliable and sustainable energy is crucial to achieving many of the Sustainable Development Goals. Energy access, however, varies widely across countries and the current rate of progress falls short of what will be required to achieve the Goal. Redoubled efforts will be needed, particularly for countries with large energy access deficits and high energy consumption."

The potential exists for renewable energy infrastructure projects to minimize gender gaps in nearby or impacted communities, as well as to improve access to resources and economic opportunities for both men and women, when stakeholders take gender issues into account. Gender-responsive approaches to major building projects can increase their success while producing advantages for and safeguarding the interests of impacted communities. Women and men have more livelihood opportunities if they are connected to energy infrastructure. For example, energy access can expand or improve informal home-based businesses that focus on food preparation, processing, and catering, as well as launching or

[93] USAID. 2018. "Advancing Gender in the Environment: Making the Case for Gender Equality in Large-Scale Renewable Energy Infrastructure Development."

[94] Pearl-Martinez, Rebecca. "Global Trends Impacting Gender Equality in Energy Access."

[95] The World Bank. 2021. "Report: Universal Access to Sustainable Energy Will Remain Elusive Without Addressing Inequalities." https://www.worldbank.org/en/news/press-release/2021/06/07/report-universal-access-to-sustainable-energy-will-remain-elusive-without-addressing-inequalities.

[96] Ibid

expanding businesses connected to computers, mobile technology, or larger-scale food production due to consistent, reliable access to light and electricity[97].

Employment in the Sector. Women account for 35 percent of the renewable energy workforce, 20–25 percent of the energy workforce overall, and just 16 percent of board members for the world's 200 largest utilities[98]. Typically, women's direct employment opportunities in electricity infrastructure projects have been restricted by gender roles and social norms in the local community or nationally and employer bias. Structural gender inequalities in educational trajectories, as well as regulatory limitations on employment prospects for women, have resulted in less women with technical and professional engineering skills[99]. Even when women reject their conventional roles and embrace professional professions in STEM subjects, stereotypes, and gender prejudices still exist. To level the playing field for women's employment, consistent legislative initiatives and public investments are required[100]. The case study on the right highlights how discrepancies in job access and outcomes, along with utility business practices excluded women from fully participating in the energy industry[101].

USAID's The Engendering Utilities program's pilot started in 2015, aimed to learn more about how to improve the participation of women in the power utilities sector. The initiative started with a study that looked at the role of women and subsequent gender inequities in electric power distribution companies. The findings highlighted that there were considerable variations in employment procedures and outcomes leaving women excluded from the industry. The results showed discrepancies in job outcomes and utility business practices, both of which have an influence on women's capacity to engage fully in the energy industry.

Electricity Infrastructure. The introduction of electricity is essential for the empowerment of women and children since it is a cleaner, more modern kind of energy. Women often require help to attain the start-up capital for energy-based microenterprises to buy and maintain powered assets like rice mills, freezers, and biogas units, and develop the skills and knowledge necessary to use electricity for prospective revenue. If the energy sector is to be inclusive and sustainable, new approaches are needed, as demonstrated in the case study below.[102]

By providing flexibility in deployment, the ability for more localized control, and greater flexibility in financing alternatives, the development of mini- and micro-grids has created new prospects for energy access. The following case study is an example of how a PPP enhanced energy access, expanded communities' healthcare access, and expanded business potential for the private sector.

[97] Nelson, Sibyl and Anne T. Kuriakose. 2017. "Gender and Renewable Energy: Entry Points for Women's Livelihoods and Employment". https://www.cif.org/sites/default/files/gender_and_re_digital.pdf.

[98] Orlando, Maria Beatriz, Vanessa Lopes Janik, Pranav Vaidya, Nicolina Angelou, Ieva Zumbyte, and Norma Adams. 2018. "Getting to Gender Equality in Energy Infrastructure: Lessons from Electricity Generation, Transmission, and Distribution Projects.".

[99] USAID, 2016.

[100] Orlando et al. 2018.

[101] USAID. 2021. "Developing a Business Case for Gender Equality". https://www.usaid.gov/engendering-industries/gender-equality-guides/business-case.

[102] UNOPS. 2017. Access to Energy: Giving Sierra Leone the Power to Change Lives. https://www.unops.org/news-and-stories/stories/access-to-energy-giving-sierra-leone-the-power-to-change

UNOPS Project in Sierra Leone. With the help of the private sector, UNOPS rural renewable energy project in Sierra Leone is enhancing rural people's access to energy. The project is developing solar-powered mini-grids located at community health centers and run as for-profit businesses with the help of private sector investors and operators who are offering low-carbon electricity for entire communities. The program's focus on ensuring the diverse voices of beneficiaries were included in their strategy assisted to target the design and implementation of the program which provided access to low-carbon power to 360,000 individuals who reside in rural and isolated locations. In addition to helping to run medical equipment, cool vaccines, and offer light for late-night medical services, the initiative addresses the urgent demand for power in healthcare institutions and how PPPs can enhance not only energy access but energy access for health care needs.

Best Practices in Gender-Inclusive Energy.

1. **Work with governments** to identify and remove any legal barriers to women's employment in the energy sector.
2. **Devise MOUs** with the public or private sector that create a culture committed to gender equality and diversity, starting with management's commitment to its employees and other interested parties.
3. **Make clean and/or renewable energy sources** (solar, wind, and hydro) and contemporary energy services more accessible to underserved populations (especially in rural areas).
4. **Increase the cost-effectiveness** of energy sources and services.
5. **Create and execute plans, initiatives, and tools** to increase access to and make efficient use of energy (e.g., providing off-grid generation capacity in rural communities, alternative financial instruments, or mechanisms to make energy affordable to disadvantaged households, etc.).
6. **Create supportive legislation and regulations** requiring management and staff of government energy agencies and utility corporations to incorporate gender equality into their energy projects.
7. **Increase the participation of women** in energy-related careers and jobs, through information, communication, and education campaigns and other government initiatives that encourage girls and young women to choose energy-related careers, by providing scholarships, guaranteeing job placements, and identifying role models in energy-related careers.
8. **Train female electrical technicians** in on- and off-grid operations and maintenance as well as capacity building for management and staff in gender mainstreaming in energy programming.
9. **Promote women's entry-level employment** in civil and electromechanical construction; establish a gender focal point in project management; and allocate funds for gender mainstreaming initiatives which target women and marginalized populations for job employment.
10. **Create opportunities** for employing women in electricity infrastructure by incorporating gender-sensitive training and skills development, along with STEM education for girls, employing women in nontraditional occupations where possible, and ensuring women's safe working conditions[103].

The 'Last Mile' Challenge "When considering the transport landscape in any part of the globe, special attention must be paid to the 'last mile.' Transporting goods via rail, truck, ship, or aircraft can be efficient and cost-effective. However, when goods arrive at a high-capacity freight station or port, they must then be transported to their final destination. This last leg of the supply chain is often less efficient, comprising a significant portion of the total cost to move goods. This has become known as the 'last mile' logistics challenge. The 'last mile' is also a conundrum for passenger transport, one that will need to be addressed to achieve sustainable transport."

8.5 Transportation

Transportation facilities and services have historically been developed as gender-blind and are modeled primarily on meeting the needs of males. For example, ensuring whether there is proper lighting at bus stops or along routes is commonly ignored, even though women may regard it as

[103] ADB. "Gender-Inclusive Approaches in the Energy Sector". 2018. https://www.adb.org/sites/default/files/institutional-document/771396/tip-sheet-gender-inclusive-approaches-energy.pdf.

an essential condition of using public transportation at night[104]. Global, large-scale development depends on transportation. Transport is both a factor in and a sign of economic progress[105]. Economic growth depends on the efficient movement of people and goods across vast and short distances, including transportation corridors for air, rail, waterways, marine shipping, and air freight routes, as highlighted in the Last Mile Challenge example on the right.[106] According to estimates, advancements in transportation, communication, and border management systems might result in a $2.6 trillion (4.7 percent) rise in global GDP.

According to the International Labor Organization's (ILO) 2017 study, the biggest obstacle to women's labor force participation in developing nations is a lack of transportation, which is thought to reduce their likelihood of participation in the labor force by 16.5 percent. Transportation investments that take gender into account can benefit women significantly in terms of increased access to secondary and tertiary roads that link them to markets, employment and educational opportunities, and health services, as well as women's caregiving and household responsibilities, which in turn benefits entire societies.

To design gender-inclusive transportation projects, transportation disparities (discussed in detail below) must be addressed in a context-specific manner[107]. The transportation industry in particular has an opportunity to advance more environmentally friendly and inclusive transportation services by recognizing and accounting for gendered mobility patterns during the planning, building, and administration of transportation infrastructure and services[108].

> "Sustainable transport plays a fundamental role in overcoming the social exclusion of vulnerable groups. SDG target 11.2 explicitly calls on the international community to work toward sustainable transport for all people: *By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons."*
> *UN Advisory Group on Sustainable Transportation, 2016*

Travel Patterns. In most developing countries, women's (and girls') mobility patterns, particularly in rural areas, are connected to collecting water and gathering firewood—which is time-consuming and physically demanding. When basic services are not available, women may need to travel vast distances to get to water and use sanitation facilities[109]. This is particularly apparent in more patriarchal societies where women engage in a practice known as 'trip chaining', by combining and making more trips than men, often covering shorter distances and serving many objectives all at once (such as dropping off children at school on the way to work or stopping at the store on the way home). Women are also more likely to travel during off-peak hours and with children or elderly dependents (e.g., picking up kids from school in the early afternoon or transporting elderly parents to doctor appointments). On the other hand, men often make fewer, shorter travels each

[104] Levgovini, Arianna, Nancy Vandycke, et al. 2022. "All too often in transport, women are an afterthought". https://blogs.worldbank.org/transport/all-too-often-transport-women-are-afterthought

[105] United Nations. 2016. "Analysis and Policy Recommendations from the United Nations Secretary-General's High-Level Advisory Group on Sustainable Transport". https://sustainabledevelopment.un.org/content/documents/2375Mobilizing%20Sustainable%20Transport.pdf.

[106] Ibid.

[107] Gender Tool Kit: Transport, ADB 2013.

[108] ITF. 2021. "Transport Innovation for Sustainable Development: A Gender Perspective." https://www.itf-oecd.org/sites/default/files/docs/transport-innovation-sustainable-development-gender.pdf

[109] Gender Tool Kit: Transport, ADB 2013.

day, such as to and from work, by themselves, for a specific reason, and during rush hour. Sociocultural norms can also affect and dictate gender transit patterns[110].

Use of Transport Modes. Access to transportation (cars, buses, trains, bicycles) is unequal for men and women. In some countries where it is less socially acceptable for women to drive, males are more likely to own a car or motorcycle or have driving skills. In Yemen, women are not permitted to ride bicycles or motorcycles, must travel in covered motorized vehicles accompanied by a male relative, and can only use their donkeys to transport heavy loads[111]. Walking is the most regularly used mode of transportation for many women in developing countries, particularly in rural areas due to the lack of other transportation available, the cost, or the distance from the house. Where women do use transportation services, they rely more heavily on slower, non-motorized transport or intermediate modes of transport such as bicycles, motorbike-taxis, and animals or animal-drawn carts, rather than cars or transport services[112].

Time Use and Time Poverty. Due to women's unpaid caretaking and household responsibilities, women face 'time poverty,' which has a substantial influence on how much time women can devote to travel. As a result, women frequently bear a disproportionate share of the opportunity costs associated with subpar transportation infrastructures and services that are unreliable and rigid. For instance, if the transportation system does not offer enough flexibility for women to travel to work and fulfill their domestic family care obligations, they may decline employment opportunities As a result, they may accept lower-paying local work prospects or informal income opportunities closer to their house or that they can do at home. Improved mobility for women can make a significant difference in their ability to effectively manage their time, access services, and increase economic advancement.

> According to the ADB, "Every day about 800 girls and women die needlessly in pregnancy and childbirth, almost all of whom are in the developing world. Many of these deaths could have been prevented by timely access to transport and reduction of time and distance to health services."

Access to Resources for Travel. Women may find it difficult to pay for transportation services since they commonly earn less money and have less voice in how household resources are spent. Worldwide, women are also less likely to possess or have access to a private vehicle, such as a car, motorcycle, or even a bicycle. As a result, they rely more heavily on public transportation.

Mobility and Safety. When using transportation services, women are frequently the targets of sexual and other types of harassment. Therefore, women's views of safe travel include the dangers of harassment, stalking, sexual assault, and rape in addition to physical road safety. The example below highlights the differences that women experience and may require in infrastructure transportation services and why understanding these differences is required for meeting appropriately designed service offerings[113].

Employment. Today, women represent only two percent of the world's 1.2 million seafarers and 94 percent of female seafarers work in the cruise industry. Within this historically male-dominated industry, the International Maritime Organization (IMO) has made a concerted effort to help the

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[110] Ibid

[111] The World Bank. 2012. "Making Transport Work for Women and Men: Challenges and Opportunities in the Middle East and North Africa (MENA) region". https://documents.worldbank.org/en/publication/documents-reports/documentdetail/220381468278678436/making-transport-work-for-women-and-men-challenges-and-opportunities-in-the-middle-east-and-north-africa-mena-region-lessons-from-case-studies

[112] Gender Tool Kit: Transport, ADB.

[113] The World Bank. 2014. Riding a Bus in Kathmandu: Gender and Transport in Nepal. https://www.worldbank.org/en/news/feature/2014/03/17/riding-a-bus-in-kathmandu-gender-and-transport-in-nepal

industry achieve female representation that aligns with current expectations[114]. When the IMO gender program began in 1988, only a few maritime training centers welcomed female students. Since that time, the IMO gender and capacity-building program has established an institutional framework to include a gender perspective in the organization's policies and practices. This has supported women's access to marine education and job prospects in the maritime industry.

The Importance of Stakeholder Inclusion.

Women's needs were heard and met in the World Bank's Metro Manila Bus Rapid Transit (BRT) Line 1 Project. Women make up 55% of public transportation riders and face a particular set of difficulties. To understand what these were and as part of the assessment phase, stakeholder consultations were initiated. Findings showed that:
1) women feared physical harassment as a result of overloading on buses and therefore felt unsafe;
2) as women traveled with children and bags, there were space challenges;
3) they faced difficulties boarding and getting off;
4) they wanted a payment scheme to allow for multiple trips;
5) difficulty boarding and alighting; and
6) they saw an underrepresentation of women in the public-transport sector, where drivers work.

The Bank then took these challenges and incorporated them into their design plans ensuring:
1) enough room for passengers and cargo;
2) improved sidewalks and walking facilities;
3) surveillance equipment installed on buses and at stations;
4) a BRT system designed for ease of boarding and alighting, with buses and the stations at the same level; and
5) a project policy environment that promoted equal employment opportunities.
If the Bank had not taken the time and resources to understand what was important to these majority female riders, they would have not been incorporated into infrastructure design plans.
World Bank

Access to and Use of Transport in Rural versus Urban Areas.

Rural context: Typically, rural women move around their homes, villages, and agricultural and forest areas on foot. On their shoulders, heads, or backs, they frequently manually carry large quantities of water, firewood, and agricultural goods. Greater emphasis must be given to investments in pathways, footbridges, neighborhood walks, and roads, intermediate modes of transportation, and other time- and load-reducing measures in order to increase the mobility of rural women[115].

Urban context: Women are more likely than men to walk and largely rely on public transportation networks to fulfill their various responsibilities. Women are commuting more to work, especially in industrial and service sectors, and extended commute times are challenging to their family responsibilities. In some situations, mothers may also need to go into metropolitan areas with their kids to transport them to and from school. As a result, women's access to transportation in cities frequently depends on the availability, schedule, pricing, and physical and personal safety of public transportation.

Importance of ICT and Transportation: Through the use of passenger information systems, real-time traffic management centers, integrated electronic ticketing systems, automated control systems that allow vehicles and trackside or roadside equipment to communicate, and other methods, ICT increases the efficiency of transportation networks. It also makes it easier to adopt

[114] International Maritime Organization. "Women in Maritime". https://www.imo.org/en/OurWork/TechnicalCooperation/Pages/WomenInMaritime.aspx

[115] McDonnell, Ania. 2019. "Addressing Gender Disparities in Transportation". https://genderpolicyreport.umn.edu/addressing-gender-disparities-in-transportation/.

intermodal solutions for freight transportation since accurate tracking systems make it simpler to coordinate and create smart hubs[116]

Gendered Differences in Transportation Needs. In Nepal, a city that has seen a population surge of over 60% in the past decade, and where 83% of Nepali women work and make-up at least one third of the travelling public – one in three women and one in six males report feeling uneasy due to theft, sexual assault, and physical harm. Moreover, those women aged 19 to 25 are twice as likely to directly link their feelings of personal insecurity to worry about "inappropriate touching," with 43% reporting this issue. In fact, one in four young women between the ages of 19 and 35 reported having experienced it directly in the 12 months prior. The main perpetrators are middle aged men, and more than half of all women surveyed said they would avoid standing or sitting next to a middle-aged man while travelling. Reckless driving and overcrowding traveling with children on public transport is also a major problem and many parents avoid this altogether saying it is 'frightening and unhygienic for them'.

Best Practices in Gender-Inclusive Transportation

The following best practice considerations for gender mainstreaming in the transportation sector, including fostering women's representation in transport sector jobs and leadership roles, developing programs to promote equality, and implementing benchmarks to measure how inclusive companies' services and employment methods are.

1. **Prioritize sustainability.** Make transport planning and investment decisions based on the three sustainable development dimensions—social development, environmental (including climate) impacts, and economic growth—and a full life-cycle analysis. Promote sustainable transport technologies through outcome-oriented government investment that encourage private sector investment and action through various incentive structures.
2. **Build technical capacity**. Focus training and educational opportunities for transport planners and implementers, especially in developing countries, through partnerships with international organizations, MDBs, and governments at all levels, to ensure equitable access to markets, jobs, and education.
3. **Explore intermodal transport systems.** Connect informal and formal transport systems with public transport services to shared transport to allow cities to leapfrog the conventional models of car-centric development. 'Mobility on Demand' options, enabled by fleets of lightweight electric vehicles or bicycles stationed in hubs around a city that can be returned to another nearby hub, can be key links in the intermodality chain. Effective and inclusive intermodality can advance equity and ensure a people-centered approach to transport and development more broadly.
4. **Increase the availability, reliability, affordability, and quality of transport.** Women and girls in cities are more likely to travel to access markets, work, and education when transportation services are readily accessible, on time, conveniently located, and viewed as safe, affordable, and of high quality. Costs can be reduced by regulating and monitoring the fares charged by transport operators, integrating fares between various modes of transportation, and reducing off-peak fares. Wide shoulders on rural roads to enable walking, stop lights, traffic signs, traffic bumps, and enforcement of safety precautions on public transportation are a few safety measure examples. Providing strengthened security during hours when most women travel and ensuring that sidewalks and public transport locations are well-lit are measures that can address safety risks.
5. **Increasing capability of transportation organizations and service providers.** To create the capacity to address gender issues in transportation, and increase gender

[116] The World Bank. 2017. "Philippines – Metro Manila Bus Rapid Transit First Line Project." https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/270231488468381979/philippines-metro-manila-bus-rapid-transit-first-line-project.

awareness within the organizational structures of transportation-related ministries, private sector transportation businesses, and transportation unions, to foster systematically addressing gender issues. Other considerations may include working with intermediate organizations, setting-up multi-sectoral transportation planning committees, hiring gender specialists for the transportation workforce, and conducting gender training.

6. **Increasing public understanding of the demands for local culture while promoting women's mobility.** Work with the media, religious institutions, local leaders, girls' and boys' schools, women's organizations, networks, and willing partners to mobilize and create support for projects which can facilitate mobility and access improvements for women and girls.
7. **Gender-informed monitoring and evaluation.** Monitoring project implementation is crucial for informing mid-course adjustments, and future projects, and ensuring that gender-related activities are carried out and their effects are quantified. Baseline data may include things like transportation difficulties faced by women, men, girls, and boys; unmet transport requirements among women and men; and potential service changes to address those needs. Evaluations could look at how a project affected women's and men's travel habits and modes of transportation, or the specific effects of the project on women, men, girls, and boys, such as increases in income, education, access to health services, and a greater voice in community decision-making[117].
8. **Establish gender criteria and norms**. Hold discussions with policymakers, MDBs, and other financial organizations to encourage investment and the development of GESI transport systems and facilities.

9. Best Practices Most Applicable to USTDA

Knowing where to integrate GESI into projects can be overwhelming. The following recommendations are based on entry points that USTDA can implement in their forthcoming infrastructure investments and improvement areas for infrastructure projects already underway.

1) **Create a USTDA Gender Policy.** To ensure that GESI is considered in USTDA projects, a gender or GESI policy is recommended. This should state the goals and objectives of GESI within USTDA and its overarching mission in creating it. This will increase USTDA's credibility with the development community, its private and public sector partners, and financiers, and strengthen USTDA's efforts toward its goals. It also holds the organization accountable for targeting and monitoring and creating new and ongoing learning opportunities.
2) **Build Capacity for USTDA Staff on GESI Approaches and Programming.** Provide training opportunities for USTDA staff on basic GESI principles to build a general understanding. Consider hiring a full-time gender specialist or devise a roster of GESI specialists to advise on USTDA projects to ensure GESI is an integral consideration. The more prepared USTDA staff are in GESI concepts, approaches, and programing, the better enabled they will be to design, procure, implement, monitor and evaluate infrastructure programs that have a positive and long-lasting impact on the lives and wellbeing of women, girls, and other marginalized populations. This includes training on topics related to GESI, best practices, understanding local contexts, conducting a country-wide and regional gender-responsive analysis, as well as hosting seminars, brown-bags, and tailored learning opportunities. While these types of preparatory capacity building do

[117] The World Bank, 2012.

not equate with "gender expertise" staffing, they are important nonetheless to assist staff in understanding gender considerations for improved programming.

3) **Conduct a Partner Analysis.** USTDA is well-positioned to enhance current and potential alliances and partnerships to facilitate programs that are inclusive of infrastructure needs for all and enhance opportunities in regions where USTDA works.
    - **Private Sector (PS)** partnerships are critical for improving GESI in infrastructure. Some PS entities have corporate social responsibility commitments, policies, or protocols. It is important to see how those commitments play out in their funding, their investments, and their MEL. Encouraging long-term partnerships with local, regional, and international private sector entities can facilitate inclusion in infrastructure across sectors, within and across value chains, and in improving the working environment to increase equal pay, encourage diverse leadership and management positions, develop flexible work arrangements, provide childcare assistance, and in making workplaces safe and harassment-free. USTDA does not need to only partner with those who have GESI mandates, protocols, or processes, but could make this a stipulation of future work with USTDA.
    - **Civil Society** can be an important partner for USTDA. It can link USTDA's work to services that are outside of its own mandate and can enhance results for transformative change and local ownership. Because local organizations often have the community's trust and outreach capacity, they can bring issues that need attention to the forefront. Also critical to GESI infrastructure is the involvement of women and organizations focused on gender equality and women's human rights. Including women with disabilities, displaced women and lesbian, gay, bisexual, transgender, queer, and intersex individuals is essential to ensure that humanitarian responses attend to the differentiated needs of all individuals[118]. Local women's groups and networks are frequently the best positioned to support, create, and implement context-specific responses, raise awareness and mobilize communities.
    - At the **national level**, USTDA's efforts could guide best practices in specific sectors and strategic investment decisions from a GESI perspective.
    - Understanding where **other donors and partners** are working, what they do best, and how USTDA can partner to add value and increase impact is critical in inclusive infrastructure programming where budgets and resources may be limited.
4) **Engrain Gender Mainstreaming Life-Cycle Considerations Throughout all USTDA Infrastructure Investments.** Applying a life-cycle approach can help to ensure that public investments are successful and efficient in promoting gender equality and that women's perspectives are heard throughout the investment and delivery process. While USTDA does not have control over all suppliers and implementers, GESI considerations and integration of a gender lens could be made across USTDA's investments in designing and preparing a project preparation activity, training, conducting monitoring and evaluation, instituting a reverse trade mission, or in special initiatives such as the GPI.
5) **Generate and Share more Gender-Sensitive Data and Evidence**. Develop and improve the use of sex- and age- disaggregated data and gender statistics in inclusive infrastructure with partners (government, private sector, civil society, communities, and more) to improve the collection and use of such data. Improve data collection tools and ensure that women's concerns—for example, time burden and constraints, gender roles, care services, safety, access to resources, and credit—are considered. Communicating

[118] Office of the Secretary General. 2020. Women Peace and Security Report.

lessons learned and best practices can improve programming. This may mean ensuring that USTDA partners in infrastructure development can share data on who will benefit or has benefitted, disaggregated at a minimum by sex and age.

6) **Adopt a GESI Procurement and Solicitation process.** To integrate GESI issues into the delivery and execution of infrastructure projects, it may be necessary to train partners and stakeholders on how to mainstream GESI in infrastructure projects and how to include GESI concerns in tender specifications and contract implementation terms.
7) **Creating the Business Case for Inclusive Infrastructure with Future Partners.** GESI considerations do add a cost to business which can cause the private sector (and resource-poor governments) to be less inclined to add additional GESI-related costs. However, USTDA can be a leading actor in this effort by sharing the "business case" for not going back to "business as usual" for intrinsic social and environmental reasons and as an opportunity to expand a business. By taking this leap, businesses may identify new paradigms to run their businesses and develop resilient, interconnected, and purposeful infrastructure.

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World Bank. 2021. Report: Universal Access to Sustainable Energy Will Remain Elusive Without Addressing Inequalities. https://www.worldbank.org/en/news/press-release/2021/06/07/report-universal-access-to-sustainable-energy-will-remain-elusive-without-addressing-inequalities

Yates, S., Carey, G., Hargrave, J. et al. Women's experiences of accessing individualized disability supports: gender inequality and Australia's National Disability Insurance Scheme. Int J Equity Health 20, 243 (2021). https://doi.org/10.1186/s12939-021-01571-7.

II. Annexes

11.1 Emerging Key Principles from Review of Leading Practices

The following summarizes key emerging good or best practice principles for inclusive infrastructure.

Table 3: Leading Practices

Key Principles and Practices	Description	Illustrative examples
1. Ensure resilient and inclusive infrastructure	• Creating incentives for the private sector to update standards and norms along with ensuring government laws, procedures and policies are updated, encourages the development of infrastructure resilience. • Developing national level frameworks, legislation, and institutional capacities. Facilitating learning from past events and drive future resilience. • Supporting standards and regulations with enforcement systems and capacities.	• Financing instruments such as social bonds and sustainability bonds can be useful mechanisms for connecting private investors to inclusive infrastructure programs. The International Capital Market Association provides guidelines on these tools. Below are examples of procurement policy that are gender inclusive and applicable to infrastructure projects: • Australian New South Wales' adopted an "Infrastructure Skills Legacy Programme" to increase the diversity, including gender diversity, in infrastructure workforce. This program is required for infrastructure projects over an AUD 100 million threshold. • Canada's Women in Construction Fund aims to increase the participation of women in construction trades and considers the eligibility of project objectives, along with the ways in which the project will contribute to the improved recruitment, retention, and success of women apprentices.[119]

[119] OECD. 2021. "Selected stocktaking of good practices for inclusion of women in infrastructure." https://www.oecd.org/gov/infrastructure-governance/gender-in-infrastructure/OECD-Selected-stocktaking-of-good-practices-for-inclusion-of-women-in-infrastructure.pdf

Key Principles and Practices	Description	Illustrative examples
2. Partnerships- private and public sector partnerships	• Collaboration between public and private sectors can reduce redundancies and capitalize on private sector finance and experience, while building more comprehensive infrastructure systems and linkages. • Private financing, including PPPs, can lead the way in bridging the gap in infrastructure development. • Inclusive opportunities for businesses through innovation and technology, incentives, and legal and regulatory controls.	• Ensure that the private partner is required to incorporate gender-related commitments in subcontracts, particularly commitments linked to gender-sensitive procurement (e.g., preferential procurement of women-owned enterprises, the application of specific codes of conduct or supplier diversity plans). • Include promises and targets for gender-inclusive hiring, training, childcare, adherence to equal pay for equal work, anti-sexual harassment policies, and design elements relating to health and safety for female employment, management, and/or entrepreneurship (e.g. separate facilities, lighting). • Engagement of stakeholders and users: incorporate gender-responsive commitments relating to stakeholder and user engagement (for example, the requirement to distinguish between men and women when conducting surveys to track stakeholders and/or user satisfaction with income-generating activities enabled by the project or new/improved infrastructure services)[120].
3. Engrain a gendered employee life cycle approach	This includes recruiting and hiring; onboarding and training; performance management, compensation and benefits; talent and leadership development retention; employee engagement; succession planning and promotion; separation and retirement attraction and talent outreach – this brings more women into the picture and creates a more inclusive, dynamic workforce and organizational structure.	Conducting salary reviews to examine gender gaps in pay; collecting sex-disaggregated employee satisfaction data; employing more women; number of women promoted, trained, hired[121].

[120] World Bank. 2022. "Applying a Gender Lens throughout the PPP Project Cycle". https://ppp.worldbank.org/public-private-partnership/applying-gender-lens-throughout-ppp-project-cycle

[121] Ibid

Key Principles and Practices	Description	Illustrative examples
4. Conduct an environmental and social impact assessment	Evaluate environmental and social impacts that may not otherwise be noted in a more traditional infrastructure projects.	Take into account any adverse impacts or risks that may affect the equal access to, equal participation in and/or equal benefit from project activities among women and men. In May 1994, the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment provide insight into the procedure for these assessments. Most relevant is Principle 2: "Analyze Impact Equity – Clearly identify who will win or who will lose and emphasize vulnerability under-represented groups." The 2012 IFC Performance Standards are more specific, the following Performance Standards address GESI concerns: • Performance Standard 2 States: "The client will take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to women."[122] • Performance Standard Seven "seeks to ensure that business activities minimize negative impacts, fosters respect for human rights, dignity and culture of indigenous populations, and promote development benefits in culturally appropriate ways." The UN Gender Theme Groups (GTG): Standards and Procedures document provides guidance on procedures to strengthen UN coordination on gender mainstreaming.[123]

[122] IFC. 2012. "Performance Standard 2: Labor and Working Conditions." https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/performance-standards/ps2

[123] https://unsdg.un.org/sites/default/files/2022-01/UNSDG-GTG-Standards-and-Procedures.pdf

Key Principles and Practices	Description	Illustrative examples
5. Policy regulation and standards	This may consist of inclusive policy development and implementation and inclusive standards and universal design	The Universal Declaration of Human Rights: Articles 2 and 23 state that there can be no distinction or discrimination on the basis of gender, including the right to equal pay for work124. Beijing Platform for Action is an important blueprint for advancing women's rights. Strategic Objective G.1 presented at the 1995 United Nations Fourth World Conference on Women in Beijing, states "that the United Nations must take measures to ensure women's equal access to and full participation in power structures and decision-making.125" UN Charter: The concept of gender equality has been established within the core guiding principles of the United Nations, and reflects a commitment to the equality of men and women in all aspects of the human endeavor. Articles 8 and 101 "stipulates that there shall be no restrictions on the eligibility of men and women to participate in every capacity and under conditions of equality in its principal and subsidiary organs.126" Sector policies that explicitly incorporate the inclusion of disadvantaged groups help to provide a framework and accountability for implementation at the project level. Anti-discrimination legislation exists at international and national levels to promote an inclusive approach to the planning and implementation of infrastructure.

[124] UN. "Universal Declaration of Human Rights." https://www.un.org/en/about-us/universal-declaration-of-human-rights

[125] UN Women. "The Beijing Platform for Action Turns 20". https://beijing20.unwomen.org/en/about

[126] UN. "Gender Equality". https://www.un.org/en/global-issues/gender-equality

Key Principles and Practices	Description	Illustrative examples
6. Affordability and optimizing finance	Presenting the business case; ensure willingness to pay; and develop financial assistance and subsidy instruments.	USAID's Developing a Business Case for Gender Equality[127] identifies gender equality as being associated with: • Increased profitability and organizational performance; • Improved national productivity and economic growth; • Resilient workplaces and national economies that can with stand shocks; • Enhanced organizational reputation and ability to attract talent and retain employees; and • Innovation.
7. Integrate a systems perspective	Applying an integrated systems approach in considering infrastructure resilience as part of a wider system and interconnection with other infrastructure systems.	The Global Infrastructure Hub's Project Planning, Development and Delivery[128] document integrates inclusivity at all phases of the project life-cycle, noting how this fosters inclusive urban development.
8. Enhance knowledge and capacity building in gender	Infrastructure development involves multiple stakeholders, who play critical roles. To be more inclusive and GESI sensitive, it is necessary to improve the knowledge and capacities of all the involved stakeholders, including government, private sector and civil society.	Capacity development on basic GESI; data collection and analysis; stakeholder engagement and how to interview diverse stakeholders; ensuring safety and privacy.
9. Gender-mainstreaming in project life-cycle	This ensures gender considerations are made at every stage of a project; strengthens accountability and empowers all beneficiaries; contributes to regional economic growth and increased GDP; fosters fit-for-purpose infrastructure and equitable benefits to both women and men users; and promotes cost-	Allocate sufficient financial resources for gender equality and women's empowerment activities. Identify and consult with women/gender groups, associations or stakeholders on project formulation.

[127] USAID, 2015.

[128] Global Infrastructure Hub. "Project Planning, Development and Delivery." https://inclusiveinfra.gihub.org/action-areas/project-planning-development-and-delivery/

Key Principles and Practices	Description	Illustrative examples
	effectiveness, longevity, and community ownership, waste reduction inefficiency.	Ensure training curricula and tools are developed to accommodate the different education/skill levels that may exist between women and men. Design project activities to meet the specific needs of women and men. Develop gender-specific targets or performance indicators that track gender results and impact. Collect sex disaggregated data to track gender equality results and assess gender impacts.
9a. Conduct a gender analysis	Promotes the engagement of all intended beneficiaries, combining qualitative and quantitative synthesis and analysis resulting in tailored infrastructure design and implementation	Gender Analysis in Technical Areas: Energy Infrastructure – UN Women[129] Checklist for Gender Mainstreaming in the Infrastructure Sector (AfDB)[130]
9b. Conduct stakeholder and community engagement/analysis	Ensures that the intended beneficiaries are consulted and that their perspectives are incorporated for inclusive design and implementation.	Interview community leaders, religious people, minorities, people of different ages, women and men; interview civil society organizations, academic and private sector working in a sector. Conduct focus group discussions to delve deeper into questions and concerns. Conduct a survey of households to gather statistically relevant information.
9c. Application of quantitative and qualitative information for decision-making	Using evidence driven statistics and analysis to make informed decisions. Stakeholders at all levels should use an evidence-based decision-making process for the planning, delivery, and management of their	Conduct a literature review of government statistics and academic research. Combine stakeholder analysis with literature review

[129] UN Women. 2022. "Gender Analysis in Technical Areas: Energy Infrastructure". https://www.unwomen.org/en/digital-library/publications/2022/12/gender-analysis-in-technical-areas-energy-infrastructure

[130] AfDB. 2009. "Checklist for Gender Mainstreaming in the Infrastructure Sector". https://www.afdb.org/sites/default/files/documents/policy-documents/checklist_for_gender_maintstreaming_in_the_infrastructure_sector.pdf

Key Principles and Practices	Description	Illustrative examples
	infrastructure systems to ensure sustainable, resilient, and inclusive development. Collect and analyze sex- and age-disaggregated data to inform infrastructure design, implementation, and monitoring and evaluation.	findings to triangulate information.
9d. Application of context driven approaches	Fosters an understanding of local, regional, and national context for tailored interventions and program design. Context matters in areas such as geography, economic, political, social, and cultural norms, as well as the risk of natural catastrophes, security concerns, climate change, resource shortages, population increase, etc. Inclusive infrastructure projects need to consider the diverse users and their unique needs over time.	Geographical and regional differences between women, girls, men, and boys in social and cultural norms, economics, education, access to services, resources, etc. These may be expressed by: • Differences in legal status and entitlements; • A gender division of labor within the economy; • Inequalities in the domestic/unpaid sector informal labor category; • Cultural acceptance of violence against women; • Discriminatory attitudes, practices and behaviors
9e. Create a gender specific action plan (GAP)	Creates transparency, deadlines, milestones, and tailored entry points	Applies sex-disaggregated data and detailed gender and social analyses, to identify any key gender inequalities and constraints that the project will aim to improve. Includes clear, realistic, and appropriate targets and sex-disaggregated baseline data. Includes a long-term project gender specialist and capacity building for executing and implementing agencies
9f. Monitoring, evaluation, and learning (MEL)	Ensures projects stay on track, creates transparency and accountability, allows for adaptation when needed and learning opportunities.	As it relates to the program objectives: Sex and age disaggregated data – who will the infrastructure reach, who will use the infrastructure, how often, etc.

Key Principles and Practices	Description	Illustrative examples
		Women's employment indicator for construction (adapted based on sector) 30-40% increase in female employment in X sector.

11.2 Organizational Table

Table 4: Organizations and Their Roles in Inclusive Infrastructure

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
US Government (USG)– USG entities working across all sectors, leading commitments from government and the private sector.		
US Department of Commerce (USDC)	The USDC makes commitments through fair trade and inclusive economy investments.	Equity Action Plan DOC Diversity, Equity, Inclusion and Accessibility Council 13 Indo-Pacific Economic Framework for Prosperity (IPEF) partner countries – representing 40% of the global economy
US International Development Finance Corporation (DFC)	The DFC has and continues to make investments to improve women's empowerment, ensure women benefit, and to ease women's access to capital.	In addition to applying a gender lens to all projects, the DFC has invested in GESI. Examples of their investments include: • 2X Women's Initiative ($13.5 billion of investments in projects owned or led by women, or a product or services that empowers women). The DFC is committed to catalyze an additional $12 billion more by 2025. In 2022, 49 percent of DFC's commitments advanced the 2X Initiative. • Investing up to $25 million in the Uhuru Growth Fund I-A, which provides growth capital to small-and medium-sized enterprises in W. Africa – including women-led businesses. 2X women's economic empowerment initiative with 40% of Uhuru's team being women. • The Women's Livelihood Bond 5 is the world's first Orange Bond IIX's Women's Livelihood Bond 5 (WLB5) illustrating the United States' commitment to advancing gender equity in emerging markets.
Export Import Bank of US (EXIM)	EXIM has several initiatives that focus on diversity and advancing women in business.	Creation of a women in business as a subcommittee of the agency's Advisory Committee to provide ways EXIM can reach more women and better consider equity goals set by the agency's strategy.

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
		Have environmental and social guidelines on website set forth by IFC performance standards and the EHS Guidelines of the World Bank Group
Partnerships for Global Infrastructure Investment (PGII)	PGII will deliver projects to close the infrastructure gap in developing countries, strengthen the global economy and supply chains, and advance U.S. national security.	PGII currently has a gender working group and gender equality action plan working document. $600 billion in public and private sector investment w/ US contributing $200 billion over the next 5 years. The PGII Gender Equality Action Plan sets priorities and goals for the U.S. government, to improve USG capabilities and efficacy, mobilize private financing, promote U.S. exports, and leverage partnerships with like-minded countries to meet global infrastructure needs in the PGII Gender pillar and advance transformational progress. Supports priorities of the Biden-Harris Administration's National Strategy on Gender Equity and Equality, pursuant to Executive Order 14020. Reinforces key Administration initiatives and aligns with relevant government-wide strategies, i.e., the forthcoming National Action Plan to End Gender-Based Violence and updated U.S. Strategy to Prevent and Respond to Gender-Based Violence Globally, the forthcoming Interagency Strategy to Advance Women's Economic Security, the National Action Plan to Combat Human Trafficking, the U.S. Strategy on Women, Peace, and Security, and the Global Partnership for Action on Online Harassment and Abuse, among others. Advocates for the inclusion of gender in project design to build the pipeline of gender projects; Advances gender-specific domestic trade and investment outreach, including hosting trade missions and reverse trade missions to promote U.S. exports and engage industry in PGII.
Global Entities- Global entities work across all sectors, leading commitments from government and the private sector.		
World Bank (WB)	As a large global organization, the WB has and continues to support GESI through its	The Advisory Council on Gender and Development is an external consultative body dedicated to promoting gender

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
	programs, partnerships, strategies, and documents.	equality and advises on the World Bank's work as it relates to GESI. The AC guides the World Bank's 2016-2023 Gender Strategy. This strategy has four main objectives: 1) Improving human endowments, including health, education, and social protection 2)Removing constraints for more and better jobs 3) Removing barriers to women's ownership and control over assets 4) Enhancing women's voice and agency and engaging men and boys The Gender Equality and Infrastructure Primer, highlights specific gender and infrastructure issues. The WB's Gender Data Portal houses global gender data
Organization for Economic Co-operation and Development (OECD)	Sets recommendations for development goals and strategies, including in the infrastructure sector.	The 2020 Recommendation of the Council on the Governance of Infrastructure made note of the need for inclusive development that promotes gender equity.
Global Infrastructure Hub	Focuses on knowledge sharing to improve infrastructure policy and delivery and supports gender equitable infrastructure.	The Global Infrastructure Hub Maintains a 'Girls in ICT Portal' at **www.girlsinict.org,** which features over 500 programs such as scholarships, including over 100 scholarship opportunities, some 70 contests and awards, more than 100 training and internship opportunities, and over 100 online networks offering career support and mentoring, as well as tech camps.
European Institute for Gender Equality (EIGE)	Is an autonomous body of the European Union, established to contribute to and strengthen the promotion of gender equality, including gender mainstreaming in all EU policies and the resulting national policies, and the fight against discrimination based on sex, as well as to raise EU citizens' awareness of gender equality	EIGE has a number of toolkits, good practices and other resources for the policy areas of agriculture and rural development, energy, transport, security, and the digital agenda among others. They offer guides to: • Gender Equality Training • Gender Impact Assessments • Institutional Transformation • Gender Equality in Academia and Research

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
		• Gender-Sensitive Parliaments, Gender Budgeting, and Gender- responsive Public Procurement.
International Finance Corporation (IFC)	A member of the World Bank Group – is the largest global development institution focused on the private sector in emerging markets and is committed to supporting GESI through its Gender Equality Strategy and diverse GESI integrated programming.	While the IFC has no explicit Gender Policy, it does have a Gender Equality Strategy, and programs specifically dedicated to gender. In addition, they are held accountable by the Independent Evaluation Group, which published a Mid-Term review of the Gender Strategy in 2021, among other evaluations of IFC programming and its gendered impacts. They are also held accountable by the Compliance Advisor Ombudsman, an independent accountability mechanism for IFC supported projects. For example, the Compliance Advisor Ombudsman can and has investigated cases in which investments did not adequately consult stakeholders and resulted in increased GBV. Examples of GESI integrated programming include: • Gender and Economic Inclusion Group • Closing the Gender Finance Gap Through the Use of Blended Finance • Inclusive Banking • Emerging Practices to Advance the Economic Inclusion of Persons with Disabilities.
Intergovernmental		
Entity International Transport Forum (ITF) is an intergovernmental organization with 62 member countries from	The ITF works for transport policies that improve peoples' lives. Their mission is to foster a deeper understanding of the role of transport in economic growth, environmental	• Gender Analysis Toolkit for Transport Policies • 2021 Consultation on Gender in Transport • ITF Corporate Partnership Board - Workstream on Gender

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
developed and emerging countries.	sustainability and social inclusion and to raise the public profile of transport policy.	**Publications** • Gender Equality and the Role of Women in Decarbonising Transport (ITF, 2022) • Transport Innovation for Sustainable Development: A Gender Perspective (ITF, 2021) • The Gender Dimension of the Transport Workforce (ITF, 2020) • Transport Connectivity: A Gender Perspective (ITF, 2019) • Women's Safety and Security: A Public Transport Priority (ITF, 2018) • Understanding Urban Travel Behavior by Gender for Efficient and Equitable Transport Policies(ITF, 2018) • Gender in Transport (ITF, 2011)
Development Institutions		
African Development Bank (AfDB)	Their focus on inclusive infrastructure is to enable the African continent to take advantage of the opportunities related to the construction of gender-sensitive infrastructure, the Bank will mobilize its financial resources and base these interventions on its commitments.	The AfDB institutionalizes gender through a commitment to gender mainstreaming throughout all activities/projects across Africa. Its Gender Strategy (2021-2025) lays out its mission, goals and milestones. Pillar 3 of the Strategy is focused on inclusive infrastructure, specifically "Increasing women's access to social services through infrastructure; focused on agriculture, trade, industry, energy, finance, water, sanitation and hygiene." The AfDB has several initiatives that offer targeted investment for women entrepreneurs. • The Affirmative Finance Action for Women in Africa initiative $1 billion in approved funding is dedicated to lending to African women entrepreneurs. • Africa Digital Financial Inclusion Facility (ADFI) is a financing vehicle to give beneficiaries access to the formal economy through digital financial services.

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
		ADFI has a target of 60% of its projects being gender-intentional, and 15% to transform gender norms and relations. • The AfDB's African Women in Business Initiative, works to identify constraints to women's entrepreneurial development and develops approaches to promote the enabling environment for female entrepreneurs, raise stakeholder awareness, and support SMEs and enterprise education. Public sector operations should propose a *Gender Marker System* (GMS) category before seeking approval from the AfDB board. After this screening is completed, the proposal should follow the specific GMS requirements which might include conducting a gender analysis, Gender Action Plan, or gender screening.[131]
Asian Development Bank (ADB)	ADB works across Asia and the Pacific to promote gender equality and women's empowerment, reduce poverty, and contribute to green, equitable, and inclusive development. The Bank promotes gender equality and women's empowerment by mainstreaming these goals across the full range of its operations.	Improving gender equality is the second operational priority in ADB's Strategy 2030 aiming for at least 75% of ADB's committed operations to promote gender equality by 2030. ADB conducts country gender assessments used to inform the planning phase of the project lifecycle. One of ADB's operational priorities is to "Make Cities More Livable", by improving urban infrastructure using inclusive planning and an understanding of the transport, economic, and natural capital context of a city.
Development Bank of Latin America (CAF)	CAF promotes gender equality and the empowerment of women through its investments, loans and technical assistance	CAF launched a Strategy for Gender Equality 2022-2026, though it is not published online. Its Management Policiess state that the organization must incorporate equal opportunities

[131] AfDB. 2018. Enhancing Gender Mainstreaming in projects at AfDB. https://idev.afdb.org/sites/default/files/Evaluations/2020-03/Enhancing%20Gender%20Mainstreaming%20in%20projects%20at%20AfDB.pdf

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
	to public/private sector, and partners with UN Women to carry out its objectives.	between genders and the empowerment of women, though in no specific terms. CAF and the Inter-American Commission of Women (CIM) of the Organization of American States (OAS) signed an MOU aiming to increase cooperation and promotion of Gender Equality and Women's Empowerment (GEWE) in the region[132].
European Bank for Reconstruction and Development (ERBD)	EBRD works in infrastructure, agribusiness, energy, telecommunications and technology in Europe, Eurasia, Central Asia, and the Mediterranean.	The EBRD's Economic Inclusion strategy states that gender is mainstreamed across all the Bank's activities. EBRD's Strategy for Promotion of Gender Equality (SPGE) 2021-2025 focuses on three priority thematic areas: access to skills and employment, entrepreneurship and access to finance, and access to services that enhance economic opportunity. The SPGE also provides guidance for integrating gender into monitoring output, outcome, and impact indicators.
Interamerican Development Bank (IADB)	The IADB is committed to gender equality as an essential component of sustainable development in Latin America and the Caribbean (LAC).	The Bank's key policies and strategies underline its commitment: The second update to the Institutional Strategy (2020-2023), establishes the Bank's vision as an institution, names "gender equality and diversity" as one of three cross-cutting issues and "social exclusion and inequality" as one of three development challenges. The Operational Policy on Gender Equality in Development (Gender Policy) aims to strengthen the Bank's support for member countries' targets and commitments to gender equality and women's empowerment. It outlines guidance on how proactive and preventive gender programming should be implemented, including the requirement of gender analysis

[132] OAS. 2022. "CIM and CAF sign agreement to enhance women's economic inclusion and empowerment in the region". https://www.oas.org/es/cim/docs/ENG_Nota%20de%20Prensa%20-%20Firma%20MoU-CAF_CIMfinal_GA_GLNA%20ENG.pdf

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
		during the preparation of operations and development of technical products. The Gender Action Plan (GAP), launched in 2010 is updated every three years, consolidates strategic gender-related action items from all IDB sectors and ensures the Gender Policy is implemented. The Gender and Diversity Sector Framework, updated every three years, identifies effective interventions for gender equality, development with identity, and social inclusion; it assesses the region's main challenges and highlights which evidence-based actions the Bank will take. The IDB Infrastructure and Energy Sector continues to use its operations to foster economic opportunities for women by adapting infrastructure and infrastructure services to meet gender-specific needs and support women's leadership and participation within its different divisions. IADB's Transport Division has two key goals: • i) promote greater participation of women in non-traditional jobs linked to the construction of transport infrastructure and the operation of transport services; and • ii) promote the design, implementation, and evaluation of policies that incorporate women's needs into the planning and operation of transport systems. **Gender and Infrastructure Platform: an online tool** The IDB works toward equal and equitable access to resources and benefits from infrastructure services for women, men, boys, and girls. The Bank promotes gender mainstreaming in its projects and initiatives in the areas of water and sanitation, energy, extractives, and transport. The IDB Infrastructure and Energy Sector's online tool incorporates a gender perspective into its projects and

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
		initiatives. It provides access to indicators for infrastructure operations design, estimated budgets, a menu of more than 150 gender-sensitive activities, and more than 80 practical examples. It also allows other institutions and specialists from LAC to add suggested activities, indicators, or best practices. To learn more, visit: https://generoeninfraestructura.iadb.org/
United States Agency for International Development (USAID)	Integrates gender into a wide range of global development projects.	USAID is committed to GESI through a variety of policy documents and requirements including: USAID's 2022 Gender Equality and Women's Empowerment Policy; ADS Chapter 205: Integrating Gender Equality and Female Empowerment in USAID's Program Cycle; Biden's Executive Order on Establishment of the White House Gender Policy Council; US Strategy to Prevent and Respond to GBV Globally; Gender and COVID commitments and resources; Women Prosper initiative, among others. ADS Chapter 205 outlines responsibilities that USAID Missions, Regional Missions, and Country Offices and specific departments must comply with. Illustrative examples of these responsibilities include enforcing the GA requirement and having a Gender Advisor appointed. ADS 205 also includes policy directives and required procedures requiring gender integration throughout the program cycle, with guidance on how to do so.
Millennium Challenge Corporation (MCC)	Supports inclusive infrastructure through compact and threshold programming.	MCC requires Social and Gender Assessment personnel within their Department of Compact Operations, as well as on the core team of their partner countries. MCC Gender Policy (2006, updated 2011 and August 2022) requires MCC and its partner countries to consider gender differences and inequalities in country. MCC also has Gender Integration Guidelines with its strategies to integrate gender considerations at each step of the program cycle and requires a GA for each program.

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
Development Finance Institutions (DFIs) as part of the G7	Invests in projects that promote gender equality.	The 2x Challenge was founded by G7 Countries to mobilize DFI and private sector funds for programming that improves the economic status of women in developing countries. The challenge sets minimum criteria for female employment, consumers, leadership, and entrepreneurship for all investments.
Africa Investment Forum	Committed to inclusivity and centering programming on African women. Recognizes the importance of application of a gender lens; the gap in women-run and funded investments in Africa	Women as Investment Champions initiative is expected to increase women-led investment opportunities.[133] The recent $31 billion investment commitment is expected to help tap the potential of women-led initiatives across the sub-Saharan Africa region. This commitment reiterates the leadership of AIF in Africa's development trajectory[134].
Private Sector		
Private Sector	Many companies have corporate social responsibility statements – particularly larger corporations. As most infrastructure is done with local companies, building the business case is critical. Inclusive investments are uneven across the world.	Private companies can choose to make socially responsible investments, and leverage stakeholder power for inclusive infrastructure. The 2X Challenge is one mechanism and incentive for companies to have inclusive policies, products, and leadership. Other ways that some companies are investing in inclusive infrastructure include through their Corporate Social Responsibility (CSR) platforms; and PPP (WB, UN, IFC, AfDB, ADB, IDB, among others)
Example Initiatives		
TInnGO[135], which stands for Transport Innovation Gender Observatory, is a 3-year	Aims to create a framework and mechanisms for a sustainable game change in European	Has a toolbox to measure gender issues around intersectional analysis. https://www.tinngo.eu/tinngo-incident-reporting-tool/

[133] USTDA. 2022. "USTDA and AIF Showcase Women as Investment Champions". https://ustda.gov/ustda-and-aif-showcase-women-as-investment-champions/

[134] AIF. 2022. "$31bn committed at the African Investment Forum 2022…" https://www.africainvestmentforum.com/en/news/news/31bn-committed-africa-investment-forum-2022-help-unleash-investment-potential-including

[135] TInnGO. 2023. "TinnGO project: A sustainable game changer in European transport". https://www.tinngo.eu

Entity	Role in Inclusive Infrastructure	Illustrative Examples GESI Approaches/ Opportunities
research project funded in the context of the HORIZON2020 Program of the EU.	transport through a transformative strategy of gender and diversity sensitive smart mobility.	
Diamond Project[136]	The Diamond project analyses and converts data into knowledge with notions of impartiality to support gender inclusion in current and future transport systems from the perspective of women as transport users and as professionals in the sector. Is a H2020 EU-funded project (November 2018 – October 2021).	• Conducted integrated research on women in transport sector. • Uses gender analysis. • Has a self-diagnosis and decision support system (DSS) tool that is used in analysis.

[136] Diamond. 2023. "Diamond: Revealing actionable knowledge from data". https://diamond-project.eu