



INDIA Gender Equality Diagnostic of Selected Sectors

March 2013

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Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines Tel +63 2 632 4444 Fax +63 2 636 2444 www.adb.org

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Foreword

While this gender equality diagnostic continues the tradition of the Asian Development Bank (ADB) of informing country partnership strategies with sound country gender assessments, this publication is the first in a series of gender assessments of South Asian developing member countries that focus on specific sectors that ADB supports. For each sector, the gender equality diagnostic identifies gender issues that are relevant to policy and programming choices. It summarizes legislative and policy commitments on gender equality that form the backdrop within which programs and projects are developed and implemented, and points to a number of examples of innovative approaches by the government and its development partners. To ensure both local and global perspectives, ADB has engaged the support of local sector experts to work with an international gender specialist in preparing this publication.

The gender equality diagnostic is a valuable resource for social and gender analyses of specific sectors and investments. It will contribute to strengthening gender analysis in project preparation, support the preparation of practical gender action plans, assist with the identification of gender-related design features to incorporate within project components, and strengthen the ability to identify and report on gender equality results. The discussion and the suggestions made throughout the document build on the rich international literature about gender mainstreaming and the lessons learned about maintaining a focus on gender equality results; the importance of analysis- and evidence-based planning for achieving gender equality results; the value of capacity development of executing and implementing agencies on gender equality issues; and the need for continued attention to gender issues and action plans through implementation and monitoring, and evaluation.

As a practical resource, the gender equality diagnostic supports the work of ADB staff and consultants to mainstream gender throughout the planning and project cycles—from initial analyses to project design, budgeting, implementation, and, finally monitoring and evaluation. It may also be useful to practitioners in other development organizations in India, including government, nongovernment, and international organizations.

Gender mainstreaming is not an end in itself, but a means to improve the quality of project planning and to strengthen the positive impacts of our programming on women and gender equality. I am convinced that the gender equality diagnostic will prove useful in our efforts to improve outcomes for women, which are critical to achieving the goals of economic growth and poverty reduction that are shared by ADB and the Government of India.

Juan Miranda
Director General
South Asia Department

Preface

Strategy 2020, the long-term strategic framework of the Asian Development Bank (ADB), has identified gender equity as one of the five drivers of change that will enable ADB and its developing member countries to realize their agenda of inclusive and environmentally sustainable growth and regional cooperation. Thus, ADB's country partnership strategies include gender equity among their goals and pursue a gender mainstreaming approach to ensure that women participate and benefit from ADB projects. As mainstreaming gender in policies, programs, and projects requires sound gender analyses, the ADB South Asia Department conducted a gender equality diagnostic of the sectors in India where ADB has significant investments. Specifically, these are in the areas of (i) agriculture and water resource management, (ii) vocational education and skills development, (iii) energy, (iv) finance and public sector management, (v) transport, and (vi) urban development. Each sector chapter begins with an identification of gender issues, supported with specific data, followed by a brief overview of government policy commitments relevant to ADB initiatives, and a summary of how ADB has approached gender mainstreaming in its investments. The chapters conclude with suggestions of points for attention for ADB to improve its gender equality results. A generous infusion of boxed features that include data, policy highlights, narratives of experiences, tip sheets, and useful resources, among others, offers the readers accessible information for each chapter.

Various actors collaborated for about 6 months to develop the document. A team of local researchers did the initial documentation and identified the issues. This was followed by a broader review of literature available in print and on the web, including publications by researchers, government agencies, and development organizations, as well as census and survey data generated by the Government of India. The analysis resulted in an initial draft that ADB sector and gender specialists at headquarters and in India reviewed. Extensive consultations were held with the Ministry of Women and Child Development.

The document benefited from the contributions of a number of ADB staff and external consultants. We would particularly like to recognize Johanna Schalkwyk, who brought together information from various sources into one insightful publication. Francesco Tornieri, senior social development specialist (gender), provided guidance throughout the process, together with Prabhjot Khan, associate social development officer (gender) of the India Resident Mission, and Rajib Ghosal, gender and development consultant. The contribution of gender and sector specialists in the South Asia Department, who reviewed versions of the draft, is equally well regarded. Much appreciation also goes to the ADB Gender Community of Practice for their valuable comments.

Hun Kim

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Country Director India Resident Mission

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राज्य मंत्री (स्वतंत्र प्रभार) महिला एवं बाल विकास मंत्रालय भारत सरकार नई दिल्ली-110001

MINISTER OF STATE (INDEPENDENT CHARGE)
MINISTRY OF WOMEN & CHILD DEVELOPMENT
GOVERNMENT OF INDIA
NEW DELHI-110001

Message

The Asian Development Bank (ADB) has been India's valuable multilateral partner since 1966. The Government of India appreciates ADB's efforts to transfer knowledge and share global best practices on key developmental themes such as gender equality. This publication entitled *India Gender Equality Diagnostic of Selected Sectors* is especially timely in light of the Twelfth Five Year Plan and its core theme of inclusive development. The government recognizes that inclusive development requires efforts to ensure that its programs reach and serve women, and make full use of their skills and perspectives for the benefit of the country.

Gender-based discrimination is deeply rooted in our society and manifests itself in many forms. Achieving gender equality and women's empowerment is thus a major challenge. Legislation and policies to eliminate discrimination are important but are not enough to wipe out gender biases. Reducing gender disparities requires an approach that also seeks to support gender equality through government schemes in all sectors and, more broadly, promotes changes in attitudes and practices in government and society. This effort requires a long-term commitment by the government and the support of all development partners, including ADB.

This publication makes a valuable contribution to ADB—India collaboration by identifying issues and opportunities for promoting gender equality in infrastructure and non-infrastructure sectors. It also provides insights into policies and strategies currently in place to mainstream gender in urban development, agriculture and natural resources, roads and transport, financial management, and energy. These are all critical sectors for ADB and India.

I wish to congratulate ADB for coming out with this useful new publication and for working together with the Government of India to address gender disparities.

Krishna Tirath

Abbreviations

ADB Asian Development Bank
CFL compact fluorescent lamp
CPS country partnership strategy

DIC district implementation committee EGM effective gender mainstreaming

GAP gender action plan
GDP gross domestic product
GEN gender equity theme
ITI industrial training institute

JNNURM Jawaharlal Nehru National Urban Renewal Mission

LPG liquefied petroleum gas
MFI microfinance institution

MGNREGS Mahatma Gandhi National Rural Employment Guarantee Scheme

MWCD Ministry of Women and Child Development

NABARD National Bank for Agriculture and Rural Development

NGE no gender elements

NRLM National Rural Livelihoods Mission

NSS National Sample Survey

NULM National Urban Livelihoods Mission

PPP public-private partnership

PPTA project preparatory technical assistance

RAY Rajiv Awas Yojana

RRP Report and Recommendation of the President

SEWA Self-Employed Women's Association

SGE some gender elements

SGSY Swarnajayanti Swarozgar Yojana

SHG self-help group

SIDBI Small Industries Development Bank of India

WUA water users' association

Introduction

Purpose and Uses of the India Gender Equality Diagnostic

The Asian Development Bank (ADB) recently marked its 25-year partnership with India with a publication that reviews the evolution of the program and major areas of activity. In summarizing achievements and principles, this anniversary document emphasizes that the ultimate aim of the ADB–India partnership is to achieve inclusive growth:

While the increase in the volume of ADB assistance and the size of its ongoing portfolio over the years is indeed a matter of satisfaction, we need to remember that the India–ADB development partnership is more than just about loan approvals and dollar amounts, or about the length of roads built, number of power transmission lines built, and the kilometres of water pipes laid. It is ultimately about changing lives—about working jointly with [the Government of India] and other clients to ensure that the economic opportunities being created by India's economic growth can be accessed equitably and sustainably by one and all.¹

This "gender equality diagnostic" has been prepared as a resource to support ADB and its government partners to mainstream gender equality in its main operational sectors in India and thus to contribute to the shared objective of inclusive growth.

One of the aims in undertaking a "gender equality diagnostic" of these sectors was to provide a basis for increased attention to gender equality issues and opportunities in the formulation of the India country partnership strategy for the period 2013–2017. Equally important was the objective of providing ADB staff, partners, and consultants with a practical resource they

could draw on when doing sector analyses, designing projects, monitoring implementation, and engaging in policy dialogue.

Given these aims, the gender equality issues identified in each sector are closely related to the types of initiatives in which ADB is active or potentially active and through which it can have an impact. Similarly, the discussion of the policy and program context highlights gender equality themes that can guide ADB in its efforts to align with government objectives. The document does not aim to be a comprehensive analysis of gender equality issues and related policies, but rather to approach each sector through the prism of the ADB portfolio in India.

The main users and uses envisaged are

- ADB sector specialists: for guidance on gender issues to address as part of broader sector assessments, or to specify issues to be addressed by consultants that undertake project preparatory technical assistance (PPTA);
- ADB staff and consultants involved in project analyses and design: as a reminder of gender issues to consider and as a starting point for project- and area-focused data gathering and analysis;
- ADB project managers: as a prompt about issues to look for when reviewing project concept papers and designs, or in monitoring implementation;
- ADB gender specialists: as a quick reminder of issues and data sources; and
- ADB partners in government ministries and agencies: as a reference on issues and approaches of concern to ADB in its partnership with India.

As most users of this document will consult only the specific chapter for the sector they are dealing with, issues that apply to several sectors or points of information applicable to all sectors are repeated in the

ADB. 2011. *India–ADB Development Partnership*. p. 10 (emphasis added). www.adb.org/publications/india-adb-development-partnership

sectoral chapters. This was done deliberately in order to increase the utility of the document as a resource for analysis and planning by sectoral staff and project consultants. In short, the document is a collection of sectoral chapters likely to be read and used separately, complemented by two overview chapters and an appendix providing data tables with state-level breakdowns.

PART A

Overview

Overview

Key Gender Equality Issues and Policy Initiatives

This chapter highlights key gender equality issues and related government commitments that are relevant to the planning and implementation of Asian Development Bank (ADB) investments in India. Gender gaps and inequalities and government efforts to respond to them are important elements of the context within which project objectives and designs are formulated, particularly given the commitments of both India and the ADB to gender equality and to inclusive growth.

Key Gender Equality Issues

While India has had an impressive record of growth in recent decades, gender equality indicators provide continuing cause for concern. According to the gender inequality index of the United Nations Development Programme, India's performance lags behind that of other countries in the region, including countries with lower per capita gross domestic product (GDP) (Box 1). Several other summary indicators of women's position discussed below underline the pervasiveness of gender inequality and the need for efforts in all sectors to enhance women's rights and opportunities and decrease disparities.

India's 2011 census found a continuing decline in the sex ratio among children under age 7—it was as low as 927 girls per 1,000 boys in 2001 and was further reduced to 914 in 2011.¹ Also troubling is data showing higher infant mortality rates among girls than boys in almost all states and territories and in both rural and urban areas.²

Box 1: United Nations Development Programme Gender Inequality and Human Development Indexes Show India Trailing behind the Region

Regional ranking, gender inequality index (2011)		Regional ranking, human development index (2011)	GDP per capita (2009, \$)
Sri Lanka	1	1	4,333
Bhutan	2	3	4,643
Bangladesh	3	5	1,286
Nepal	4	6	1,049
Pakistan	5	4	2,369
India	6	2	2,993

GDP = gross domestic product.

Source: United Nations Development Programme online database: http://hdrstats.undp.org/en/indicators/default.html

The gender inequality index reflects women's disadvantage in three dimensions—reproductive health, empowerment, and the labor market. The index shows the loss in human development due to inequality between female and male achievements in these dimensions. For a brief explanation of the index (and how it differs from the earlier gender-related development index), see http://hdr.undp.org/en/statistics/gii

For an interactive site that shows regional comparison by map and graph, see http://hdr.undp.org/en/data/map

These trends have significant social consequences, as pointed out by the National Advisory Council in its consultation document about public policy responses:

There is a wide consensus that this shortage of millions of women has implications not only for gender equality but also for social violence, human development and democracy. For this decline to take place amid repeated commitments at the highest official levels to gender justice and gender equity is extremely worrying.³

Census of India. 2011. Provisional Population Totals, Paper. All-India, online tables. Statement 13. http://censusindia.gov.in

SRS Bulletin. 2011. 45 (1) (January), Table 4. www.censusindia.gov.in/vital_statistics/SRS_Bulletins/ Bulletins.html

NAC Working Group on Gender and the Declining Sex Ratio. 2012. Final draft recommendations, April 20. nac.nic.in/gsr_press.htm

Box 2: Women (and India) Held Back by Persistent Inequality

- 79% of women vs. 63% of men continue to be engaged in agriculture. (2009-2010, National Sample Survey [NSS], 66th round)
- Women account for only 18.6% wage employment in the nonagriculture sector. (2009–2010, NSS 66th round)
- Average wages for women workers are 68% of those of men in rural areas, 57% in urban areas (casual laborers, the largest category). (2007-2008, NSS 64th round)
- · Women hold only 12.4% of cultivated holdings, accounting for 9.9% of cultivated area held by individuals. (2005–2006, Agricultural Census)
- Women own less than one-third of deposits in commercial banks. (2010, Reserve Bank of India, Basic Statistical Returns)
- 55% of adult women are literate compared with 78% of men. (2005–2006, National Family Health Survey-3)
- Only 34% of rural households and 81% of urban households have access to a toilet facility. (2007-2008, District Level Household Survey [DLHS-3])
- Biomass (firewood, chips, and dung) remains the primary source of energy for cooking for 85% of rural households. (2007-2008, NSS 64th round)
- Urban transport may be largely on foot for poor women— 52% of women in one Delhi slum walked to work vs. 26% of men. (Anand and Tiwari, 2006)

Discriminatory practices in families and society also contribute to high maternal mortality ratios. Factors related to the high risk of maternal death include early marriage, women's limited power of decision over family planning and use of health care services, poor nutrition, poor health knowledge, domestic violence, and inadequate services for antenatal and obstetric care. Despite a significant decline over the last decade, the most recent data shows that the maternal mortality rate remains high at 212 deaths per 100,000 live births (well above India's Millennium Development Goal target of 109 by 2015).4

The high incidence of violence against women, including violence in the home, is yet another indicator of the extent of gender inequality. Survey data shows that over one-third of adult women in India have experienced sexual or physical violence. Domestic violence is one of the most common forms of violence faced by women, and over half of both women and men accept that there

are justifications for a man beating his wife. 5 These high levels of tolerance for domestic violence show the need for continued efforts to raise awareness of women's rights and the law among both women and men and among community leaders.

Constraints to women's economic participation, productivity, and returns persist.

Constraints to women's economic participation, productivity, and returns reduce the quality of life of women and their families but also hold back progress toward national goals for poverty reduction and inclusive growth (goals shared by ADB). Critical constraints faced by women that must be taken into account in ADB's sectoral analyses and project planning are summarized below. (See Box 2 for data highlights at the national level. These refer to India as a whole, as does the discussion below, but it is important to note that regional differences are significant. State-level data is provided in the appendix.)

 Women's representation in industry and services, the higher-growth sectors in India recent years, is much lower than in agriculture and male-female wage gaps remain significant.

A high proportion of rural women continue to be engaged in agriculture (79% of women, compared with 63% of men in 2009–2010) and the shift to other sectors has been slower for women than men (comparable data of 1977–1978 was 88% of women and 81% of men). In wage employment in the nonagricultural sector, including urban and rural, women account for only 18.6% of employment.

Women's share of wage employment in the nonagricultural sector is one of the gender equality indicators for the Millennium Development Goals as it shows the extent to which women are able to move into employment with higher returns on their labor. Gender biases in the labor force are also evident in the wage gap

SRS, Office of the Registrar General, India. 2011. A Presentation on Maternal & Child Mortality and Total Fertility Rates (07–07–2011). www.censusindia.gov.in/2011-common/vitalstatistics.html

National Family Health Survey, 2005-2006 (NFHS-3). Table 15.6 (experience of violence) and Table 14.16 (attitudes toward wifebeating). www.rchiips.org/NFHS/chapters.shtml

National Sample Survey Organization, Ministry of Statistics and Programme Implementation. 2010. NSS Report No. 537: Employment and Unemployment Situation in India: 2009–2010. para. 5.8.2. http://mospi.nic.in/mospi new/admin/Login.aspx (log-in required, but only requires registration).

Central Statistics Organization, Ministry of Statistics and Programme Implementation. 2011. Millennium Development Goals: India Country Report 2011. Appendix 3, Table 6A. www.undp.org/content/india/en/home/library/mdg/mdg_india _country_report_2011.html

between men and women. Some of the wage gap is due to women being clustered in lower-skill and lower-wage activities. However, women are also paid less than men for similar work. Among the many factors in the persistence of such discrimination is the perception that women are secondary earners and that lower wages for them are therefore justified. In addition, many women are unaware of minimum wage standards and laws against employment discrimination.8

▶ Low asset ownership among women, particularly land and housing, has broad impacts on women's opportunities and well-being.

Very few rural women are landowners. Land ownership is a major factor in access to other resources—without title, women are less likely to be considered "farmers" and targeted for extension services, training, and new technologies. In addition, bank credit is more difficult to obtain without land titles, so the impact extends to women's ability to finance agribusiness and selfemployment as well as inputs for farming.

Insecure tenure is also a major problem for poor women in urban areas. Ownership of housing brings a range of benefits; it provides not only a secure place to live but also a means or a place to earn a livelihood and collateral for credit for emergencies or investments.

Several studies have documented other benefits of property ownership for women, including increased bargaining and decision-making power in households, lower levels of domestic violence, and less anxiety over physical security.9

While financial services have yet to reach a large proportion of the population, women are disproportionately represented among those without access.

This includes access to savings services and insurance, both of which enable the poor to guard against the risk associated with debt. Group-based lending and microfinance have increased women's access to credit, but the amounts remain small and do not cover needs related to lifecycle events or entrepreneurship. Poor

women would benefit from more attention to developing appropriate financial services products, including microsavings and microinsurance as well as microcredit and measures to increase financial literacy. Another gap is financing options for women whose enterprises are ready to expand beyond the capacity of the microfinance available to them.

Women's high workloads are exacerbated by deficiencies in basic water and sanitation services in both urban and rural areas.

Improved living conditions are important for all, but particularly for poor women, who are the most exposed to the drudgery and indignity associated with the lack of water and sanitation services. Deficiencies in basic services increase the time and effort for household water collection, waste disposal, and family hygiene, all responsibilities usually carried by women that can also constrain the time available for income-earning activities. Inadequate toilet facilities also expose women to indignity and increase the risk of sexual harassment and assault.

The burden of continued heavy reliance on biomass fuels for household energy falls disproportionately on women.

A large proportion of households remain dependent on traditional biomass fuels that are inefficient, create health risks, and require much female time and energy to collect. Cooking fuel is a major household need that has received minimal investment. Women's access to energy for income generation and entrepreneurship can be constrained by some of the other dimensions of inequality noted above, including lower earnings and limited assets.

Women-specific transport concerns have yet to receive adequate attention in policy and planning.

Much of rural and urban transport is on foot, but little attention is accorded to facilitating pedestrian movement and safety by improving footpaths in rural areas or sidewalks and streetlights in urban areas. Such improvements would benefit all pedestrians, but would particularly benefit women, who are more likely than men to be pedestrians.

Women are also more dependent than men on urban public transport, but planning does not yet take sufficient account of how routes and fare structures could facilitate women's access to jobs, shops, schools, and health centers, particularly where several destinations need to be combined in the same trip from home. Another critical issue for women in both rural and

Department for International Development, United Kingdom. 2010, Gender, Caste and Growth Assessment-India. pp. 69-70. https://ueaeprints.uea.ac.uk/18809/

Deininger, Klaus et al. 2010. Inheritance Law Reform and Women's Access to Capital: Evidence from India's Hindu Succession Act. World Bank Policy Research Working Paper 5338. http://go.worldbank.org/CNLI8M1800); and Panda, P. and B. Agarwal. 2005. Marital violence, human development and women's property status in India. World Development. 33(5):823-850. http://binaagarwal.com/acedemic_papers.htm

urban areas is the pervasive risk of harassment they face as pedestrians, in passenger waiting areas, and in buses and trains.

▶ Women facing particular difficulties include women who are household heads, who are single, and who are members of minority groups.

Female-headed households (14% of households in 2005-2006) are more likely to be economically vulnerable than male-headed households (women household heads tend to be older and less educated than male household heads, and less educated than the average woman). 10

The category of "single women"—widowed, divorced, separated, and never-married women—has received less attention to date than female-headed households, but these women also face particular constraints. While some single women may be heads of households, others are not and there is growing awareness of the ambiguous and precarious position of widowed and divorced women who may live within families but remain responsible for maintaining themselves and their children. 11

Single women have formed organizations in several states and have recently collaborated to establish a national forum to advocate for the rights of single women. Some of the issues highlighted by advocacy organizations are summarized in Box 2. The midterm appraisal of the 11th Five Year Plan also recommended more policy and program attention to single women in light of the unique problems they face. 12

Finally, women who are Muslim or from scheduled tribes or castes face double disadvantage: the indicators of well-being for all three groups are below those of the rest of the population, and are even lower for women in these groups. The situation of Muslim women may be particularly constrained as they do not benefit from the reservations for education and government employment that are in place for scheduled castes and tribes. For

- Maintaining rights of widows to inherited land. Daughters and widows often lose lawfully inherited land through intimidation and seizure by relatives. In Rajasthan, advocates have used a strategy of verifying the legal documents, alerting the police to intimidation, and holding a public ceremony to formally present the land transfer certificate to the widow or daughter. If this public approach fails, the advocates assist with legal action.
- Obtaining separate food ration cards. Where food ration cards go to heads of households, predominantly male, they have sole power over access to subsidized foods by family members (including divorced and widowed women within the family). Advocates in Himachal Pradesh persuaded local officials to issue separate ration cards to single women.
- Securing drought-relief work for single women. Advocates in Rajasthan worked to ensure access by single women to the central government's flagship program that guarantees households a minimum 100 days manual work per year, and to ensure the implementation of the program provision for the payment of equal wages to women and men for such

Source: S. Majumdar. 2010. India's Single Women Resist Stigma, Demand Rights. WeNews. 10 January. http://womensenews.org/print/7944

example, Muslim women have the lowest female literacy rates among all religious communities. 13

Government Commitments

With its emphasis on women as agents of development rather than a vulnerable group, the 11th Five Year Plan reflected an important shift in approach and in recognition of women's current and potential contributions to development. Input documents for the 12th Five Year Plan also reflect this approach. 14 The central government's commitment to inclusive growth and the rights-based strategy pursued in key areas (rural livelihoods, education, and food security) also have the

Box 3: Issues Being Pursued by Advocates for the Rights of Single Women

Kishor, S. and K. Gupta. 2009. Gender Equality and Women's Empowerment in India. National Family Health Survey (NFHS-3), 2005–2006. Ministry of Health and Family Welfare. www.rchiips.org/NFHS/sub_report.shtml

See, for example, Desai, S. and M. Banerji. 2008. Negotiated Identities: Male Migration and Left-Behind Wives in India. Journal of Population Research. 25:3. http://ihds.umd.edu/papers.html

Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan. Chapter on Women's Agency, para. 11.48. www.planningcommission.gov.in/plans/mta/11th_mta/MTA.html

 $^{^{\}rm 13}$ "Scheduled castes are also referred to as "Dalits" and scheduled tribes as "Adivasi." Scheduled castes and tribes are recognized in specific schedules of the Constitution as having particular needs to overcome social disadvantages. For a useful recent discussion of Dalits and Adivasi, see World Bank. 2011. Poverty and Social Exclusion in India. Text in PDF available at http://go.worldbank.org/U2WJNKI8H0. For Muslims, the best overview is the 2006 Social, Economic and Educational Status of the Muslim Community in India (Sachar Report), prepared by a high-level Prime Minister's committee: www.mfsd.org

Planning Commission. 2012. Report of the Steering Committee on Women's Agency and Empowerment. http://planningcommission.nic.in/aboutus/committee/index.php ?about=12strindx.htm

potential to improve outcomes for women. Legislation or policy statements in many sectors include commitments to strengthening women's rights and opportunities.

As India is a federal state, authority over particular policy domains could be at the central or state level or shared between them. For example, state governments have over agricultural land, water, authority development, and local government, all important fields in relation to ADB initiatives. However, the central government also takes a leadership role in these and other areas of state jurisdiction through five-year plans, national level policy statements, and/or model bills that can be adopted or modified at the state level. Major programs (often called "missions") and centrally funded schemes also enable the central government to pursue national priorities.

The paragraphs below highlight a number of policy themes and signals that are relevant to ADB initiatives in collaboration with central, state, or local partners.

▶ The central government has promulgated a range of legislative measures to strengthen women's rights.

The Hindu Succession Amendment Act, 2005 established new rights for women to inherit agricultural land and strengthened the rights of daughters as heirs to joint family property. 15 The Protection of Women from Domestic Violence Act, 2005 was passed in the same year and Parliament is now considering the *Protection of* Women Against Sexual Harassment at the Work Place Bill, 2010, which follows up on a Supreme Court decision requiring employers to have a complaint mechanism to deal with this widespread problem; the bill aims to cover all workplaces in the public and private sectors. India is also a signatory to the International Labour Organization's labor standards conventions, including conventions barring discrimination against women in employment and wages, and has national legislation on minimum wages, equal remuneration, and maternity leave. These and other measures 16 provide an important

foundation for rights, but government documents also emphasize the importance of greater awareness of the rights outlined among the public (both women and men) and among government officials.

High priority has been given to ensuring women's representation in decision making, by both central and state governments.

Since the 73rd and 74th constitutional amendments of 1992 that established rural and urban local bodies, a one-third reservation for women has applied to local decision making. This has resulted in a significant increase in the representation of women and in their opportunities to influence decisions that affect their communities and their lives. Implementation is through state legislation, and several states have increased the reservation from one-third to 50% for either rural or urban local bodies or both. (States adopting the 50% reservation include, for rural governments, Bihar, Madhya Pradesh, West Bengal, and Karnataka, Uttarakhand; for urban local governments, Andhra Pradesh, Kerala, and Tripura; and for Maharashtra.) A constitutional amendment to extend the 50% reservation nationwide is also in process.

These are important steps toward increasing women's influence on decisions affecting their communities and their lives. Studies have found that increased exposure to women politicians has had a positive impact on community attitudes toward women in public office, 17 and that women's participation results in more attention to the issues they prioritize. 18 At the same time, observers still point to the additional measures required to achieve effective participation by elected women throughout the country, such as training to achieve better awareness of the functions of local bodies and support for networking among elected women. 19

National policies aim to strengthen women's access to skill training for employment.

The National Policy on Skill Development, 2009 aims to increase women's participation in vocational training to

For a concise review, see Agarwal, B. 2005. Landmark step to gender equality. The Hindu Magazine. 25 September. www. hindu.com/mag/2005/09/25/stories/2005092500050100.htm The act covers the Hindu population, or more than 80% of women. For inheritance issues for non-Hindus, see Agarwal, B. 2005. Women's inheritance: next steps: a look at the disabilities non-Hindu women face. The Indian Express. 17 October. www.binaagarwal.com/popular_writings.htm

See review of laws adopted to protect women in Planning Commission report (footnote 14), pp. 32-43. Also useful is the listing of such legislation with links to the legal text in WikiGender:

www.wikigender.org/index.php/Indian Laws relating to Women %26 Children

Poverty Action Lab (MIT). 2012. Raising Female Leaders. Policy Briefcase. April. www.povertyactionlab.org/publication/raisingfemale-leaders

Poverty Action Lab (MIT). 2006. Women as Policy Makers. Policy Briefcase. www.povertyactionlab.org/evaluation/impact-womenpolicy-makers-public-goods-india

See discussion on pp. 66-73 in Planning Commission report (footnote 14).

at least 30% by 2012 through counteracting discrimination as well as proactive measures such as scholarships, transport, and loans. The policy promotes both vocational training in fields employing women and women's participation in nontraditional areas. 20 ADB can play a role in supporting implementation by ensuring that project-financed skill development activities reflect the policy's aims, including the promotion of women's access to skill training in a range of fields.

National policies show a commitment to increasing women's employment opportunities and wages.

This commitment is evident in the National Rural Employment Guarantee Act, 2005, which provides the basis for the national flagship program in support of rural livelihoods, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). The act calls for 33% participation by women and for the use of minimum wage rates in payments to all workers (i.e., equal wage rates for women and men). The program has been found to provide major benefits to women by enabling them to access wage employment at the minimum wage where wage employment opportunities were otherwise very limited for women and wage practices biased against them. 21 The aim of broadening opportunities for women and providing equal wages would also be relevant to construction and maintenance employment related to the energy projects.

Antipoverty, housing, and resettlement schemes have been identified as having a role in securing women's property rights.

The 11th Five Year Plan emphasizes the importance of property and land rights to women's economic empowerment and security. It states that

[t]he Eleventh Plan will carry out a range of initiatives to enhance women's land access. It will ensure direct transfers to them through land reforms, anti-poverty programmes, resettlement schemes. It will include individual or group titles to women in all government land transfers.... In case of displacement, a gender sensitive rehabilitation policy that includes equitable allocation of land to women will be devised. The Eleventh Plan will also ensure the rights of poor,

landless, and tribal women over forest land, commons, and other resources.²²

The plan also makes a commitment to ensuring that housing provided by government during the plan period will be either solely or half in the name of a woman.²³

New flagship programs to strengthen livelihoods for the rural and urban poor give a prominent role to self-help groups and to women.

Both the National Rural Livelihoods Mission (NRLM) launched in 2011 and the National Urban Livelihoods Mission proposed later that year promote the formation and strengthening of self-help groups (SHGs), with the aim of involving a member of every poor household, preferably a woman. The missions seek to reach the poor with sufficient support, including training and access to credit, to enable them to access wage employment or undertake self-employment.

The outreach to women is an important recognition of their role and livelihood needs. There is also growing recognition that SHGs and microcredit cannot on their own overcome women's poverty and disempowerment. As pointed out in the input documents for the 12th Five Year Plan, many women's SHGs (particularly among the poorest communities, scheduled castes, scheduled tribes, and single women) have few skills or assets and limited ability to absorb credit and therefore face considerable difficulty in establishing enterprises. This underlines the need to address structural factors such as illiteracy, lack of investment, and poor creditworthiness as part of livelihood strategies.²⁴

A target of at least one-third participation by women as program beneficiaries has been set for all sectors.

The 11th Five Year Plan requires that "at least 33% of the direct and indirect beneficiaries of all government schemes are women and girl children." This commitment is also made by a number of states in state-level fiveyear plans for the same period. It has also been specifically stated in key schemes. For example, MGNREGS, the national flagship program in support of rural livelihoods, sets a minimum target of 33% participation by women and mandates equal pay for women and men. This approach has been shown to

National Policy on Skill Development, 2009. www.skilldevelopment.gov.in/node/163

Khera, R. and N. Nandini. 2009. Women workers and perceptions of the National Rural Employment Guarantee Act, India. Economic and Political Weekly. 44(43):49-57.

http://eprints.soas.ac.uk/7832/; and the act's website: nrega.nic.in

Planning Commission. 2007. Eleventh Five Year Plan. Vol. II, para. 6.32. planningcommission.nic.in/plans/planrel/fiveyr/ welcome.html

²³ Planning Commission (footnote 22), para. 6.41.

²⁴ Planning Commission (footnote 14), pp. 12–13.

provide major benefits to women by enabling access to wage employment at minimum wage in rural areas where wage employment opportunities are otherwise limited for women and wage practices are biased against them.²⁵ Another example relevant to ADB initiatives is the 30% target for women's participation set by the National Policy on Skill Development, 2009, which also outlines a strategy to achieve this target that includes scholarships, transport and loans for women, and steps to counter discrimination.²⁶

More systematic and coordinated approaches to gender issues and women's empowerment are being pursued.

Policies or legislation in several sectors include provisions in support of gender equality or women's participation. The formulation of such provisions reflects an increased awareness among decision makers of the need for specific protections or targets to enable women to participate or benefit equitably.

The 11th Five Year Plan also promotes more systematic attention to gender equality and women's interests across government. Toward this end, the plan promotes "gender budgeting," which it described as a strategy to "assess the gender differential impact of the budget and take forward the translation of gender commitments to budgetary allocations." ²⁷ Ministries and departments in all sectors are called on to establish gender budgeting cells to review public expenditure, collect sexdisaggregated data, and conduct gender analysis, drawing on the guidance and tools developed by the Ministry of Women and Child Development.

Another major strategy aimed at making government more effective in reaching and serving women is the National Mission for the Empowerment of Women launched in March 2010. The mission emphasizes intersectoral convergence at all levels of government to increase awareness and access to government schemes and programs.²⁸

Box 4: Highlights of Government Commitments on Gender **Equality Relevant to ADB Initiatives in India**

- **Increasing women's employment opportunities:** National Employment Policy, draft 2008 (equality in labor market, increased access to opportunities); Mahatma Gandhi National Rural Employment Guarantee Scheme (33% participation by women and equal pay for women); state-level policies on the public service (e.g., reservation of 33% of government jobs in Madhya Pradesh, 30% in Karnataka); state programs supporting women's enterprise (e.g., for women's agro-enterprise in the Orissa State Agriculture Policy, 2008).
- Eliminating discrimination in wages, recruitment, and working conditions: Equal Remuneration Act, 1976 (equal pay; equal treatment in recruitment, promotions, and training, for women and men for the same and similar work).
- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (women's participation in vocational training, with target of at least 30% by 2012, use of proactive measures such as hostels, scholarships, transport, loans); also of concern at the state level, such as Rajasthan 11th Five Year Plan (expansion of technical training facilities and employment-related courses for women).
- Improving women's employment opportunities and wages in the construction sector: National Urban Housing and Habitat Policy, 2007 (skill upgrading, employment in supervisory positions, and development as contractors; requirement that construction companies and public authorities provide adequate support services and facilities such as crèches and toilet facilities; promotion of state legislation on health, safety, and insurance measures, especially for women in construction).
- Increasing women's participation in all government programs: 11th Five Year Plan, 2007–2012 (minimum of 33% participation); reiterated in some state-level five-year plans for the same period
- Strengthening women's ownership rights: Hindu Succession (Amendment) Act, 2005 (women's inheritance rights); 11th Five Year Plan 2007–2012 (transfers to women through land reform and antipoverty and resettlement programs; governmentprovided housing to be either solely or jointly in the name of the woman in the household). Several state governments acted in this area, such as Karnataka's draft housing and habitat policy, 2009 (public housing and public–partnership schemes to issue sole or joint title to a woman).
- Strengthening women's participation in water resource management: National Policy for Farmers, 2007 (greater role for women as water users, both in access and management); similar issues addressed in state-level policies (e.g., Himachal Pradesh State Water Policy, 2005; Maharashtra Groundwater Development and Management Bill, 2009; Chhattisgarh Ground Water Bill, 2012, regarding participation of farmers and all other water users in irrigation management).
- Increasing women's participation in local decision making: 73rd and 74th constitutional amendments (establishing rural and urban local bodies, respectively; minimum of one-third representation of women); state governments are responsible for implementing legislation and several have increased (or are about to increase) the reservations to 50%.

Note: In 2011, the Government of India approved the name change of the State of Orissa to Odisha. This document reflects this change. However, when reference is made to policies that predate the name change, the previous name Orissa is retained.

Khera and Nandini (footnote 21).

National Policy on Skill Development (footnote 20).

Planning Commission (footnote 22), Vol. II, para. 6.74.

See the mission's website at nmew.gov.in

Overview

ADB in India: Building on Experience

The Asian Development Bank (ADB) has a significant long-term partnership with India, having approved loans amounting to almost \$26 billion in the period 1986-2010. A recent review of the 25-year development partnership notes how the program has evolved to include new sectors and new partners at the state level. Energy and transport have been key sectors from the outset and together account for almost 60% of ADB investments to date in India. Urban development is an increasingly important part of the portfolio, with an emphasis on basic infrastructure and related service delivery. In finance and public sector management, the focus has shifted considerably from initial activities in areas such as capital market development to the current focus on financial inclusion, state-level fiscal reforms, and infrastructure financing. Investments in agriculture and water resource management are a relatively recent addition to the ADB portfolio in India, having been introduced in the last decade as part of a reorientation toward a more direct focus on poverty reduction.

Some of the newer sectors and activities offer a broader range of entry points to formulate project outcomes and activities in support of gender equality, including initiatives related to agribusiness, water resource management, financial inclusion, and community development. However, experience in India and elsewhere shows that initiatives in all sectors provide opportunities for outreach to ensure that women are reached and benefited equitably.

ADB Experience in Addressing Gender Equality in India

Under the India country partnership strategy for 2009–2012, ADB aimed to "strengthen gender mainstreaming in all sectors, especially agriculture and water resources, urban development, renewable energy, roads and relevant financial subsectors." The challenge in translating the commitment into sectoral strategies and projects is evident in the limited way it is reflected in the strategy's sectoral roadmaps and results frameworks.

Nevertheless, progress was made, as shown in Box 1. Of the projects that were approved before the 2009–2012 strategy, only 18% showed gender mainstreaming (i.e., were categorized gender equity theme [GEN] or effective gender mainstreaming [EGM]), but 30% of those approved under the strategy (and 62% of projects in the pipeline for 2013–2015) had that status. The

Box 1: ADB Projects in India by Year and Gender Category*						
	ADB Gender Category Projects					
Year approved	GEN	EGM	SGE	NGE	All	% GEN + EGM
2000–2008	1	5	10	17	33	18%
2009–2012	1	18	26	10	60	30%
2013-2015**	1	33	19	1	54	62%

ADB = Asian Development Bank, EGM = effective gender mainstreaming, GEN = gender equity theme, NGE = no gender elements, SGE = some gender elements.

Note: See Box 3 for further explanation of categories.

Source: ADB.

For a review of the overall program and activities in each sector, see ADB. 2011. *India–ADB Development Partnership*. Manila. www.adb.org/publications/india-adb-development-partnership

^{*} Ongoing projects and project pipeline.

^{**} Estimates based on proposed projects, subject to change.

Box 2: Proportion of ADB Projects in India in GEN/EG	Mi
Categories, by Date and Sector*	

	2000-2008	2009–2012	2013-2015	
Agriculture and Water Resource Management	2/2	1/4	10 / 10	
Education (Vocational Ed. and Skill Development)	-	-	2/2	
Energy	0/9	2 / 18	4 / 13	
Finance and Public Sector Management	1/3	1/7	1/3	
Transport	0/11	2/11	4 / 12	
Urban Development	3/8	10 / 13	13 / 14	

- = none, EGM = effective gender mainstreaming, GEN = gender equity theme.

Note: See Box 3 for further explanation of categories.

Source: ADB.

proportions vary by sector, as shown in Box 2 for the same time periods.

In the **Urban Development Sector**, most projects approved under the CPS for 2009-2012 were categorized as qualifying for "EGM," and all those in the pipeline are targeted to achieve this. A major focus of gender equality efforts in the sector has been women's representation in the participatory processes related to project implementation. Projects have supported access to basic services critical to poor women, including female-headed households. Project community development and slum rehabilitation components generally include livelihoods initiatives that support women, often involving self-help groups (SHGs) and in some cases including access to credit for microenterprise.

In the Agriculture and Water Resource Management **Sector,** many current and pipeline projects aim for "EGM." Irrigation and water management projects have taken steps in include women in water users' associations, and both water and agribusiness projects are giving more attention to women as farmers and producers.

The Finance and Public Resource Management Sector includes several quite distinct activities. Of these, financial intermediation for microcredit has attracted the most attention from a gender perspective, but the potential to incorporate a gender perspective in projects focused on public resource management has also been recognized.

The **Energy and Transport sectors** have together accounted for almost 60% of ADB investment during the

25-year partnership with India to 2010. Much of the investment has been in major infrastructure, such as highways, state roads, power grids, and transmission lines. Such projects establish a framework for subsequent development rather than direct benefits to individuals and the options for addressing gender equality issues are therefore less obvious. Avenues pursued to increase benefits to women include, in the energy sector, an exploration of energy-based livelihoods for women entrepreneurs and, in the transport sector, awareness campaigns aimed at counteracting the potential impact of improved road networks on the spread of HIV/AIDS and on trafficking of women and children.

Many projects in most sectors involve construction to **build or upgrade infrastructure**. A number of projects have set targets for women's employment in such construction and have made commitments to equal pay for equal work. In some cases, this approach has been reinforced through the inclusion of a clause on core labor standards and targets for women's employment in the bidding process for construction contractors or through orientation sessions on these issues for contractors.

Across the sectors, India's high population density means that new infrastructure generally entails resettlement. Most resettlement plans identify the need to consult with women about resettlement approaches, although this is often narrowly focused on femaleheaded households. A broader approach taken in at least one project was to ensure the inclusion of women's names in legal titles to property allocated in the resettlement process, a measure that strengthens women's ownership rights and thus makes an important contribution to women's security and livelihood options.

Gaps and Challenges

While progress has been made, there is also a need to reflect further on the experience gained and results achieved in order to build on promising practices and successful innovations (and to draw lessons from poor or disappointing outcomes).

Areas of concern related to project preparation, design, and management include the following:

 Limited progress has been made in developing approaches to gender equality and women's empowerment in several major sectors (the energy and transport sectors each have a significant number of projects with "no gender elements").

^{*} Ongoing projects and project pipeline, by year approved or scheduled for processing

- Better use could be made of the opportunities provided by technical assistance projects and sector studies to deepen understanding of gender disparities and possible strategies to respond, particularly in new sectors of activity (e.g., skill development, urban transport) or new lending modalities (e.g., public-private partnerships).
- Further attention needs to be paid to ensuring that the gender elements incorporated into project designs are based on a gender analysis and are tailored to project-specific objectives and outcomes.
- A more strategic and evidence-based approach to targeting is needed if targeting is to be an effective management tool.
- · Limited efforts have been made to date to seize the opportunities in capacity building and policy reform initiatives to engage with partners in support of gender-responsive policy reform.
- Staff of the resident mission have limited influence on project designs and gender action plans, despite the perspective they could provide on the basis of experience with the local implementation context.
- There seems to be a tendency toward a gradual "evaporation" of intentions and commitment to gender equality as a project moves from initial plans through the implementation and monitoring cycle.

Another set of concerns relates to achieving greater clarity about the results to be achieved through the gender-related design features or actions proposed for a project. While many process steps are recommended as part of a gender mainstreaming strategy (gender analysis, engagement of specialists, preparation of gender action plans, etc.), these are all tools, not ends in themselves. The aim of gender mainstreaming is to ensure that ADB investments contribute to improving the lives of women by reducing gender disparities and supporting equitable access to resources and benefits. Many ADB projects offer opportunities to contribute to one or more of the gender equality outcomes highlighted below.

• Strengthened awareness and implementation of women's rights. Consistent attention to providing job opportunities and equal pay in the construction employment created by ADB projects would not only support the women hired but also contribute to broader awareness of women's rights in the labor market. Related areas that ADB could pursue include increased awareness among communities and contractors of women's rights to minimum wages, appropriate working conditions, and protection from

Box 3: ADB Gender Categories and Specific Requirements for the Effective Gender Mainstreaming Category

Gender Equity Theme (GEN)

- · Directly supports gender equality and women's empowerment
- All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- · See specific requirements for EGM below

Some Gender Elements (SGE)

- · Does not meet EGM criteria BUT
 - ... provides some direct and substantial benefits to women because of the nature of the project OR
 - ... includes some gender-related design features in project design or resettlement

No Gender Elements (NGE)

· Gender issues not integrated in design

Effective Gender Mainstreaming (EGM) Requirements Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. The following project requirements must be met to qualify as EGM:

- The social analysis conducted during project preparation included careful consideration of gender issues highlighting both constraints and opportunities.
- Specific gender design features are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs/components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are in the project design and monitoring framework.
- A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the project administration manual.
- The RRP main text discusses how the project will contribute to improving women's access to or benefits from the project, at a minimum in the Due Diligence section.
- The policy matrix contains a covenant or a condition to support implementation of the gender action plan.

See Guidelines for Gender Mainstreaming Categories of ADB Projects. www.adb.org/Gender/gender-categories.asp

sexual harassment. Many projects also offer opportunities to increase awareness among women, communities, and officials of policy and legislation on women's rights in relation to property and inheritance, family violence, and trafficking.

- More equitable access to key resources. Many ADB projects, particularly in relation to resettlement, have opportunities to ensure that titles to land and property are placed in women's names or jointly with their husbands (a strategy proposed in the 11th Five Year Plan). Ensuring equitable access to other key resources provided through ADB projects is also important, including, for example, access to water resources provided through irrigation systems and access to training and other supports in the small business sector. ADB could identify and pursue such opportunities through project implementation strategies and, where policy or regulatory reform is required, through supporting partners to achieve the necessary reforms.
- New or more secure livelihood opportunities for women. New areas to explore include the potential support of livelihood opportunities related to ADB investments, such as energy-based microenterprise and entrepreneurial opportunities related to energy sector investment, employment and entrepreneurial transport opportunities related to urban improvements, and tourism-related livelihoods made possible by urban infrastructure investments. Another issue for continuing attention is support for the re-establishment of women's livelihoods when they are disrupted by project-related resettlement.
- Improved access to or use of government services by women. ADB projects offer opportunities to facilitate women's awareness of and access to government services in areas prioritized by the Government of India, such as rural and urban livelihoods (including access to the flagship Mahatma Gandhi National Rural Employment Guarantee Scheme and to training under the National Policy on Skill Development, 2009) and financial intermediation (such as participation in the Aadhaar identification system that is critical to financial inclusion and access to government services). ADB follow-up in such areas would be in accordance with and support the government's National Mission for Empowerment of Women.
- Increased capacity of partner government agencies to reach and serve women. ADB partners have ongoing responsibilities to support communities and deliver services to the public, women, and men alike. Many ADB projects include components to strengthen partner capacity for policy review and program implementation. As part of this, opportunities could be identified to address capacity gaps related to equitable targeting and service

delivery to women in ADB priority sectors. This could include, for example, improvement of data systems so that they generate the sex-disaggregated data necessary for analysis of program delivery and impacts. In urban planning, which is increasingly prominent in the ADB portfolio, ADB could give particular attention to gender mainstreaming in the tools for urban planning, in participatory processes, and in analysis of service needs and delivery methods. ADB could also engage with selected partners at central and state levels that show particular interest or potential to involve and benefit women, such as partners in financial intermediation, renewable energy, and urban poverty.

A clearer focus on the outcomes that ADB seeks to achieve in a particular project—the changes for women or the changes in gender disparities—would allow for more focused integration of gender issues in project design, would facilitate communication with partners and communities, and would assist in implementation.

ADB's Gender Strategy for India

ADB's Strategy 2020 identified gender equity as one of the five drivers of change and undertook a commitment that ADB would support gender equity through genderinclusive projects and would pay careful attention to gender issues across all sectors.

In its India program, ADB aims to increase the proportion of projects with gender mainstreaming (as indicated by the gender category for pipeline projects set out in Box 1 above). ADB effort to strengthen gender equality outcomes in collaboration with government partners to provide support for national aims to better reach and serve women in all sectors. This strategy is in line with the "finance plus" criteria set out by the Government of India to guide selection of ADB projects as it outlines approaches that, if taken, can contribute to achieving systemic or transformational impacts.²

Box 4 sets out the practical steps proposed for ADB's gender strategy for India under the country partnership strategy for 2013-2017. This includes specific commitments by sector and several general or crosscutting commitments related to the processes for project planning, design, and management.

The "finance plus" criteria for selection of projects are related to systemic or transformational impact, innovation and piloting of new approaches, and innovations in financing and leveraging.

Box 4: ADB's Gender Strategy for India

Under the country partnership strategy, 2013-2017 ADB will give further attention to the Commitments by sector following issues and objectives to enhance impacts on women's empowerment and gender equality: Agriculture and Water Resource Management: increased access by women to water for household, livestock, and other uses; broader participation of women in water resource management (whether or not they are land title holders); ensuring that disaster risk reduction and climate change adaptation measures take account of women's interests; equitable access to employment in construction, maintenance, and agro-enterprise. Education: increased access by women to quality training in marketable skills and subsequently to employment; improved facilities and environment for women in technical and vocational training establishments. Energy: in energy distribution initiatives, increased attention to household energy needs and to women's contribution to energy efficiency as consumers and entrepreneurs; drawing lessons from innovative efforts to strengthen women's energy entrepreneurship; and increase knowledge of women's and men's energy needs and preferences, and access to energy. Finance and Public Sector Management: assess experience in financial intermediation for women's micro, small, and medium-sized enterprises, including capacity needs of intermediaries in serving women; identify opportunities to integrate a gender perspective into policy, fiscal, and regulatory reforms. Transport: continued attention to mitigation measures related to sexually transmitted infections and human trafficking in major port, rail, and highway construction projects; increased attention to urban women's transport concerns, particularly safety while waiting for and using public transport services and affordability of mass transit for access to employment and services. • **Urban Development:** engage with selected state and municipal partners that demonstrate particular interest and potential to involve and benefit women and build their capacity for gender equity initiatives; increase gender mainstreaming in the tools and processes for urban planning; identify opportunities to strengthen tenancy and ownership rights of poor women as part of community development or resettlement; identify ways that ADB can contribute to safer cities for women. **General commitments** ADB will strengthen its gender equality outcomes in collaboration with government partners at both central and state levels through improving the quality of gender analyses done during the project preparatory technical assistance, in particular by aligning the analyses more closely with project objectives; (ii) reflecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents; (iii) monitoring achievement of key gender equality outcomes in design and monitoring frameworks; (iv) selectively using technical assistance resources to build knowledge and capacity to deliver gender-responsive outcomes; and (v) engaging in gender-responsive policy, legal reform, and legal empowerment in ADB priority sectors. Resources prepared to support the program in taking on this challenge include the following: **Guidance resources** • India Gender Equality Diagnostic of Selected Sectors (prepared in 2012 covering the ADB priority sectors, as listed above), and Gender Equality Reference Sheets (prepared in 2011 for most ADB partner states in India and available on the ADB internal website). Source: ADB. Country Partnership Strategy 2013-2017 (draft).

PART B

Gender Mainstreaming in ADB Sectors

Gender Mainstreaming in ADB Sectors

Agriculture and Water Resource Management

Almost 70% of India's population of 1.2 billion—some 833 million persons—live in rural areas. Agriculture is an important component of rural livelihoods, although returns are modest and cultivation accounts for only 33% of the incomes of rural households (with agricultural wage labor contributing another 12%). Poverty rates are high in rural areas, particularly in Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, and Uttar Pradesh, where poverty levels are more than double those in Kerala and Punjab. In almost all areas, poverty levels in rural communities are higher, and sometimes much higher, than in the cities.

Given the importance of agriculture in providing subsistence and employment to a large proportion of the population as well as food for the nation, the belowtarget growth in the sector was an important concern in formulating the approach to the 12th Five Year Plan for the period 2012-2017. According to the Planning Commission, there is evidence from other countries that growth in the agriculture sector is two to three times more effective than growth in other sectors in reducing poverty, but even with high levels of growth in agriculture, the sector is unlikely to be able to absorb the growth in the labor force. Thus the performance of both the agriculture and nonfarm sectors is critical to the goal of inclusive growth pursued by the Government of India. Related concerns include the increasing stress on water resources and the need for more effective water

resource management for agriculture, households, and industrial uses, and the vulnerability of communities and livelihoods to the effects of climate change.⁴

Investments in the agriculture and water resource management sector are a relatively recent addition to the India portfolio of the Asian Development Bank (ADB).⁵ Initiatives in this area were introduced under the 2006-2009 strategy as part of a reorientation toward a more direct focus on poverty reduction. Activities have mainly been concerned with irrigation infrastructure and water resource management, including capacity building of water users' associations, coastal protection, and management of flood damage and riverbank erosion. Agribusiness infrastructure and opportunities also feature among current and upcoming activities. The participatory management and livelihoods components of many of these projects provide considerable scope for ensuring that women participate and benefit.

This chapter aims to assist in efforts to identify how ADB projects in this sector could have positive impacts on women's opportunities and quality of life and thus contribute to the gender equality objectives of both ADB and the Government of India. It is organized into four sections:

 a brief review of the gender equality issues most relevant to the ADB objectives and activities in the sector, with a focus on rural livelihoods and community involvement in water resource management;

Census of India. 2011. Provisional figures, Paper 2. http://censusindia.gov.in. See data tables in the appendix of this report for state-level data.

Desai, S. et.al. 2010. Human Development in India: Challenges for a Society in Transition. pp. 12–19. http://ihds.umd.edu/report.html

Based on 2009–2010 data. See the Table A4 in the appendix for details by state, rural/urban comparisons, and source information.

Planning Commission. 2011. Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan. paras. 1.21–1.23, 1.39–1.43, 2.12. http://planningcommission.nic.in

For an overview of assistance in the sector, see ADB. 2011. India– ADB Development Partnership. www.adb.org/publications/indiaadb-development-partnership. Also see project list in Box 13.

- an overview of government policy commitments pertinent to ADB initiatives in the sector;
- a summary of how ADB has approached gender mainstreaming in its investments in the sector; and
- points for attention in sectoral analyses and project preparation to strengthen gender equality outcomes (and a "tipsheet" to aid analysis and design).

Key Gender Equality Issues in the Sector

Rural Livelihoods

Women's contributions are critical to the well-being of rural households.

Rural households generally depend for their livelihood on various activities pursued by household members, including crops, kitchen gardens, large and small livestock, wage labor, and other income-earning and self-provisioning activities of both the women and men in the household.⁶ The constraints women face in increasing their productivity and incomes thus result in costs to all poor households, whether they are led by men or women.

Women are often overlooked as farmers and cultivators or as workers producing goods and income. Women's access to capital and credit is less than that of men. Women also experience gender biases in labor markets and wages and have inadequate access to information about rights, opportunities, technologies, and support programs. Tackling rural poverty requires attention to the way these constraints limit the contributions women can make to lifting their families and themselves out of poverty. Women as well as men need opportunities to develop marketable skills, to use productivity-enhancing technologies, to benefit from training and extension, and to obtain credit.

Also important to recognize is that poverty can be experienced differently by various members of rural households. Gender biases in consumption, in the use of household resources, and in household decision making can exacerbate the burden of poverty for women, and can even result in poverty among women living in nonpoor households. The situation of single women

Box 1: Proportion of Rural Women and Men Engaged in Agriculture, 1977-2009

	Women (%)	Men (%)
1977–1978	88	81
1983	88	78
1987–1988	85	75
1993–1994	86	74
1999–2000	85	71
2004–2005	83	67
2007–2008	84	67
2009–2010	79	63

Note: Figures refer to the "usually employed." Includes farming, dairy, livestock, horticulture, etc., as cultivators or agricultural

Source: National Sample Survey (NSS). Report No. 531: Employment and Unemployment Situation in India: July 2007-June 2008, updated for 2009-2010 under NSS Report No. 537. para. 5.8.2. http://mospi.nic.in/mospi_new/admin/Login.aspx

and widows within larger households can be particularly precarious. 8 This point requires emphasis because of the tendency to regard households as the unit for analysis and for program targeting without adequate attention to disparities among household members and differences in their situation and needs.

There is room for large productivity increases by empowering women farmers.

In rural India in 2009-2010, 63% of men and 79% of women were engaged in agriculture. While men are still in the majority among farmers and agricultural workers (women account for about 40% of all agricultural workers), there has been a steady decline of men in agriculture over the last 2 decades, as shown in Box 1. Farm size has also been falling over this period—in 2003, 70% of farms were smaller than one hectare, compared with 56% in 1982. 10

These figures make it evident that the profile of the average farmer and agricultural laborer is changing. But while women account for an increasing proportion of producers, studies have found that yields tend to be lower on women's plots and farms. The lower yields are due to gender-based constraints that include "women's lower access to inputs, especially fertilizers; insecure

Desai (footnote 2), pp. 12–19; and Datta S. and V. Sharma. 2010. State of India's Livelihoods Report 2010. Access Development Services and Sage Publications. pp. 15 ff. http://accessdev.org/ Ih-li-soil.php

Agarwal, B. 2010. Rethinking agricultural production collectivities. Economic and Political Weekly. XLV, (9). http://ase.tufts.edu/gdae/ about_us/leontief/AgarwalRethinkingAgProdCollectivities10.pdf

Desai, S. and M. Banerji. 2008. Negotiated Identities: Male Migration and Left-Behind Wives in India. Journal of Population Research. 25:3. http://ihds.umd.edu/papers.html

Raw data to calculate this proportion for rural workers (or all workers) was not available in the published NSS data for 2007-2008; the 40% figure is for 2004–2005, calculated from NSS data by Agarwal (footnote 7).

¹⁰ Footnote 7.

land rights; lower access to male labour, oxen labour, and extension services; and difficulties in ensuring timely ploughing, weeding, or transportation." 11 The impact of the gender biases that constrain women farmers and the need to address them was a major theme in the FAO's State of Food and Agriculture Report 2011:

The obstacles that confront women farmers mean that they achieve lower yields than their male counterparts. Yet women are as good at farming as men. Solid empirical evidence shows that if women farmers used the same level of resources as men on the land they farm, they would achieve the same yield levels. The yield gap between men and women averages around 20–30 percent, and most research finds that the gap is due to differences in resource use. Bringing yields on the land farmed by women up to the levels achieved by men would increase agricultural output in developing countries between 2.5 and 4 percent. Increasing production by this amount could reduce the number of undernourished people in the world in the order of 12–17 percent. 12

Low ownership by women of productive assets, particularly land, has major implications for women's productivity, incomes, and well-being.

Data on ownership of assets including land and livestock tends to be on a household basis and thus provide little insight into what women themselves own. The most recent data for land ownership is from the 2005-2006 Agricultural Census, which shows that women held only 12.4% of cultivated holdings, 50% of them holding less than 0.5 hectares, and the total accounting for 9.9% of cultivated area held by individuals. 13 Not having title is a major factor influencing access to other resources without title, women are less likely to be considered "farmers" and to be targeted for extension services, training, and information about new technologies, even when these relate to the types of production in which women have predominated. 14 As bank credit is also more difficult to obtain without land title, low ownership

rates among women affects their ability to finance agribusiness and self-employment activities as well as inputs for farming.

There are significant differences among states in ownership of land by women—for example, 3% of cultivated land in Odisha, compared to 12% in Bihar, 16% in Maharashtra, and 22% in Andhra Pradesh. 15 This points to the role of cultural factors and social norms in influencing women's position and to the need to address such factors, as well as the law, in achieving change.

The shift from the farm to the nonfarm sector has been slower among women than men, and rewards for women's labor remain lower in both sectors.

According to a recent World Bank study, the result of faster growth in nonfarming activities than in farming, the nonfarm sector accounted for 30% of rural employment in 2004-2005, up from 20% 10 years earlier. Although nonfarm employment is increasingly likely to be casual work, even casual nonfarm employment pays more than agricultural wage employment (almost 45% more). However, it has been mainly men who have shifted to working primarily in the nonfarm sector, while women have remained locked in the less-remunerative agricultural work—indeed, their share of nonfarm employment declined between 1983 and 2004–2005 (from 26% to 23%). 16

Women and men tend to do different types of agricultural wage labor. Activities in which women predominate, such as weeding and transplanting, are more likely than men's to be classified as unskilled work under minimum wage legislation, which both reflects and reinforces assumptions about women workers. 17 For casual agricultural labor, women's wages are 69% of those of men. The National Commission for Enterprises in the Unorganized Sector found that more than 95% of women working as agricultural wage workers earned wages that were below minimum wage rates. Even so, women were unable to get work for more than part of the year, and many fewer days than was the average for men doing agricultural wage labor. 18

Agarwal, B. 2011. Food Crisis and Gender Inequality. DESA Working Paper No. 107 (ST/ESA/2011/DWP/107). www.un.org/esa/desa/papers/2011/wp107_2011.pdf

¹² FAO's State of Food and Agriculture Report 2010–2011. p. 5. www.fao.org/publications/sofa/en

Online data from the 2005-2006 Agricultural Census: http://agcensus.dacnet.nic.in/nationalT1sizeclass.aspx. About 44% of men's individual holdings were also less than 0.5 hectare.

Srivastava, N. and R. Srivastava, R. 2010. Women, Work and Employment Outcomes in Rural India. Economic and Political Weekly. XIV (28). 10 July. p. 53. http://environmentportal.in/files/ Women%20Work%20and%20Employment%20Outcomes.pdf

Further state-level data is presented in Table A6 in the appendix, drawn from Agricultural Census 2005-2006 (footnote 13).

World Bank. 2011. Perspectives on poverty in India: stylized facts from survey data. p. 135: http://go.worldbank.org/XCAKAZWTP0

Kamala, S. and R. Madhave. 2011. Gender equality and social dialogue in India. International Labour Organization Working Paper 1/2011. p. 12. www.ilo.org/publns

For a careful and detailed review of rural employment and wages, see Srivastava and Srivastava (footnote 14).

About half of rural nonfarm work is self-employment (further discussed below), with the remaining half divided between casual wage labor (28%) and regular salaried work (22%). In these categories, the disparity in wages between women and men is even greater than in agriculture: women's wages were 69% of men's in agriculture, but 65% for nonfarm casual labor and 57% in regular nonagricultural wage employment. Again, much of the gap has been attributed to the tendency of men and women to do different work and the undervaluation of skills in activities in which women predominate. 19

Women's nonfarm self-employment and enterprises tend to be less remunerative than those of men.

"Self-employment" includes some very different subcategories—those who employ other persons, those who work on their own account, and helpers (mostly unpaid workers in family enterprises). Self-employed women are much more likely than men to be in the "helper" category. Women's proprietary enterprises tend to be very small, with about one-third having fixed assets as low as Rs1,000 (approx. \$19) and most reporting returns lower than the national minimum wage. Men's enterprises tended to be bigger and to provide more value added per worker, and be less likely to report returns below minimum wage. Twice as many women as men were in home-based enterprises, many of them on a subcontract basis and paid as piece-work.²⁰ While the data suggests that many such enterprises provide marginal returns to men as well, it is clear that women are particularly challenged in generating reasonable incomes or receiving any direct returns at all.

▶ Women want opportunities for employment and self-employment.

Women's recorded rates of workforce participation are low in India compared with other countries. In some part, this reflects what is counted as "work" and the extent to which unpaid contributions to family enterprises are recognized, both factors that can contribute to undercounting of women's economic activity (e.g., the following are not counted: sewing or weaving for household use or the collection of roots, cattle feed, or firewood for household use).²¹ Women's domestic work also demands considerable time and effort, particularly in

poor households. However, a recent review of evidence from the national 2004–2005 survey of employment and unemployment concluded that women want work outside the home or in addition to their domestic duties—one-third of women doing only domestic work at the time of the survey would take paid work in addition to their domestic duties. Of these, almost 25% wanted regular full-time work (likely wage employment) and another 70% preferred regular part-time work (likely selfemployment, given types of work cited). Almost 60% or respondents cited poor access to credit and financial services as major constraints to self-employment.²²

Water Resource Management

Women have interests in water resource management in relation to their crops, livestock, economic activities, and households.

The importance of ensuring that water resource management approaches consider the range of needs and uses of water in rural areas has been emphasized in many recent studies concerned with more effective approaches given water scarcity and the likely impacts of climate change.²³ Greater recognition of women as water users and managers is also strongly advocated as essential by Indian institutions and researchers, ²⁴ and by international bodies such as the United Nations Conference on Trade and Development and the International Fund for Agricultural Development (see Box 2 for some of IFAD's practical suggestions). 25

These approaches take issue with approaches to water management based on water subsectors or single uses such as irrigation. This leaves out users and needs related to other economic and productive purposes related to livestock, kitchen gardens for own use and local markets, agribusiness, and small enterprise. Further, it ignores household needs for water for

Srivastava (footnote 14), tables 3 and 4. p. 54.

²⁰ Srivastava (footnote 14), pp. 54–55.

²¹ See definition in National Sample Survey Organization (NSSO). 2010. Employment and Unemployment Situation in India 2007-2008. NSSO Report No. 531 (NSS 64th round). Access through http://mospi.nic.in/mospi_new/admin/Login.aspx (log-in required, but only requires registration).

²² World Bank. *Poverty and Social Exclusion in India.* pp. 155–156 (drawing on NSS 61st round, 2004-2005). http://go.worldbank .org/U2WJNKI8H0

²³ See, for example, UNCTAD. 2011. Water for Food: Innovative water management technologies for food security and poverty alleviation. http://unctad.org/en/docs/dtlstict2011d2_en.pdf and IFAD. 2007. Gender and water. Securing water for improved rural livelihoods: the multiple-uses systems approach. www.ifad.org/ gender/thematic/water/gender_water.pdf

Including Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan. Chapter on Agriculture, para. 21.40. www.planningcommission.gov.in/plans/mta/11th_mta/MTA.html and Kapoor, Aditi. 2011. Engendering the Climate for Change: Policies and practices for Gender-Just Adaptation. alternativefutures.org.in/info/release-of-report.html

UNCTAD (footnote 23).

drinking, cooking, washing, etc. This list includes needs and uses that are particularly important for women—in particular, women predominate among those looking after livestock, and households generally depend on women to supply the water for all domestic needs, including cooking, hygiene, and health). In short, better representation of women is likely to support water supply management that more effectively balances the needs of all water users. 26 Efforts to protect and conserve vital water resources are unlikely to be successful without taking account of the needs and perspectives of women who are directly dependent on these resources to maintain households and livestock and also share interests with men in other agricultural and economic uses.

Infrastructure design for water management can also be considered from a gender perspective.

As noted by one study of water management technologies for irrigation and drainage, technologies are designed and developed with little thought given to who will manage them, and how they will be managed and maintained."²⁷ Considering irrigation infrastructure, one issue is ease of access to irrigation canals for water for household uses. If this use, which would be very important to women, is not considered as part of the design, the infrastructure design is unlikely to include steps to facilitate access. Such access issues are likely to become more acute as infrastructure is designed to withstand the effects of weather events associated with climate change, such as through more robust infrastructure or higher canal walls.

Another approach would be "design for management," that is, the adaptation of technologies to match the preferences and capacities of users, including adaptations that would enable rural women to benefit fully from them. Such adaptation could include putting steps in irrigation structures, as suggested above, and consideration of factors such as irrigation schedules (e.g., to align with time available for access for livestock or household needs, or avoiding night irrigation because of women's increased risk of harassment after dark).

Land ownership and tenure issues often limit women's influence on decisions related to water management and use.

Despite having critical interests in access to water and use of water, land ownership is a condition for membership in many water management bodies. This condition excludes the many women farmers and agricultural workers who cultivate land they do not own from participating in decision making and management, as well as women concerned with access to water for household uses.

Considering decision making about irrigation water, the link between participation and land ownership is even greater. As ownership is largely in the hands of men, women are largely absent from the forums that make decisions related to the major demand on water resources. Exceptions are Chhattisgarh and Madhya Pradesh, which open membership in water users' associations to all using water from a government irrigation source for a range of agricultural, domestic, and other purposes.²⁸ (See Part A, "ADB in India" for ADB's experience and contribution to reforms in Chhattisgarh.)

▶ The importance of involving women in water management is increasingly recognized, although approaches are not yet consistent or effective, particularly in relation to irrigation.

Although the National Water Policy, 2002 provides little guidance on women's interests and participation in water management, a number of state-level policies formulated since then have been concerned with ensuring a voice for women (including, for example, policies in Himachal Pradesh, Maharashtra, Odisha, and Rajasthan). 29 Government consultations on a new water policy have been underway for some time and some of the consultation documents suggest that a revised policy could pay more attention to women's interests than the current policy.³⁰ Impetus has been given to the reform process by the increased awareness of the stress on water resources in many areas of the country and the limited availability of water in the face of growing demand, and a new national policy is expected by 2013.

Chattopadhyay, R. and E. Duflo. 2004. Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. Econometrica. 72 (5). http://econ-www.mit.edu/faculty/ eduflo/papers

²⁷ UNCTAD (footnote 23).

²⁸ Mid Term Appraisal, para. 21.40 (footnote 24); see also PRAYAS. 2009. Background to water sector reforms. Independent Water Regulatory Authorities in India: Analysis and Interventions. Compendium of analytical work by PRAYAS, 2006–2009. www.indiawaterportal.org/node/18357

²⁹ Footnote 34 provides titles and sources for the water policies of

See consultation documents at http://mowr.gov.in/ index1.asp?linkid=201&langid=1

However, the National Water Mission established under the National Action Plan for Climate Change, which will be pursuing further consultations for a revised national policy, makes only a very perfunctory reference to "duly ensuring an appropriate role for women" in the two volumes of its comprehensive mission documents,³¹ which is not encouraging.

On the other hand, the importance of participatory processes and the need to involve communities is a frequent theme in policy discussions about water management. In irrigation management, the link between participation and land ownership and its effect on excluding women (as well as other social groups with low land ownership) has been identified as an issue for attention. The Mid Term Appraisal of the Eleventh Five Year Plan may provide a useful prod, suggesting that the approaches in Chhattisgarh and Madhya Pradesh could be the way forward—that is, to extend membership in water users' associations "to all those using 'water for agriculture, domestic, power, nondomestic, commercial, industrial or any other purpose from a Government source of irrigation." 32

Gaining rights to participate is a critical first step, but may not be enough to ensure they can influence water resource management.

Given the points above, women's interests and views should be represented in water management processes. This may require policy or legislative reforms in the water and/or irrigation sectors. The right to participate is clearly the first hurdle, and specific targets or reservations of seats may be required to give effect to these rights. Even with these in place it is not necessarily the case that women's views are heard. Forums for discussion and decision making about access to important resources and opportunities are likely to reflect the power differentials in the community, including the unequal power relationships between women and men (further complicated in many areas by other divisions related to caste, tribe, religion, and/or age). In this context, it can be difficult for women to voice their views, particularly if their views contradict those of men. Lower levels of literacy and education among women can be further challenges to effective participation.

Box 2: New Ways of Doing Business to Enable Women to Benefit from Water Projects

Considering its experience with efforts to increase women's access to resources and in decision making for water management, the International Fund for Agricultural Development promotes several measures that would enable women to benefit from water projects. In addition to measures related to increased access to and ownership of land, clearly an important factor in water rights, there are several measures specific to water management:

- providing water infrastructure other than irrigation systems, such as wells and hand pumps, not only to address health and sanitation issues but also to reduce the everyday drudgery of women by providing them with more time to participate in other activities;
- establishing a minimum quota for women's membership in water users' associations (WUAs) so as to ensure women's participation in decision-making processes;
- setting slightly lower WUA membership fees for women. where appropriate, to make it more economically feasible for them to join;
- opening up WUA membership to users of water for other purposes than irrigation; and
- enhancing women's capacities through training in incomegeneration activities, crop and vegetable production, irrigation methods, and water conservation.

Source: IFAD. 2007. Gender and water. Securing water for improved rural livelihoods: the multiple-uses systems approach. www.ifad.org/gender/thematic/water/gender_water.pdf

Specific measures are required to overcome such constraints and to ensure meaningful participation by women as community members and in management committees (for example, measures to reserve places for women, designing training and other supports for access by those with low education or literacy, and taking account of the competing demands for household and family responsibilities in scheduling meetings).

Policy and Program Environment for Gender Equality Initiatives in the Sector

The Government of India accords high priority to rural development and has a broad range of policies and programs related to rural infrastructure, agriculture, water resources, and rural livelihoods. While key policy fields for agriculture and rural development are primarily areas of state jurisdiction, notably agriculture and water, the central government provides leadership through its five-year plans and through policies such as the National

Ministry of Water Resources. 2009. Comprehensive Mission Documents for National Water Mission under National Action Plan on Climate Change. Vols. I and II. http://wrmin.nic.in/ index2.asp?sublinkid=579&langid=1&slid=794

Mid Term Appraisal (footnote 24), para. 4.140.

Policy for Farmers, 2007 and the National Water Policy, 2002 (soon to be updated).33

There are also two major national programs supporting livelihoods of the rural poor. The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), which was introduced in 2006 and extended throughout the country in 2008, provides an entitlement to manual work. The National Rural Livelihoods Mission (NRLM) was launched in 2011 to strengthen the approach to supporting rural self-help and self-employment (see brief overview of each in Box 4). These two programs are intended to complement each other, one focusing on wage employment and the other on self-employment. In addition, the NRLM's support for more effective selfhelp groups (SHGs) and federations is intended to strengthen voice and mutual support among the poor, and to contribute to better selection of infrastructure projects under MGNREGS in relation to local needs and future opportunities. NRLM implementation strategies also seek further "convergence" with other programs to make more optimal use of various resources available.

The paragraphs below highlight a number of government policy themes and signals related to women's participation and empowerment in agriculture and rural development that are relevant to ADB support to the sector (see also highlights in Box 3).

National plans and policies increasingly recognize women as farmers requiring independent access to inputs and services.

The 11th Five Year Plan and the preparatory working group reports drew attention to the increased representation of women among the 85% of farmers that are small and marginal, as well as the biases against women farmers in access to inputs, credit, extension, insurance, and markets.³⁵ This is an important first step

Box 3: Highlights of Government Policy Commitments on Gender Equality Relevant to ADB Initiatives

- Strengthening women's ownership rights: Hindu Succession (Amendment) Act, 2005 (inheritance); 11th Five Year Plan 2007–2012 (transfers to women through land reform, antipoverty, and resettlement programs).
- Increasing access by women to rural employment and income opportunities: National Rural Employment Guarantee Act, 2005 (33% participation by women, minimum wages paid to all); National Employment Policy, draft 2008 (equality in labor market, increased access to broader range of opportunities); state programs supporting women's enterprise (e.g., for women's agro-enterprise in the Orissa State Agriculture Policy, 2008).
- Eliminating discrimination in wages, recruitment, and working conditions (including training): Equal Remuneration Act, 1976 (equal pay; equal treatment in recruitment, promotions, and training for same and similar work for women and men).
- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (30% target for women's participation in vocational training); also addressed at the state level, such as in the Rajasthan 11th Five Year Plan (expanding technical training facilities and employmentrelated courses for women).
- Strengthening women's participation in water resource management: National Policy for Farmers, 2007 (access to and management of water); several state-level water policies; state-level policies in several states (e.g., Himachal Pradesh, Maharashtra, Odisha, and Rajasthan).
- Increasing women's participation in local decision making: 73rd Constitutional Amendment (establishing rural local bodies, Panchayati Raj Institutions) implemented and in some cases augmented through state legislation.
- Increasing women's participation in all government programs: 11th Five Year Plan, 2007–2012 (33%) participation); reiterated in some state-level five-year plans for the same period (e.g., in Bihar).

Only limited state-specific references are included. Some further state-level information is provided in ADB's Gender Equality Reference Sheets, prepared in 2011 for most ADB partner states in India. National policies listed are available on the internet; search by title.

in shifting approaches and programs away from the assumption about women as secondary workers and toward regarding them as legitimate targets and participants in programs to increase agricultural output and household well-being. The National Policy for Farmers, 2007 also highlights the role of women farmers

National Policy for Farmers, 2007. http://agricoop.nic.in/NPF/ npff2007.pdf; and National Water Policy, 2002. http://mowr.gov.in/index1.asp?linkid=201&langid=1

³⁴ Himachal Pradesh State Water Policy, 2005. www.indiawaterportal.org/node/1034; Maharashtra Groundwater Development and Management Bill, 2009. www.indiawaterportal .org/node/14845; Rajasthan State Water Policy 2010, www.indiawaterportal.org/node/11368). See also (draft) State Water Policy of Assam (2007): www.indiawaterportal.org/ sites/indiawaterportal.org/files/e0706_0.pdf; and Odisha, where provisions for women's participation in water management are made in pani panchayat legislation rather than water policy: Odisha Pani Panchayat Amendment Act, 2008. http://Odisha.gov.in/govtpress/pdf/2009/83.pdf

¹¹th Five Year Plan, chapter on agriculture; also the reports of the Sub-Group on Land Related Issues, the Sub-Group on Gender and

Agriculture, and the Working Group on Gender Issues, Panchayati Raj Institutions, Public Private Partnership, Innovative Finance, and Micro Finance in Agriculture.

planningcommission.nic.in/plans/planrel/11thf.htm

in relation to crop production, livestock, and fishery and seed management and the importance to women and to agricultural production of women's access to land, land titles, credit (including Kisan credit cards), and various support services.36

As noted in Box 4, the 11th Five Year Plan (2007–2012) places a strong emphasis on group approaches for women farmers, and small farmers generally, as the most effective vehicle to increase access to land, irrigation, information, inputs, services, and markets (an approach also highlighted in the National Policy for Farmers, 2007).

▶ The importance of strengthening women's land rights has been recognized through legal reforms and other commitments.

The Indian Parliament took a major step to strengthen women's property rights with the adoption of the Hindu Succession Amendment Act, 2005, which established new rights for women to inherit agricultural land and strengthened the rights of daughters as heirs to joint family property. As a result of the act, inheritance rights to land for Hindu women became legally equal to those of men across states, overriding state laws where they were inconsistent.³⁷ These legal provisions provide an important foundation, but the ongoing challenge is to give practical effect to new rights. As noted in the Mid Term Appraisal of the Eleventh Five Year Plan, major efforts are required to increase awareness of these rights among women and also among government officials responsible for land administration.³⁸

Inheritance is the most importance source of land, given that at least 78% of rural families own some agricultural land (and as many as 89% if homestead plots are also included in the calculation).³⁹ Government programs related to housing and to the distribution of surplus land (land owned in amounts greater than allowed under

Box 4: Brief Overview of Flagship Rural Employment and Self-Employment Programs

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

The National Rural Employment Guarantee Act, 2005, on which this flagship program is based, requires the state to provide a minimum of 100 days of manual employment annually at the statutory minimum wage per household where demanded by a household member. The program aims for 33% participation by women and equal wages for women and men.

Projects providing work are planned and managed at the state and local levels and give priority to activities related to natural resource management (water harvesting, drought-proofing, irrigation, renovation of traditional water bodies, land development, flood control)—that is, activities supporting increased land productivity and future demand for labor. Efforts are being made to coordinate MGNREGS projects with other government programs, particularly in the area of natural resource management, to enhance the impact.

MGNREGS was introduced in 2006 and extended throughout India in 2008, and in 2010–2011 provided employment to 55 million households for a total expenditure in the range of \$8 billion. Sources: MGNREGS website gives access to the act, also data (under DMU Report): nrega.nic.in/rajaswa.pdf; Ministry of Rural Development, Annual Report 2010–2011, p.7 and other documents discussing convergence pilots; Ministry of Finance Economic Survey 2010-2011. Human development chapter, p. 300. www.indiabudget.nic.in/survey.asp

The National Rural Livelihoods Mission (NRLM)

Launched in 2011, the NRLM is another major program intended to reach poor rural households. It is based on a restructuring and expansion of the earlier Swarnajayanti Swarozgar Yojana (SGSY), a rural employment scheme that aimed to assist poor families to take up self-employment through a combination of bank credit and government subsidy.

Under the new orientation, the aim is to broaden the focus from credit to a livelihoods approach that recognizes the complexity of the challenges facing poor households. The new approach will place greater emphasis on social mobilization of poor households into effective self-help groups and federations of self-help groups. Mobilization will mainly focus on women. The approach aims to enhance access to bank credit and other financial and technical services, broaden access to skills training, and seek greater convergence with other social and economic support services.

Livelihood activities to be supported under the program include agricultural and livestock and/or dairying activities as well as selfemployment in services and other areas.

As with MGNREGS, the program will be implemented by state governments with the support of the central government. The cost estimates for NRLM are in the order of \$2.2 billion for the last 2 years of the 11th Five Year Plan and \$5.5 billion in the 12th plan. Sources: NRLM Program Implementation Plan (PIP): sgsy.gov.in (select Documents, then NRLM); see particularly chapters 1-2, and for cost estimates, para. 20.13; also Planning Commission. 2011. Report of the Working Group on the National Rural Livelihoods Mission. Working Group for 12th Five Year Plan for 2012–2017. planningcommission.nic.in

The National Commission for Women had made inputs to the formulation of the National Policy for Farmers, but subsequently concluded that a more comprehensive statement of women's concerns was required, and therefore prepared the "Draft National Policy for Women in Agriculture (April 2008): ncw.nic.in/Comments/Agricultural_Policy.pdf

For a concise review, see Agarwal, B. 2005. Landmark step to gender equality. The Hindu Magazine. 25/09.2005. www.hindu.com/mag/2005/09/25/stories/2005092500050100.htm. The act covers the Hindu population, or more than 80% of women. For inheritance issues for non-Hindus, see Agarwal, B. 2005. Women's inheritance: next steps: a look at the disabilities non-Hindu women face. The Indian Express. 17/10/2005. www.binaagarwal.com/popular_writings.htm

Mid Term Appraisal (footnote 24), para 4.140.

Agarwal (footnote 37).

legislated ceilings) provide other means of gaining land ownership, as does purchase through the market. The 11th Five Year Plan highlights the need to pursue all these routes to increased land ownership for women and makes a commitment to direct transfers of land to women through land reforms, antipoverty programs, and resettlement schemes. 40 (See also Box 5.)

▶ High priority has been given to women's participation in local decision making by both central and state governments.

The 73rd Constitutional Amendment enacted in 1992 required a one-third reservation for women in rural local government (Panchayat Raj Institutions), including elected members and chairpersons. Implementation approaches vary somewhat by state, but all have implemented this provision through at least one cycle of elections. While there are still some issues about achieving effective representation, such as maneuvers to unseat or undermine women, and constraints due to illiteracy or skill gaps, various studies have documented the positive effects of women's greater presence in public life on both policy outcomes and perceptions of women's potential.⁴¹ Several state governments have increased the reservation from one-third to 50%, including Bihar, Karnataka, Madhya Maharashtra, West Bengal, and Uttarakhand. The target of one-third representation of women is also used in a number of other forums for community or sector management, reflecting a concern for women's participation in adequate numbers to build confidence and make a difference (to form a "critical mass"). In short, both central and state governments have provided a strong signal to all partners about the importance of women's representation in decision forums.

The Mahatma Gandhi National Rural Employment Guarantee Scheme reflects a commitment to increasing women's employment opportunities and wages.

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) aims for 33% participation by women and provides for equal wages to be paid to women and men. India-wide, the program has

Box 5: Eleventh Five Year Plan (2007-2012): Rights of Rural and Farm Women to Land and Infrastructure Support

With the share of female workforce in agriculture increasing, and increased incidence of female-headed households, there is an urgent need to ensure women's rights to land and infrastructure

- Women's names should be recorded as cultivators in revenue records on family farms where women operate the land having ownership in the name of male members.
- The gender bias in functioning of institutions for information, extension, credit, inputs, and marketing should be corrected by gender-sensitizing the existing infrastructure providers.
- Women's co-operatives and other forms of group effort should be promoted for the dissemination of agricultural technology and other inputs, as well as for marketing of produce.
- Wherever possible a group approach for investment and production among small scale women farmers, be it on purchased or leased land, should be promoted. Women farmers are typically unable to access inputs, information, and market produce on an individual basis. A group approach would empower them.

Source: Planning Commission. 2007. Eleventh Five Year Plan 2007-2012. Agriculture chapter. Vol. III, para. 1.148. See also Vol. II, para. 6.32. planning commission.nic.in/plans/planrel/fiveyr/welcome.html. See also Agarwal, who advocated these measures to address constraints on women's productivity: Agarwal, B. 2011. Food Crisis and Gender Inequality. DESA Working Paper No. 107. www.un.org/esa/desa/papers/2011/wp107_2011.pdf

achieved a considerably higher rate of women's participation, reaching almost 50% of person-days in 2010-2011, though the figures varied considerably by state. Among major states, women's participation was highest in the south, with women accounting for as much as 90% of person-days of work in Kerala and 83% in Tamil Nadu. In Rajasthan, the participation of women was also significant at 68% of all person days, but a number of central and eastern states were well below target, particularly Bihar (29%), Assam (27%), and Uttar Pradesh (21%).42 Regarding pay, the Ministry of Rural Development reports that the average daily wage paid under the scheme increased from Rs65 in 2006 to Rs100 in 2011 (an increase of 54%, from about \$1.22 to \$1.87) and in future will be revised annually to reflect changes in the consumer price index for agricultural labor. Payments are made through banks and post offices, and more than 100 million accounts had reportedly been opened under the scheme by December 2010.⁴³

⁴⁰ Planning Commission. 2007. *Eleventh Five Year Plan, 2007–2012*. Vol. II, para. 6.32. http://planningcommission.nic.in/plans/planrel/fiveyr/ welcome.html

Chattopadhyay and Duflo (footnote 26); also from the same series of studies is Beaman et al. 2008. Powerful Women: Does Exposure Reduce Bias, on the website cited in footnote 27.

MGNREGA website, tab for DMU Report: http://nrega.nic.in

Ministry of Rural Development. Annual Report 2010–2011. pp. 6, 9-10. http://rural.nic.in/sites/annual-report.asp

An analysis based on a 2008 survey that included states with both high and low women's participation concluded that the program provided major benefits to women, in particular enabling women to access employment at the minimum wage where job opportunities were otherwise very limited for women and wage practices biased against them. MGNREGS offered new opportunities that were attractive for several reasons: local availability, predictability of working hours, less likelihood than other casual work of exploitive working conditions, the "dignity" associated with government work, and better ability to avoid hazardous working conditions. Also, wage rates were higher than other agricultural and casual work available. Positive impacts of the program identified by participants are set out in Box 6.

While programs tend to use households as the unit of entitlement, this is combined with womenspecific targeting that recognizes the need for specific measures to ensure that program benefits do not bypass women.

Like many other government programs, both MGNREGS and the National Rural Livelihoods Mission (NRLM) use the household rather than the individuals within them as the unit of entitlement. This reflects the reality that households depend on the combined contributions of their members, but ignores a critical concern from a gender perspective that women generally do not share equally in household resources or in decision making about the use of resources (including food, income, assets, etc.). Married women in poor households may have levels of well-being below that of other members, and single women living with their relatives (women who are separated, divorced, or widowed) can be particularly disadvantaged.

The MGNREGS employment guarantee is to each household and access is through the job cards that list all adult members of the household. Women can be omitted from job cards due to the social norms noted above, and thus lose any entitlement. Payment methods could raise other concerns—while the accounts opened for payment of MGNREGS earnings have been cited as means of promoting financial inclusion, the reports do not note whether the accounts are opened in the name of the worker or of the household head. If the latter, the process would diminish the likelihood of women's control over the use of the money earned.

Despite the household orientation, there are also specific MGNREGS targets for women's participation, which recognizes the need for implementation processes that protect women's right to participate. The NRLM will

Box 6: Contributions of the Mahatma Gandhi National Rural Employment Guarantee Scheme to Women's **Economic Security and Well-Being**

As reported in a study of the scheme's participants in six states, Interview after interview provides insights into how NREGA employment is helping women take charge of their lives, in little (and not so little) ways. Where the NREGA is implemented well, it has provided predictable and regular employment to women. In their fragile existence, the NREGA has brought mental respite from the tensions of being able to fulfill their basic needs. These signs of relief peep through their statements regarding the improvement in their ability to borrow/get credit; from knowing that they won't have to sleep hungry; from not having to migrate in search of work which they are not sure of getting; from not having to spend money on traveling in cases where they work in nearby areas as labourers; from the assurance that there will be some money to pay for small and large medical bills should someone in the family fall ill; from being protected from very strenuous and poorly paid work (e.g. collecting forest produce and bringing it to the market for amounts as little as Rs10 per day [approx. \$0.19]) and being protected from exploitative work conditions including sexual exploitation in some cases and conditions where there is no clear demarcation of working hours or tasks.

Source: Khera, R. and N. Nandini. 2009. Women workers and perceptions of the National Rural Employment Guarantee Act, India. Economic and Political Weekly. 44 (43):49-57. http://eprints.soas.ac.uk/7832/

also focus on households—the implementation plan states that the program will aim to ensure that all poor households participate in a self-help group through one of their members, "preferably a woman." The working group on the NRLM for the 12th Five Year Plan emphasizes the orientation toward women, and the need for a particular focus on single women (widowed, divorced, separated) as well as on women-headed households. The working group also promotes an approach that adds a gender equity perspective—that is, not only woman focused, but concerned with issues of women's rights and participation in society and decision making.44

ADB Experience in Supporting Gender Equality in the Sector

ADB initiatives in this sector only began under the 2006– 2009 strategy and thus account for a relatively small proportion of the investments in the 25-year ADB-India partnership (3% in that period compared with almost

Planning Commission. 2011. Report of the Working Group on the National Rural Livelihoods Mission. Working Group for 12th Five Year Plan. pp. 18, 21–22. http://planningcommission.nic.in

30% each for energy and transport). 45 Irrigation systems and management, and water resource management more generally, have been the most important areas of investment, followed by agribusiness infrastructure and opportunities.

All of the projects currently in implementation have been categorized as including at least "some gender elements" and half were designed to satisfy "effective gender mainstreaming" requirements (see Box 7 for the distribution of projects and an overview of the ADB gender categories).

The India country partnership strategy for 2009–2012 provided a succinct summary of key gender equality issues in the sector, noting women's increasing role in agriculture as men were shifting to nonfarm jobs and urban areas, the low levels of land ownership among women, and women's dependence on casual wage labor. In the strategy, ADB proposed to develop gender action plans to ensure that its assistance included suitable measures in support of gender equality and rural women's empowerment, and highlighted the following areas of action:⁴⁶

- reduction/removal of gender bias in the functioning of institutions for information, extension, credit, and marketing;
- development of vocational skills among female farmers, including negotiation skills;
- promotion of women's groups to improve their access to credit, agricultural technology, and markets; and
- barriers reduction/removal of to women's participation and/or representation in communitybased institutions such as water users' associations, cooperatives, and credit societies.

ADB's first rural development or irrigation investment was the Chhattisgarh Irrigation Development Project approved in 2005. The approach taken in planning this project provides a good illustration of the mainstreaming approach envisioned in the ADB Gender and Development Policy that had been approved not long before. The project aims to increase the productivity of irrigated agriculture through improving irrigation service delivery, enhancing agricultural practices, and strengthening water resource management. The strength of the project's gender equality approach is that it focuses on the key target and mechanism for project implementation: the

Box 7: Agriculture and Water Resource Management Projects by ADB Gender Category*

Year approved	GEN	EGM	SGE	NGE	Total
Approved 2000–2008	-	2	-	-	2
Approved 2009–2012	-	1	3	-	4
Pipeline 2013–2015**	-	10	-	-	10

Gender Equity Theme (GEN)

- Directly supports gender equality and women's empowerment
- All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- See specific requirements for EGM below

Some Gender Elements (SGE)

Does not meet EGM criteria BUT

- provides some direct and substantial benefits to women because of the nature of the project OR
- includes some gender-related design features in project design or resettlement.

No Gender Elements (NGE)

Gender issues not integrated in design

Effective Gender Mainstreaming (EGM)

Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. The following project requirements must be met to qualify as EGM:

- The social analysis conducted during project preparation included careful consideration of gender issues highlighting both constraints and opportunities.
- Specific gender design features are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs and/or components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are in the project design and monitoring framework.
- A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the project administration manual.
- The **RRP main text discusses** how the project will contribute to improving women's access to or benefits from the project, at a minimum in the Due Diligence section.
- The policy matrix contains a covenant or a condition to support implementation of the gender action plan.

See Guidelines for Gender Mainstreaming Categories of ADB Projects: www.adb.org/Gender/gender-categories.asp

⁴⁵ India–ADB Development Partnership (footnote 5).

ADB. 2009. India Country Partnership Strategy (2009–2012): Abridged version. para. 28. www.adb.org/documents/indiacountry-partnership-strategy-2009-2012-abridged-version

^{*} Ongoing projects and project pipeline.

^{**} These are proposed projects and are subject to change.

water users' associations (WUAs) that are also critical to the state government's approach to participatory irrigation management.

Planning documents noted that existing processes largely precluded women's participation because **WUA** membership was only open to those with land titles, and concluded that this issue needed to be addressed as part of the policy and legislative revisions to be pursued under the project. The revisions aimed to expand the membership of WUAs to households so that women who were members of a WUA could participate and vote, and to include non-landowners doing agricultural and waterrelated work. The approach recognized women as farmers and agricultural workers with interests in water management. The project also pursued several strategies to support women's participation, including targets for women's participation in various WUA subcommittees, reservation of training places for women, and the establishment of gender subcommittees with specific mandates for all WUAs. Further details on these approaches and other elements of the gender strategy are set out in Box 8. Also notable is that the project made use of management tools, such as the design and monitoring framework and loan covenants, to give weight to the gender strategy and ensure that there was regular monitoring of progress. Gender equality outcomes will also be supported through a small accompanying technical assistance grant that provides for an information and awareness campaign for election of women and voting in WUAs in the state.

The implementation of this strategy has had a significant impact on strengthening the foundation for women's participation. The revised Participatory Irrigation Management Act provides that 47

- · membership in WUAs will be conferred on households (rather than individuals) so that both women and men will be members and have the right to attend meetings and cast votes,
- all adult women who are part of a household that is a WUA member will be able to stand for election and hold office in the WUA (so that individual title is not required), and
- WUA subcommittees will have at least 33% women members.

Box 8: Chhattisgarh Irrigation Development Project: Strategy to Maximize Impacts on Women

As highlighted summarized in the project's Summary Poverty Reduction and Social Strategy (SPRSS):

- Under the revised participatory irrigation management policies, the following institutional changes will be made: (i) membership to the WUA will be on a household basis so that both men and women will be members and have the right to attend meetings and cast votes; and (ii) all women who are part of a household that is a WUA member will be able to stand for election (not just women who are property owners with a title) and hold office on the WUA management committee and any subcommittee.
- The WUA subcommittee structure will also ensure that women will be represented in WUA activities. The management committee will be required to have at least two women officers who either are elected under the general election or are nominated by the gender subcommittee.
- Each WUA will have a gender subcommittee that will have the following mandate:
 - address the needs of women title holders and WUA members, and women farm laborers in the irrigation system;
 - develop and protect the use of and access to irrigation water for alternative purposes such as home gardens, livestock, washing, and other domestic uses; and
 - create capacity development and livelihood programs especially targeting women.
- In addition to the gender subcommittee, women will have at least 33% target representation on the other subcommittees that will be formed in all WUAs, including the water allocation and distribution committee, the dispute resolution committee, and the financial audit committee.
- Women subcommittee members will be encouraged to attend the training offered through the participatory irrigation management unit for WUA and 33% of the training slots will be initially reserved for women. For general training offered to all WUA members, 50% of the slots will initially be reserved for women WUA members.
- Women heads of households will receive priority in services provided to farmers through the project.
- The WUA gender activities and (sub)committees will build from the base of members in the Ministry of Rural Development program, Development of Women and Children in Rural Areas, which has existing committees in villages throughout India.
- In all activities supported through project funds, it will be stipulated that women will receive equal pay for equal work and will be part of contractual obligations.
- The project will require that the Project Implementation Unit include at least 20% women staff contracted through project funds by year 3 of the project and 10% initially. The PIM unit staff will have at least 10% women trainers (consultants and nongovernment organizations) in the first year to increase to 20% no later than year 3 of the project.

Wijayaratna, C.M. Undated. Women's Empowerment: Provisions in the PIM Act, Rules and Bylaws. Compiled by team leader for the technical assistance supporting this ADB project. Also provides data by sex on the 2007 WUA elections. The act itself is not available in English.

While women had previously been almost absent from WUAs, their numbers went to almost half. As a result of the 2007 WUA elections, 34% of committee members and 2% of WUA presidents were women.

While other irrigation and water management projects also incorporate measures related to women's participation in community management groups (WUAs or community disaster management committees), the approaches are limited by analyses and strategies that conceive women as vulnerable groups rather than as farmers and agricultural workers with interests in water management and farm outputs. Participation by women in such community management organizations can provide experience in public participation, which could itself have other benefits, but such participation would be of greater benefit if it was approached in the context of their interests and contributions.

Another important area of current and future activity is in agribusiness support. In the initial program in this area, the Agribusiness Infrastructure Development and Investment Program, a multitranche financing facility, the first two tranches include "some gender elements" through their recognition of women's activity in agriculture and in the horticultural value chains targeted by the project. The first tranches also aimed to promote women's inclusion in the farmers' associations linking small producers to agribusiness infrastructure facilities higher along the value chain (including the facilities that were the main investment areas of the project, such as internal roads; solid waste management; water drainage; and agribusiness facilities for cooling, grading and sorting, and transportation). These aims were welljudged, but in the absence of a gender action plan they remained intentions rather than actionable strategies. The expectation for future tranches and the next phase of the project are for a more systematic and structured approach that would satisfy the requirements for "effective gender mainstreaming."

Finally, a relatively large proportion of technical assistance projects were undertaken in this sector—in the period 2005-2010, the sector accounted for 7% of loans and 11% of technical assistance). 48 The volume of technical assistance was at least in part because ADB was just beginning to invest in this aspect of rural development in India. Technical assistance projects provide important opportunities to explore issues and approaches and provide the foundation for investment projects. Such projects are generally not rated and counted under the gender categorization system, which is unfortunate as most seem to have overlooked the opportunities of such projects to deepen understanding of the gender equality issues and opportunities in the areas addressed.

Strengthening ADB Approaches: Challenges and Opportunities

Ensuring that projects in the pipeline identify and address opportunities to have positive impacts on gender equality and women's empowerment will require attention to gender equality issues and strategies throughout the planning process, as well as clear identification of the tangible benefits for women—the development results—that are aimed for. ADB's country partnership strategy (CPS) for 2013-2017 identifies several specific areas to be pursued in the agriculture and water resource management as well as several strategies that apply to all sectors (Box 9).

This section aims to support efforts to implement the CPS and, more generally, strengthen approaches in the sector. It begins with a discussion of points related to identifying or following up opportunities to support gender equality. The subsequent subsection draws on a review of project documents to point out several ways in which to improve the quality of project design and outcomes in support of gender equality and women's empowerment. The chapter ends with a "tip sheet" that aims to support gender mainstreaming in ADB's investments in the sector by suggesting possible questions and gender-related design features to consider in the project formulation process.

Issues for Further Attention in Analyses and **Strategies (Sectoral and Project)**

Women's interests and economic activities (women as actors and agents, not just a "vulnerable group")

Most project documents in the sector make some reference to "feminization" of the agricultural sector as more men than women leave agriculture for more remunerative nonfarm and urban employment. Most also make some reference to the range of women's activities, including cultivation, livestock, processing, and marketing. However, any discussion of this and of the constraints to improving productivity and incomes is generally confined to social and/or gender sections and receives limited if any attention elsewhere.

India-ADB Development Partnership (footnote 5). pp. 5, 9.

	Box 9: ADB Gender Strategy for India for 2013–2017: Agriculture and Water Resource Management Sector and General Commitments			
Sector Commitments for Agriculture and Water Resource Management	 Under the country partnership strategy for 2013–2017, ADB will give further attention to the following issues and objectives to enhance impacts on women's empowerment and gender equality: increased access by women to water for household, livestock, and other uses; broader participation of women in water resource management (whether or not they are land title holders); ensuring that disaster risk reduction and climate change adaptation measures take account of women's interests; and 			

Strategies for All ADB **Sectors**

ADB will strengthen its gender equality outcomes in collaboration with government partners at both central and state levels through

equitable access to employment in construction, maintenance, and agro-enterprise.

- improving the quality of gender analyses done during the project preparatory technical assistance, in particular by aligning the analyses more closely with project objectives;
- (ii) reflecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents;
- (iii) monitoring achievement of key gender equality outcomes in design and monitoring frameworks;
- (iv) selectively using technical assistance resources to build knowledge and capacity to deliver genderresponsive outcomes; and
- (v) engaging in gender-responsive policy, legal reform, and legal empowerment in ADB priority sectors.

Source: ADB. Country Partnership Strategy 2013–2017 (draft).

In economic and sectoral analyses, there is a tendency to talk about "farmers," "landowners," and "water users" without highlighting relevant differences between women and men within these categories. The discussion outside dedicated social and/or gender sections is often limited to references to the intention to "also target vulnerable groups including women,"49 which suggests an orientation toward women as recipients of welfare services rather than as economic and social agents seeking to support themselves, their families, and their communities (despite an additional set of handicaps based on gender discrimination). For decades, the women's movement in India and elsewhere has promoted a better understanding of women as agents of development rather than as a vulnerable group, both to reflect the reality of women's lives and to reorient the policy questions asked and the strategies pursued.

▶ Follow-up and replication of ADB experience in Chhattisgarh with women's participation in water resource management

In Chhattisgarh, ADB assistance related to irrigation included support for policy reform for water users' associations (WUAs) that addressed a major constraint to women's participation in decision making in relation to water management, which has major implications for their access to water for multiple uses and for economic opportunities. Other investments in irrigation, and more broadly in water resource management, could make important contributions by exploring the potential to introduce similar measures, including support for policy or legislative reforms where these are required and then support to ensure successful implementation. For the latter, ADB could benefit from a focused study of the Chhattisgarh experience to identify factors affecting implementation and make recommendations for similar initiatives as well as for follow-up in Chhattisgarh.

Awareness and implementation of women's legal rights to land and resources

A key issue related to women's economic opportunities and security is land ownership, including agricultural land and rural housing. Land ownership is relevant to

- women's agricultural productivity (as it relates to access to extension services and credit for inputs);
- · access to water (as participation in water users' associations is often based on land ownership, limiting the voice of non-owners using water for cultivation, livestock, small business, or for households); and
- agribusiness (as it relates to the venue for activities and credit access).

Legal changes to strengthen inheritance rights and programs to increase access to land and rural housing have been undertaken but awareness of legal rights and program options are not yet widespread among women, local communities, or government officials. ADB could play a constructive role in supporting or

Another formulation is to list various groups as if they are separate target groups (small and marginal farmers, women, scheduled tribes, and scheduled castes), which obscures the point that there are women farmers with specific needs related to being both female and a member of one of these groups.

reinforcing these strategies through their own initiatives (e.g., by incorporating rights awareness in community consultations and livelihood development programs).

ADB project analyses for irrigation and water resource management as well as agribusiness would benefit from assessment of (i) women's legal rights to land in the project area, (ii) how their land rights (or lack of rights) could affect their ability to participate and benefit from the project, and (iii) the opportunities in the project context to address constraints related to land rights.

▶ Gender implications of climate change mitigation and adaptation elements in water resource management investment

Climate change and its effects are increasingly important in identifying and designing interventions in the water resource management sector. Ensuring equitable impacts and protections for women and men from projects or project design elements aimed at mitigation or adaptation, including disaster risk reduction, will require attention to genderrelated patterns of economic and household activities and in the resources that each are able to deploy.

This is an area in which better use could be made of the opportunities provided by technical assistance projects and sector studies to deepen understanding of gender disparities and women's interests in relation to the sector and about possible approaches or effective strategies. Questions should also be pursued as part of project planning and design.

Livelihood opportunities related to infrastructure

An area that could be further explored, particularly in light of the central government's interest in strengthening livelihood opportunities for rural women, are opportunities related to ongoing operation and maintenance of rural and community infrastructure. A strategy that involves women more in operations and maintenance may have broader benefits, as is suggested by the experience of an ADB urban infrastructure project that has benefitted from training women in repair and maintenance of water sources and management of operations and maintenance functions.⁵⁰

Institutional capacity of partner governments to serve women and support gender equality

ADB partners have ongoing responsibilities to support communities and deliver services to the public, women as well as men. ADB projects often include components

ADB Project 32254, Loan 2046: Urban Water Supply and Environmental Improvement in Madhya Pradesh (2003–2012). to improve the capacity of state-level agencies to meet their responsibilities for policy review and program implementation. ADB institutional and sectoral analyses for such projects very rarely consider the issues related to the knowledge and capacities with respect to reaching and serving women.

Given this omission, it is not surprising that most capacity development strategies do not identify objectives or actions in this area except, in some cases, steps to encourage partners to increase women's representation in participatory processes. However, the capacity of state partners to reach women includes other elements and skills. One example of the type of issue to consider is the availability and use of the sex-disaggregated or sexspecific data required for policy purposes and the ability to use that data for program planning and monitoring. Other areas to explore would include whether the partner's major policy and strategy document reflect a gender perspective, and whether the partner has a clear allocation of roles and responsibilities for progress in gender mainstreaming in its organizational framework.

A related area of opportunity arises in projects that include components to support partner governments in reviewing sector policies or legislation (e.g., in relation to management of water resources), where ADB assists in assessing whether past or proposed approaches would have inequitable effects or tend to exclude women (e.g., approaches that limit participation in water management to landowners) and to explore alternative approaches that are more equitable.

Project Design and Management Challenges

Strengthen gender analysis in project preparation and "mainstream" this into project documents.

Many project approval documents rely on rather generic information about women in the summary gender analysis, making some general statements about women's position and providing data on indicators such as literacy rates and maternal mortality, generally without dates or data sources (limiting the credibility of the information) and often without drawing any projectspecific implications (limiting the utility of the exercise). The limitations in the summaries suggest that the gender analyses were similarly limited, particularly when the sectoral and economic analyses are silent on gender issues or only refer to women as one of a list of vulnerable groups. As a result, projects are launched with limited guidance on the gender equality issues despite the considerable resources that are allocated for project preparatory technical assistance (PPTA).

Improving performance at the PPTA stage will require that terms of reference for the PPTA teams provide a clear outline of the gender issues to be addressed, that consultants engaged to undertake the social and gender analysis are sufficiently senior and experienced, and that these consultants are provided with enough professional time to undertake the analysis and to collaborate with other members of the team in integrating gender equality issues and strategies into the project design.

• Clarify the strategic rationale for the gender action plan in both the plan itself and in the main project document.

Gender action plans (GAPs) are generally set out in a table format that is organized by project outputs and specifies specific activities under each output. This has the advantage of aligning these activities as closely as possible with the mainstream project implementation plan and thus facilitating implementation. While the GAP is based on a broader analysis and strategy, the summary table version is probably the one most familiar to key stakeholders (within ADB and its partner agency and among the consultants involved in supporting implementation) and it is what ADB makes available on its project website.

The presentation of the project's gender equality approach would be strengthened if the main project document spelled out more clearly the strategic underpinning for the GAP, and if this was also briefly summarized in the GAP itself. If this was done, it would enable ADB to communicate more effectively with partners and communities about its aims and strategy for outreach and benefits to women, which would help to ensure that intentions are translated into action.

Take a more strategic and evidence-based approach to targeting.

Target setting is intended as a means of stimulating or reinforcing change or progress. A target should be based on an assessment of the current situation and should aim for a reasonable and achievable improvement on that, taking account of the challenges involved in achieving the change envisaged and the strategies and resources to be invested to achieve it. If women are 30% of the overall population of farmers or water users the initiative aims to involve or serve, a target of 30% merely maintains the status quo (women are not further disadvantaged); a target somewhat greater than 30% in these circumstances provides a measure of positive action. If women are 50% of the population to be reached, then a target below this has little meaning and could even disadvantage women if it is seen as a cap.

Box 10: Checklist of Elements to Achieve Tangible Benefits

To achieve "effective gender mainstreaming," a project must make use of project management tools (e.g., gender action plans, design and monitoring frameworks, and loan covenants) and must also deliver tangible benefits. In assessing the latter, consider whether the project will

- proactively address disparities rather than assume downstream benefits;
- identify the specific gender disparities and differing needs relevant to the project area and project initiatives;
- enable women's access to productive resources, especially land, water, and credit;
- increase awareness among women and men of women's rights in relation to resources, employment, and participation in the benefits of development;
- support women's participation in decision-making forums?
- **build capacities of planners**, implementers, and beneficiaries in relation to women's participation and benefit; and
- specify monitoring indicators that capture impacts on women and on gender disparities so that corrective action can be taken during implementation.

► Ensure that monitoring approaches provide feedback to managers about the progress of implementation and about results achieved.

The desk review of ongoing projects found while ADB project designs and documents outline an intention to address gender equality, gaps between intentions and performance tend to widen as projects evolve. To counter this tendency and allow for effective oversight and corrective action by management, monitoring frameworks need to provide feedback on whether implementation is progressing (have the steps outlined been taken) and results (did the inputs make a difference to productivity and livelihoods). This goes beyond what is generally in the design and monitoring frameworks included in project approval documents, which are at too aggregate a level to guide implementation and learning and also tend to limit their focus to selected elements of participation.

Tip Sheet on Questions and Design Features for Gender Mainstreaming

The tip sheet in Box 11 aims to assist with gender mainstreaming in projects in the sector. It suggests possible gender equality outcomes related to more general ADB project outcomes, provides examples of questions to consider in preparatory analyses to assist in formulating project strategies, and suggests possible gender-related design features that could be elaborated if applicable in the project context. Other assistance may be found in the resources listed in Box 12.

Box 11: Tipsheet on Questions and Design Features for Gender Mainstreaming in ADB Projects: Agriculture and Water Resource Management				
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)		
More representative and effective water users' associations (WUAs) and district implementation committees (DICs) o Increased opportunities for women to ensure their interests are reflected in community decisions o Increased access by women to water for their productive activities and domestic use	 Does current state legislation limit women's participation by linking committee membership to landowners? Or are there provisions mandating minimum participation by women? Are there other specific constraints to women's participation (e.g., related to meeting schedules or location, competing work or household demands, etc.)? What are the gender dynamics of participation in this locality? (Do women have the opportunity and confidence to voice their views? Do men listen? Do women's views influence discussions and decisions?) Are women aware of the benefits of participation and the roles they can play? 	 Collaborate with partners on policy reforms to enable all water users to participate in water management (including domestic users and agricultural laborers as well as landowners). Target women in all households (not only female-headed households) for information about roles, participation, and benefits of participation in WUAs and DICs. Set targets for women's access to training provided to support participation in WUAs and DICs, and address barriers to participation. Work with men to encourage them to support their wives and other women to participate in WUAs as general members and elected leaders. 		
New or upgraded rural infrastructure and services O Better reflection of women's priorities in selection of infrastructure investments O More women-friendly infrastructure designs	 Have consultations on infrastructure priorities been managed so that the views of both women and men have been heard? Do design criteria for infrastructure take into account accessibility issues? Do enhancements for increased protection against climate-related events inadvertently reduce access by women? 	 Ensure that women's concerns about utility, personal safety, and dignity are taken into account in infrastructure design. Explore options for infrastructure design that maximize accessibility, such as steps to irrigation canals. Ensure that measures for disaster risk reduction consider access issues also. 		
Increased use of community-based approaches in maintenance of infrastructure O New employment opportunities for women in ongoing maintenance of new or upgraded infrastructure (at equal pay rates)	 Considering the local labor force in unskilled and semiskilled work, what proportion is accounted for by women? What types of work do they do? How do pay and skill levels compare with men? Are there opportunities to dovetail with the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) program? Would this be a means of providing additional employment opportunities for women? 	 Set targets for women's employment that reflect their representation in the local workforce. Ensure a commitment from community and private sector managers to equal wages and working conditions. Set up exposure visits to projects that have successfully involved women in community-based maintenance. 		
Additional and/or more profitable agribusiness opportunities (including greater value added along the value chain and stronger links by producers to value chains) o Increased opportunities, productivity, and incomes of women	 Are agricultural and processing activities in which women predominate given due attention in targeting of supply chains, identifying training and support needs? Are women's opportunities and capacities being looked at from a business development and economic growth perspective (i.e., not only from a vulnerable groups approach)? What are the specific constraints to increased productivity and incomes faced by women producers and entrepreneurs? 	 Set specific targets for resource allocation to and participation by women. Identify horticultural and other products in which women predominate for targeting for productivity and value chain improvements. Explore options to address specific productivity constraints faced by women. 		
Temporary employment arising through project construction work o Equitable access to temporary project jobs	 Are women active in the construction sector in the project area? How do their skill and pay levels compare with men's? Are workers and employers and/or 	Set targets for women's participation at different skill levels that are meaningful and achievable (given labor supply, local conditions, etc.)		

Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)
 Better recognition of women's rights to equal pay and appropriate working conditions 	contractors aware of core labor standards and workers' rights, including women's rights to nondiscrimination and equal pay? • Are there opportunities to dovetail with the MGNREGS? Would this allow for more or better jobs for women?	Brief contractors on their responsibilities for equitable pay and working conditions.
Reforms to policy, legal, and regulatory frameworks Recognition of the role and interests of women (as well as men) in the water sector Adoption of specific measures to ensure women's access to resources and programs	 Do any elements of existing or proposed policy exclude women, whether directly or indirectly? For example, is participation in water users' associations limited to landowners (which includes few women, despite their interests in the sector)? Do sectoral analyses and reforms consider the full range of water uses and needs (including needs for household and/or domestic use, livestock and kitchen gardens, small enterprise, etc.)? Have consultations related to the reforms in question sought the views of women? Have women's advocacy organizations active in the sector been consulted? 	 Commission an analysis of current or proposed policies to identify issues and options to ensure equitable impacts on women. Explore options for ensuring women's representation on community water management mechanisms (and a broad representation of all users). Consult with women's research and advocacy organizations active on water issues. Ensure that consultation processes (on policies, policy reforms, proposed initiatives) seek the views of the women who will be affected.
Strengthened management capacity of partners (state departments and municipal agencies) o Increased responsiveness of management and staff to gender differences in needs and priorities o Increased awareness and access by women about program and services offered by the partner o Improved data and skills for gender-responsive policy and program development	 How aware are government officials (in water management, irrigation, agriculture, agribusiness, etc.) of the role of women in the sector and their specific needs? Are the data systems maintained by partners generating sex-disaggregated data on program delivery and results? Are extension officers and services undertaking outreach to ensure that women participate equitably in training and services related to new crops, new technologies and production methods, processing, marketing opportunities, etc.? Are women aware of and accessing available programs and services? 	 Assist partner state or municipal agencies to develop linkages with research and advocacy organizations concerned with urban women's issues to provide training, feedback, research inputs, etc. Allocate resources and expertise to improve data systems so they generate sex-disaggregated data, and to improve analytic skills among planners for the use of such data.
Successful resettlement of those displaced by new infrastructure o Restoration of women's livelihoods and income o Maintenance or rebuilding of social networks o Strengthened property rights of women	 Are there barriers to women's participation in consultation processes (e.g., related to transport availability or costs, household duties, local social mores)? How does displacement and resettlement affect women's livelihoods? Are there adequate and affordable transport services to reach places of employment? Can previous livelihoods in self-employment or trade be reestablished and be viable? What other services have been disrupted (e.g., child care, schooling)? 	 Develop a consultation strategy that addresses the barriers identified to ensure that women are reached (female-headed households, widows, married women, single women). Develop and fund a plan to facilitate reestablishment of livelihoods (responding to findings of analysis on needs). Follow up government commitments to strengthen women's land rights in resettlement processes (equitable land allocations and direct transfers to women).

* Related possible gender equality outcomes refer to changes that reduce gender gaps or otherwise benefit women.

Box 12: Useful Resources for Further Reading on Gender Equality in the Sector		
India-specific research and analyses on gender and rural livelihoods	Srivastava, N. and Srivastava, R. 2010. Women, Work and Employment Outcomes in Rural India. <i>Economic and Political Weekly</i> .14:28 (July 10). p. 53. environmentportal.in/files/Women%20Work%20and%20Employment%20Outcomes.pdf	
	Sankaran K. and R. Madhave. 2011. <i>Gender equality and social dialogue in India</i> . International Labour Organization Working Paper 1/2011. www.ilo.org/publns	
	Agarwal, Bina. 2010. Rethinking agricultural production collectivities. <i>Economic and Political Weekly.</i> 14: 9 (Feb 27). www.ase.tufts.edu/gdae/about_us/leontief/AgarwalRethinkingAgProdCollectivities10.pdf	
India-specific research and analyses on gender and water resources	Kulkarni, S. 2011. Women and decentralised water governance: issues, challenges and the way forward. Economic and Political Weekly. Vol. XLVI, No. 18 (April 30). www.indiawaterportal.org/node/20639 Control for Providing Political Security Providing Political Security Political Securi	
management	• Society for Promoting Participative Ecosystem Management (SOPPECOM). 2008. Water for Production: Women in decentralized irrigation systems in Maharashtra. www.indiawaterportal.org/node/9233	
	 Society for Promoting Participative Ecosystem Management (SOPPECOM). 2008. Reforming Water, Adding Women: does decentralized water governance further gender justice in India? www.soppecom.org/pdf/Policy%20brief%201.pdf 	
India-specific research and analyses on gender, water	Kapoor, Aditi. 2011. Engendering the Climate for Change: Policies and practices for Gender-Just Adaptation.alternativefutures.org.in/info/release-of-report.html	
resources management, and climate change	Suman K.A. 2011. National Action Plan for Climate Change—India: Climate Change, Gender and Innovation: Opportunities and Challenges. Hyderabad: Change Planet Partners Innovation Foundation. www.gender-climate.org/Content/Docs/Publications/7_cppcif_napcc_gen_cc_inn_v1%201.pdf	
India-specific articles and research on women's land	Klaus Deininger et al. 2010. Inheritance Law Reform and Women's Access to Capital: Evidence from India's Hindu Succession Act. World Bank Policy Research Working Paper 5338.go.worldbank.org/CNLI8M1800	
rights	Planning Commission (2007). Report of Working Group for 11th Five Year Plan on Gender Issues, Panchayat Raj Institutions, Public Private Partnership, Innovative Finance and Micro Finance in Agriculture. planningcommission.gov.in/aboutus/committee/wrkgrp11/wg11_gender.pdf	
General articles and studies in the above areas	Agarwal, Bina. 2011. Food Crisis and Gender Inequality. DESA Working Paper No. 107 (ST/ESA/2011/DWP/107). www.un.org/esa/desa/papers/2011/wp107_2011.pdf	
	• FAO. 2011. State of Food and Agriculture Report 2010–2011: Women in Agriculture: Closing the gender gap for development. www.fao.org/publications/sofa/en	
	Website and publications of the Global Gender and Climate Alliance. www.gender-climate.org	
ADB practical resources for project planning and	ADB. 2006. <i>Gender, Law, and Policy in ADB Operations: A Tool Kit</i> . www.adb.org/documents/gender-law-and-policy-adb-operations-tool-kit	
management in the sector	ADB. 2003. Gender Checklist: Resettlement. www.adb.org/themes/gender/checklists-toolkits	
	Other ADB gender checklists: www.adb.org/themes/gender/checklists-toolkits. Currently available for a number of themes (including agriculture, water, and sanitation) and others are planned (including public sector management).	
	ADB. 2009. Project Gender Action Plans: Lessons for Achieving Gender Equality and Poverty Reduction Results. www.adb.org/publications/project-gender-action-plans-lessons-achieving-gender-equality-and-poverty-reduction-res?ref=themes/gender/publications	
	Further resources and guides on gender action plans: www.adb.org/themes/gender/project-action-plans	
Guides and case studies related to the above	World Bank. 2009. <i>Gender in Agriculture Sourcebook</i> : www.worldbank.org/genderinag. Site gives access by chapter from this page, including periodic updates on themes and case studies (innovative activities). The following chapters are particularly relevant to ADB:	
	Module 4: Gender Issues in Land Policy and Administration (including land titling)	
	Module 5: Gender and Agricultural Markets (including increasing value-added, MSMEs, market extension)	
	Module 6: Gender Mainstreaming in Agricultural Water Management	
	Module 9: Gender Issues in Rural Infrastructure for Agricultural Livelihoods	
	Module 10: Gender and Natural Resources Management (including climate change, natural disasters) • Otzelburger, A. 2011. Gender Responsive Strategies on Climate Change: Recent progress and ways forward	
	for donors. BRIDGE. www.eldis.org/go/home&id=58734&type=Document	

Gender Mainstreaming in ADB Sectors

Education (Vocational Education and Skill Development)

Education—more specifically, the improvement of vocational education and skills training systems to meet market requirements—will be pursued as a new area of collaboration for the Asian Development Bank (ADB) with the Government of India under the country partnership strategy for 2013–2017. This responds to the high priority placed by India on improving training and skill development to enable the growing youth population as well as the poor and underemployed to increase their prospects to gain decent employment and to contribute to economic growth. India's focus on skill development is therefore related to both sustaining growth and the inclusiveness of economic growth.

A series of recent reports also highlight the skill shortages that are impeding economic growth. While India's large working population has been seen as a great asset (the "demographic dividend"), the supplydemand gap in skills is undermining the potential benefits to be gained from this wealth of human resources. For example, a 2011 survey found that the skills shortage as measured by the difficulty in filling jobs was as high as 67%—one of the highest levels of all countries in the survey.²

The construction industry is among those struggling with shortages of skilled labor. Construction is a critical industry; it is the biggest employer after agriculture, accounting for about 31.5 million workers in 2005 and expected to expand to some 83 million by 2022. Many workers in this sector are women. In addition, continued major investment in infrastructure is envisaged over the next decade. Gaps in infrastructure are a "bottleneck" to faster economic growth, but the lack of skilled labor in the sector—masons, carpenters, machine operators, etc.—is a constraint in addressing this bottleneck.³

Other issues of concern in the sector include the low proportion of those of working age with any vocational training; the even lower proportion of women and girls who have benefited from vocational training; the low quality and status of vocational training provided through schools and industrial training institutes; the limited facilities for training in emerging sectors (including, for example, information technology, retail, and banking); and the lack of attention to the training and skill needs of the informal sector, which absorbs most of the labor force.

In entering into the sector, ADB envisages supporting skill development related to infrastructure (e.g., energy, transport and logistics, and municipal engineering); strengthening of skills design and delivery systems at

Planning Commission. 2011. Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan. paras. 10.14– 10.16. http://planningcommission.nic.in/

² 2011 Talent Shortage Survey by Manpower Group, as reported in Bharat Josahi. 3 April 2011. India Journal: Is 'Trainable' the New 'Employable'? India Real Time (Wall Street Journal). http://blogs.wsj.com/indiarealtime/2012/04/03/india-journal-istrainable-the-new-employable (For survey itself, see http://us.manpower.com/us/en/multimedia/2011-Talent-Shortage-Survey.pdf)

Bloomberg. 2012. India can't find enough laborers for Sing's \$1 trillion plan. 20 December. www.bloomberg.com/news/2010-12–20/india-can-t-find-enough-laborers-to-build-roads-in-1-trillion-singh-plan.html; see also the National Skill Development Corporation report on skill requirements in the construction industry at www.nsdcindia.org/knowledge-bank/index.aspx

national and state levels; and state-level human capital development programs.

Activities in all these areas provide considerable scope for ADB to have a positive impact on women's opportunities and quality of life and thus contribute to the gender equality objectives of both ADB and the Government of India. This chapter aims to assist in achieving such positive impacts. As this is a new sector for ADB in India, this chapter takes a somewhat different form than other chapters. The three sections that follow provide a preliminary brief overview of the following:

- · key gender issues related to vocational and skill training for the labor market,
- government policy commitments relevant to ADB initiatives in this area, and
- opportunities and entry points for ADB in relation to the areas it envisages supporting.

Key Gender Equality Issues in the Sector

Data Overview on Gender Gaps in Qualifications, Training, and Schooling

As context for the discussion that follows, Box 1 provides some key points about India's vocational and skills training systems.

There are significant gender gaps in the basic skills and qualifications seen as necessary in today's economy.

A recent analysis of the competitiveness of India's labor force considered the extent to which the population aged 15-49 had basic skills and qualifications related to the quality of the labor force (and the life chances of individuals).4 This included literacy, achievement of a college degree or advanced technical diploma, computer skills, and knowledge of English. As shown in Box 2, the levels of all these skills or qualifications were low, but even lower among women than men.

With respect to literacy, a basic workforce, and life skill, there is a gender gap of almost 20% at the national level. The size of the gender gap and actual levels of literacy vary greatly among states, with levels of literacy as low as 38%-39% among women in Rajasthan and Bihar and as high as 86% in the northeast states and 97% in Kerala.

Box 1: Summary Outline of the Vocational Training System

Responsibilities

• Under India's federal system, responsibility for education is shared between central and state governments. The central government provides leadership through national policy statements and legislation and through a number of schemes that are centrally funded or co-funded. Day-to-day management of many institutions is with state governments.

Major sources and/or institutions of vocational training

- Secondary schooling: there is a vocational education stream at senior secondary level ("Class X+2"), supported by the Scheme of Vocationalisation of Secondary Education introduced in 1988; since then, more than 9,600 schools have been created with a capacity of just over 1 million students (about 5% of higher secondary students).
- Industrial training institutes (ITIs) provide skills in engineering and nonengineering trades to youth aged 14+. In 2011, there were 9,404 such institutes (2,244 government ITIs and 7,160 private ITIs) with enrollment capacity of about 1.3 million.
- Women's ITIs: in 2011, there were 1,409 women's ITIs and 960 women's wings in general ITIs, with a total capacity of
- Women's Vocational Training Programme, managed directly by central government (as opposed to ITIs), consists of a National Vocational Training Institute for Women at NOIDA and 10 regional institutes with a capacity of 7,768 in longterm courses plus some short-term courses.

Other relevant points about prevocational education

- The Right to Education Act, 2009 provides for free and compulsory education for children aged 6–14 (giving effect to the 86th Constitutional Amendment of 2002). The related flagship program is implemented in conjunction with state governments and includes support of girls' education.
- Rashtriya Madhyamik Shiksa Abhiyan (RMSA) is a program that aims to universalize secondary education by making it available, accessible, and affordable. A related effort to retain girls in the secondary level includes a central government scheme supporting the construction of hostels for girls.

Sources: Reports of working groups for the 12th Five Year Plan on Secondary and Vocational Education (Ministry of Human Resource Development) and on Skill Development and Training (Ministry of Labour and Employment). http://planningcommission.nic.in

Box 2: Skill and Qualification Levels of Persons Aged 15-49 (by Sex, 2004-2005)

	% men who are:	% women who are:
Literate	81	60
With degree or diploma	9	5
English—have some	28	17
English—are fluent	5	3
Have any computer knowledge	5	4

Source: Desai et.al. 2010. Human Development in India: Challenges for a Society in Transition. pp. 95–96. Study also provides state-level breakdowns. http://ihds.umd.edu/report.html

This section based on Desai, S. et.al. 2010, Human Development in *India: Challenges for a Society in Transition.* pp. 85–96. http://ihds.umd.edu/report.html

Well beyond literacy, a college degree or advanced technical diploma is increasingly needed by industry (and by individuals in order to gain a good wage). Only 9% of men and 5% of women had such a qualification in 2004-2005. This again varied greatly by state, from as low as 1% of women in Bihar to 12% in the northeastern states and 13% in Kerala. In Kerala, there was no gender gap (13% of men had the same level of qualification) and in Punjab women had a slight edge (8% of women vs. 7% of men with a degree or diploma). Only 2% of women who were Muslim or from scheduled tribes or castes had a degree or diploma (vs. 4%–6% of men in those groups).

Some skills and knowledge of English are both of growing importance in today's economy. Here again the levels are low for all and even lower among women.

Gender gaps are also evident in levels of participation in vocational training.

Findings from the 2004–2005 National Sample Survey on the vocational training status of males and females aged 15–29 are summarized in Box 3. It is clear that very few in this younger age group had benefited from some form of vocational training or were receiving training at the time of the survey. But the numbers were even lower among women: less than 10% compared with 14.5% of men.

Box 3: Whether or Not Training Received, by Sex

Percent distribution of persons age 15-29 by status of vocational training received or being received by sex 2004-2005

training received or being received, by sex, 2004-2005				
At time of survey:	Male	Female	Both	
Was receiving formal vocational training	1.7%	0.9%	1.3%	
Had received formal vocational training	2.6%	2.1%	2.4%	
Had received nonformal vocational training (hereditary)	5.0%	2.8%	3.9%	
Had received nonformal vocation training (other)	4.4%	3.1%	3.8%	
Had not received vocational training	85.5%	90.2%	87.8%	
Total	99.2%	99.1%	99.2%	

Source: National Sample Survey (NSS), 61st round, Report 517. Status of Education and Vocational Training in India, 2004–2005. Statement 3.20. http://mospi.nic.in/mospi_new/admin/Login.aspx (log-in required, but only requires registration). Note: this regular report will be updated from NSS 66th round (2009-2010).

Box 4: Fields of Training: Women Compared with Men

Percent distribution of persons age 15–29 who received formal vocational training, by sex,2004–2005

	Male	Female	Total
Mechanical engineering trades	11.2	1.1	6.8
Electrical and electronic engineering trades	17.8	2.3	11.0
Computer trades	30.5	31.2	30.8
Civil engineering and building construction-related works	3.8	1.2	2.7
Textile related work	0.2	23.4	11.5
Artisan/craftsman/handicraft and cottage-based production work	1.1	2.0	1.5
Health and paramedical services related work	3.7	9.3	6.1
Office and business-related work	4.2	6.0	5.0
Driving and motor mechanic work	11.8	0.7	6.9
Beautician, hairdressing, and related work	0	4.1	1.8
Work related to childcare, nutrition, preschools, and crèches	0	2.6	1.2
Other	13.7	16.0	13.9

Note: Omits fields accounting for less than 1% of all trainees. Source: National Sample Survey, 61st round, Report 517. Status of Education and Vocational Training in India, 2004–2005. Statement 3.23. See Box 3 for website and note on expected update.

Box 5: Institutions of Training: Women Compared with Men

Percent distribution of persons aged 15-29 who received formal vocational training by institution of training, by sex, 2004–2005

	Male	Female	Both
Industrial training institutes and centers	29.1	7.5	19.6
Tailoring, embroidery, and stitch craft institutes	0.9	18.2	8.5
School offering vocational courses (secondary, higher secondary level)	5.0	6.0	5.4
Recognized motor driving schools	9.1	0.4	5.3
Institutes run by companies and corporations	3.9	4.0	4.0
Polytechnics	4.8	1.6	3.4
University Grants Commission (first degree level)	3.2	2.2	2.8
Hospital and medical training institutes	1.9	3.1	2.4
Nursing institutes	0.3	4.6	2.2
Nursery teachers' training institutes	0.2	3.1	1.5
Institutes for secretariat practices	0.8	1.7	1.2
Recognized beautician schools	0	2.6	1.2

Note: Omits institutions accounting for less than 1% of all trainees. Source: National Sample Survey, 61st round, Report 517. Status of Education and Vocational Training in India, 2004–2005. Statement 3.24. See Box 3 for website and note on expected update.

▶ There are also gender differences in the fields of training and in the institutions attended.

The data in Box 4 shows that men predominate in training for the various engineering trades and in training related to driving and motor mechanics, while women are the majority in training for work related to textiles, health and paramedical work, childcare, and beauty care. While this tends to reflect labor force patterns and stereotypes of appropriate work for women and men, it is interesting that the relatively newer field of computer trades is the largest single field of training and one that accounts for an equal proportion of women and men.

The distribution among types of institutes (Box 5) reflects the field of training to a large degree. Thus 29% of male trainees attend industrial training institutes or centers, which tend to emphasize the engineering trades, while tailoring and craft institutes account for some 18% of women trainees.

This data shows how women are distributed among fields and institutions (e.g., the proportion of all women trainees who are studying engineering trades), but not the proportion of female students in a particular field or institutions (e.g., the proportion of engineering trainees who are female). Such data is hard to find, but according to a commentary by one expert, women account for only 9% of the enrollment in the skill training sector overall. 5

Enrollment and retention in secondary education remains an issue in girls' education.

Vocational education through the school system is at the secondary "+2" level, after Class X, so enrollment, dropout rate, and attainment to the end of Class X affects the numbers of girls and boys who could become part of the vocational stream in Classes XI–XII.

Box 6 shows the steep decline in enrollment levels of both girls and boys with each level of education. However, the decline is even steeper for girls. In the last 3 years of primary school, the gross enrollment ratio is 84.5% for boys and 78.3% for girls. The figures for secondary are lower, with a further drop to 38.3% for boys and 33.3% for girls for higher secondary, for both

Box 6: Gross Enrollment Ratios, Boys and Girls

Gross enrollment ratios,* late primary, secondary, and higher secondary, by sex, 2009-2010

	Classes VI–VIII (11–13 years)		Classes IX–X (14–15 years)		Classes XI–XII (16–17 years)	
	Boys	Girls	Boys	Girls	Boys	Girls
All groups, all India	84.5	78.3	66.7	58.5	38.3	33.3
Scheduled castes	90.5	86.6	71.2	63.5	37.4	33.5
Scheduled tribes	87.8	78.8	54.2	44.2	31.4	22.3

* The gross enrollment ratio is the number of pupils enrolled in a given level of education, regardless of age, as a percentage of the population in the expected age group for the same level of education. Source: Ministry of Human Resource Development. 2011. Statistics of School Education 2009–2010 (as of 30 September 2009, provisional). Tables D-I and D-II. http://mhrd.gov.in/statistics_data?tid_2=156

Box 7: Gender Parity Index, Late Primary and Secondary

Gender parity index,* late primary, secondary, and higher secondary, for all and scheduled castes and scheduled tribes, 2009–2010

	Classes VI–VIII	Classes IX-X	Classes XI–XII
All groups, all India	0.93	0.88	0.87
Scheduled castes	0.96	0.89	0.89
Scheduled tribes	0.90	0.82	0.71

* The gender parity index is ratio of girls to boys (calculated using gross enrollment ratio, defined in Box 6, to standardize effects of population structure): http://mdgs.un.org/unsd/mdg/Metadata .aspx?IndicatorId=9

Source: Ministry of Human Resource Development. 2011. Statistics of School Education 2009–2010 (as of 30 September 2009, provisional). Tables D-I and D-II. http://mhrd.gov.in/statistics_data?tid_2=156

the academic and vocational streams (no separate figures for vocational are provided).

At each level, the drop in enrollment is greater for girls, which becomes more evident from the gender parity index in Box 7. In late primary years, there are 93 girls per 100 boys, which drops to 88 in secondary and 87 in higher secondary.

Compared to the all India figures, the enrollment ratios in the last years of primary school are better for both girls and boys among both scheduled castes and tribes, although the picture is somewhat more mixed thereafter. The gender parity index shows the scheduled castes do somewhat better and scheduled tribes considerably worse than the overall population.

From presentation by Dr. Santosh Mehrota, director-general, Institute of Applied Manpower Research, Planning Commission. Reported in Report of Gender and Economic Policy Discussion Forum II: Empowering Women through Skill Development— Challenges and Opportunities. April 2012. www.in.boell.org/web/112-862.html

• Educational spending on girls is lower than on boys, which increases the challenges they face.

A study using 2004–2005 data on costs of education for Classes I-X found that expenditures on boys were consistently higher than for girls, with a difference of about 10%–12% for each class level above Class I.⁶ In addition to fees (which account for a relatively small proportion), the costs of education include transportation, uniforms, and books, which together increase significantly at later primary and secondary levels. Private tutoring is another education expense to compensate for weaknesses in schools and teaching. The study attributed the lower spending on girls in part to subsidies for girls' education in some states, but also a lower likelihood of girls being enrolled in private schools or benefiting from private tutoring.

Vocational training through the school system is the system serving girls?

A report by a group of experts for the National Skill Development Board was scathing about the vocational education of girls in the school system. 7 Noting both the small proportion of girls in vocational education in upper secondary levels and industrial training institutes (ITIs) and the poor quality of the courses available to them, the report states that "there is no shying away from the fact that girls get the worst educational experience out of those available in the vocational sector."

The report further states that

...the existing pattern of vocational education in ITIs and schools has contributed to the already deep gender differences by adhering to popular stereotypes about work capacity of girls. In addition, poor content and the pedagogic interaction in the programmes keep the general ethos extremely depressing for girls. Programmes and curricula of existing training courses for girls frequently fail to meet the demands of the labor market. This does not mean that girls should be labelled as hard spots of vocational education; rather that their integration in the market economy should be the central aim, without succumbing to those forces of tradition that limit girls to sectors like beauty care, tailoring and child care. The need to underscore the relevance of a

gender sensitive approach in school-based vocational education and in the programmes of it is a central concern of this report. The new approach should focus on strategic elements for the promotion of girls in vocational education which includes developing a long term vision of the life of girls as participants in an educational experience, conceptualization of vocational education in coherence with the life of girls in our society, and standardized skills for various old and newly emerging fields.

Skill Training and Upgrading of Women in the Workforce—Do Women Have Access?

The current working population also needs attention in order to achieve objectives related to improving the quality of the labor force and the ability of workers to contribute to and benefit from economic growth. The discussion below takes up three areas of employment that account for significant proportions of women workers and in which greater access to training could have major benefits for economic objectives and for women themselves.

Many women work in the construction sector but most are in unskilled manual tasks with few chances for training and employment in skilled work.

Construction is a major source of employment and one of the fastest-growing sectors of the economy. Women are an important part of the labor force in the sector (by some estimates, as much as half),8 but are employed almost exclusively as casual manual laborers—head load workers carrying bricks, cement, sand, and water, or workers who dig, mix mortar, or break stones. These women have few opportunities to gain skills in the better-paid trades such as carpentry, masonry, plumbing, or electrical work, and those who are trained struggle to be accepted as workers in these areas. 9 Yet it is in trades such as these that skilled workers are in short supply.

This section based on Desai, S. et.al. 2010. Human Development in *India: Challenges for a Society in Transition.* pp. 80–81. http://ihds.umd.edu/report.html

National Skill Development Board. Undated. I. Section 6.1. http://planningcommission.nic.in/reports/genrep/index.php?repts =rep_csa.htm

Figure provided in the 11th Five Year Plan, Vol. II, para. 6.23. planningcommission.nic.in/plans/planrel/fiveyr/welcome.html. See also Baruah, P. 2010. Women and globalization: challenges and opportunities facing construction workers in contemporary India. Development in Practice. 20 (1): 31–44. http://csulb.academia.edu/BipashaBaruah/Papers/568911/Wome

n_and_globalisation_challenges_and_opportunities_facing_constr uction_workers_in_contemporary_India

Baruah, footnote 8; see also Baruah P. 2010. Women and Property in Urban India. Vancouver: UBC Press.

The National Urban Housing and Habitat Policy, 2007 recognizes the extent to which women participate in construction and also that the sector "is perhaps their biggest exploiter in terms of disparity in wages." In response, the policy makes a commitment to concerted efforts to upgrade the skills of women construction workers, to employ them in supervisory positions, to develop them as contractors, and to encourage both public and private agencies to take a lead in these areas. 10

The Self-Employed Women's Association (SEWA), which has been organizing women construction workers in Ahmedabad since the late 1990s, carried out several surveys to better understand the needs and priorities of women in construction that provide insights into gender differences in skills, opportunities, and rewards. 11 The first survey in 1998 found that most women were in unskilled work while most men were in semiskilled or skilled work. About 10% of women were in semiskilled work (mostly assisting male masons in plastering or concrete mixing) but generally were still paid the female manual wage rate, which was about half the male manual rate. More than 90% of women had never had any training for construction but had learned on the job. The 2003 follow-up survey found an increased preference for skilled workers and an increase in the real value of wages for them, while demand for the unskilled declined and their wages stagnated.

A major conclusion of the first two SEWA surveys in 1998 and 2003 was "the need to upgrade, diversify, and certify the skills and women in new technologies and emerging standards in the construction industry." SEWA responded by establishing the Karmika School for Construction Workers in 2004 to provide women with specialized training in construction (Box 8). The experience of the Karmika School shows that nonliterate and semiliterate women can benefit from skills training to trade standards and certification recognized by the Construction Industry Certification Council.

A follow-up study in 2007 considered the impact of the training and found positive results—many of the women trained reported more working days, more skilled work opportunities, higher incomes, and more confidence in dealing with sexual harassment at construction sites. However, continued preconceptions and biases against skilled women workers in the sector and resultant discriminatory practices suggest that advocacy and other measures are needed to encourage construction firms

Box 8: Karmika School for Construction Workers Equips Women with Specialized Construction Skills

- Provides a specialized, comprehensive 3-month training module that incorporates various skills needed in construction, such as masonry, painting, plastering, tiling, plumbing, carpentry, electric wiring, welding, roller operation, excavator operation, rubble masonry, bar bending, and lab technician training.
- Also trains workers in short-term specialized skills such as construction of toilets, disaster resistant houses, and other relevant local housing infrastructures such as drains, sewers, and landscaping.
- Training modules include training in functional literacy skills and life skills such as conflict resolution and bargaining and negotiating with contractors and other employers.
- Provides trainees with a daily stipend and travel costs.
- Program was developed in partnership with the Construction Industry Development Council, the apex organization for the development of the construction sector.
- Links have also been developed with private sector building firms for mutual benefit—serving builders' needs for a steady supply of skilled labor and providing women trainees with onthe-job training and skilled women with employment opportunities.
- Most trainees of the school are illiterate or minimally literate (only 13% had more than 8 years of schooling)

Source: Baruah. 2010. Women and globalization: challenges and opportunities facing construction workers in contemporary India. Development in Practice. 20 (1): 31-44. See also the webpagewww.sewahousing.org under the Activities tab.

and contractors to recognize the contribution that skilled women can make. 12

Pervasive attitudes disparaging efforts to increase the skill and authority of women in the construction sector also make it challenging to maintain and expand this groundbreaking initiative, despite the skills shortages that exist in the construction sector. This seems another area for government leadership and advocacy.

Most women continue to be engaged in agriculture, a sector in which training could help address low growth, productivity, and incomes.

A high proportion of rural women continue to be engaged in agriculture (79% of women vs. 63% of men in 2009–2010), and women form an increasing proportion of those working in the sector as men are finding more

National Urban Housing and Habitat Policy 2007. p. 35. mhupa.gov.in/policies/duepa/HousingPolicy2007.pdf

¹¹ Information about the SEWA studies is from Baruah, footnote 8.

 $^{^{\}rm 12}~$ Another study in Tamil Nadu came to similar conclusions about the biases and discrimination against women in recruitment, training, and recognition of skills in construction: Barnabas, A. et al. 2009. A Study on the Empowerment of Women Construction Workers as Masons in Tamil Nadu, India. International Journal of Women's Studies. 11(2): 121–141. www.bridgew.edu/soas/jiws/Nov09v2/ Annette.pdf

rewarding nonagricultural opportunities more readily than women. Women now account for almost 40% of those working in agriculture. 13

Low growth and productivity in the sector were concerns of the 11th Five Year Plan (2007–2012) that are reiterated in the approach paper for the 12th plan. 14 Studies have also found that women's plots and farms tend to have lower yields than those of men, a difference attributed to a range of gender-based constraints related to access to resources that include skills (as well as inputs, land, labor, etc.). 15 Among farm laborers, daily wages for women are less than 70% of those of men, 16 in part again because they are engaged in lower-skilled tasks.

Increased training in new technologies and skilled practices for women agricultural workers and smallholders, including livestock and poultry farmers, is urged by one of the 12th plan working groups in order to increase both productivity and incomes in agriculture.¹⁷

Also important is equitable access by rural women to training that enables them to participate in nonagricultural work and enterprise in rural areas.

Various initiatives have shown that the lack of literacy need not bar women from learning technical skills.

The experience of SEWA's Karmika School for Construction Workers in training illiterate and semiliterate women for a range of skilled trades in the construction sector is but one example of institutions developing training approaches that are not dependent on literacy in order to equip trainees with skills needed in a particular sector or community. India's Barefoot College is another example. The college aims to enable rural community members to acquire a range of skills required in their

Box 9: Tilonia's Barefoot College Trains Illiterate and **Semiliterate Women as Barefoot Solar Engineers**

Barefoot College's approach to the solar electrification of remote rural villages is to involve villages in producing, installing, repairing, and maintaining sophisticated solar lighting units, drawing on illiterate and semiliterate women and men of the villages reached. A specific course for women was introduced in 2005 and with the success experienced in India it began to receive women students from other countries. In 2008, the college was officially recognized by India's foreign affairs ministry as a training center for Women Barefoot Solar Engineers from least-developed countries in Asia, Africa, and Latin America. By 2011, the solar engineers trained had provided electricity to more than 600 villages in 33 countries.

The program has produced a cadre of women solar technicians who install solar panels, build solar lanterns, and provide repair and maintenance support through local workshops. Women are taught to handle sophisticated charge controllers, to install solar panels and link them to batteries, to build solar lanterns, and to establish a local electronic workshop where they can carry out all repairs to the solar power system themselves. The mostly illiterate trainees learn to identify parts by shape and color, develop the skills required by following mimed instructions, and execute technical tasks by example.

In addition, the college has also supported a program for Women Barefoot Solar Cooker Engineers who produce parabolic solar cookers, again training illiterate and semiliterate women in tasks that require a high degree of accuracy and craftsmanship. Sources: Various articles available on the Barefoot College website, www.barefootcollege.org/sol_resources.asp (see also the college webpage on Rural Women Social Entrepreneurs); AlertNet. 2011. India's women solar engineers light up rural life. www.trust.org/alertnet/news/indias-women-solar-engineers-light-uprural-life; and Women Barefoot Solar Cooker Engineers Society, www.barefootcollege.org/Solar%20Cooker%20Pamphlet.pdf

communities. It has developed methods to training that enable illiterate and semiliterate men and women to develop skills to serve as, for example, midwives, dentists, health workers, solar engineers, solar cooker engineers, water drillers, hand pump mechanics, architects, artisans, designers, masons, etc. The college's experience in enabling women with limited literacy to be effective solar technicians is of particular note (Box 9).

Policy and Program Environment for Gender Equality Initiatives in the Sector

The Government of India is giving high priority to increasing the employability and skills of the workforce. The 2009 National Policy on Skill Development stated an ambitious target of creating 500 million skilled workers by 2022 and underpins a national mission to increase the capacity of the vocational training system. The policy emphasizes equity and inclusivity objectives, and aims to

Calculated from NSS 66th round, Report 537. Employment and Unemployment Situation in India, 2009-10. Statement 5.9.2 and Table 29. http://mospi.nic.in/mospi_new/admin/Login.aspx (log-in required, but only requires registration).

Planning Commission. 2011. Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan. para. 12.2. http://planningcommission.nic.in

Agarwal, B. 2011. Food Crisis and Gender Inequality. DESA Working Paper No. 107 (ST/ESA/2011/DWP/107). www.un.org/esa/desa/ papers/2011/wp107_2011.pdf

Srivastava, N. and R. Srivastava, R. 2010. Women, Work and Employment Outcomes in Rural India. Economic and Political Weekly. XIV (28). p. 51. http://environmentportal.in/files/ Women%20Work%20and%20Employment%20Outcomes.pdf. This uses 2004–2005 data, but the 2009–2010 proportions seem similar; see footnote 13, Table 49.

Working Group on Disadvantaged Farmers, Including Women. 2011. Final Report. http://planningcommission.nic.in

tackle barriers that prevent particular groups from benefiting from training. Particular emphasis is placed on ensuring that women benefit—the quote in Box 10 shows that the policy views increased access to skills training as critical to improving women's life chances, and envisages a range of measures to improve access and the impact of vocational training for women. 18

Various other elements of the policy also respond to women's situation and needs. For example, the policy recognizes that rural women are increasingly the main workers in their households, but lack up-to-date skills and knowledge to improve productivity. It proposes an approach to skill development in rural areas that would strengthen participants' ability to acquire new technologies, improve linkages to value chains, increase agricultural production, expand access to markets, engage in off-farm activities for additional incomes, and gain skills for self-employment—all elements identified by various studies as critical to improving productivity and incomes of rural women. The policy is also concerned with skill development for the unorganized sector, and the target groups specified include the categories where most women are found—workers in microenterprise, home-based workers, casual laborers, and farmers. The commitment to addressing entry barriers for unorganized workers, such as transportation and loss of wages, would also be very important in increasing women's ability to participate.

Both this policy and the National Employment Policy (draft 2008)¹⁹ promote vocational training in fields employing women as well as women's participation in nontraditional areas. The employment policy assigns an important role to training in improving prospects for women. It emphasizes the need to ensure that training for women "aims at mainstreaming their employment rather than confining them to stereotyped 'female occupations'." It calls for particular attention to the skill training of women workers as a means of meeting their needs and also addressing the "bias against women workers in the labour market."

The concern for equitable participation and the avoidance of stereotyping in vocational education is also voiced in the National Policy on Education (1986, updated 1992). This was echoed in the design of the centrally sponsored Scheme of Vocationalisation of Higher Education and given further emphasis in its

Box 10: National Policy on Skill Development, 2009, on Vocational Training for Women

Skill development for employability will be used as an agent of change in promoting women's employment. Women face a multitude of barriers in accessing skills and productive employment, remaining on the job due to effect of globalization or otherwise and advancing to higher level jobs, as well as returning to the labour market after a period of absence spent, for example, in raising children.

- A policy of nondiscrimination will be pursued vigorously to provide equal access for women to skill development and employment.
- This Policy will aim to raise women's participation to at least 30% by the end of the 11th Plan.
- Proactive measures that overcome barriers and facilitate participation, such as hostels for women, scholarships, transport, training materials and loans, will be made available on a large scale.
- The Women's Vocational Training Programme will be expanded and the institutional network providing training facilities exclusively for women, so that they can obtain skills with high wage and self-employment potential, will be greatly expanded.
- In order to promote skills and employability of women, the sectors which employ a large number of women will be identified. These may include construction, home-based traditional crafts or piece rate work, financial and health service as well as agricultural sectors.
- Gender stereotyping in vocational courses will be eliminated to encourage women's participation in nontraditional occupations, including existing and emerging technological fields.

Source: National Skills Development Policy, section 3.3.

recent update,²⁰ which states that equal and nonstereotyped participation of girls in vocational education "should be the guiding principle for taking various steps for implementation and monitoring of the scheme, be it expansion or strengthening of schools, enrolment, placing or other." It also advocates using care to ensure that girls are encouraged to join regular courses and not pushed into nonformal modes of vocational education; putting specific incentives and support systems in place to increase participation and performance in high employment oriented courses; and involving vocational counselors in efforts to reduce gender bias on the part of employers. Statements about the approach also advocate giving priority to coeducational schools and institutes except where society is not yet ready, in which case all-girls schools are an alternative.

National Policy on Skill Development, 2009. www.skilldevelopment.gov.in/node/163

National Employment Policy (draft 2008). http://dget.nic.in/publications/FirstDraftNEP.pdf

Ministry of Human Resource Development. Revised centrally sponsored scheme of "Vocationalization of Higher Secondary Education." http://mhrd.gov.in/sites/upload_files/mhrd/ files/revised%20scheme.pdf (link at end of page).

Similar themes also underlie the recommendations for the 12th Five Year Plan made by the Steering Committee on Women's Agency, which stated that

... one of the major impediments affecting women's participation in workforce particularly in secondary and tertiary sectors is the lack of skill development. Skill development must be seen as a vehicle to improve lives not just livelihoods of women and the curriculum should include inputs that help women assert individually and collectively. The XII Plan [12th Plan] should focus on promoting skill development initiatives beyond traditional skills to emerging skills, which would help women break gender stereotypes and also help them move into higher skilled tasks. Training of women as auto drivers, taxi drivers, women masons, etc. should be incorporated in the skill development programmes. Entrepreneurship development should also be included as an integral part of skill training.

Box 11: Highlights of Government Policy Commitments on Gender Equality Relevant to ADB Initiatives in the Sector

- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (women's participation in vocational training—see Box 10); also addressed at the state level, such as in the Rajasthan 11th Five Year Plan (expanding technical training facilities and employment-related courses for women).
- Increasing women's employment opportunities: National Employment Policy, draft 2008 (equality in labor market, increased access to opportunities); Mahatma Gandhi National Rural Employment Guarantee Scheme (33% participation by women and equal pay for women); statelevel policies on the public service (e.g., reservation of 33% of government jobs in Madhya Pradesh, 30% in Karnataka); state programs supporting women's enterprise (e.g., for women's agro-enterprise in the *Orissa State Agriculture* Policy, 2008).
- Eliminating discrimination in wages, recruitment, and working conditions (including training): Equal Remuneration Act 1976 (equal pay; equal treatment in recruitment; promotions; and training; for same and similar work, for women and men).
- · Improving women's employment opportunities and wages in the construction sector: National Urban Housing and Habitat Policy, 2007 (skill upgrading, employment in supervisory positions, and development as contractors).
- · Increasing women's participation in all government programs: the 11th Five Year Plan 2007–2012 (minimum of 33% participation); reiterated in some state-level five-year plans for the same period (e.g., in Bihar).

Only limited state-specific references included. Some further statelevel information is provided in ADB's Gender Equality Reference Sheets, prepared in 2011 for most ADB partner states in India. National policies listed are available online; search by title.

Other central and state policies related to skills training, employment, and participation in government programs reflect a concern to improve women's knowledge, skills, and employability, both for their own benefit and in support of economic growth. Key themes and policies are summarized in Box 11.

Opportunities and Entry Points for ADB

Initiatives in support of vocational training and skill development provide a range of opportunities for ADB to support gender equality and women's empowerment (in line with ADB requirements for gender mainstreaming outlined in Box 13 at the end of this chapter). As highlighted in Box 12, the ADB country partnership strategy (CPS) for 2013–2017 identifies several specific areas to be pursued in the education development sector as well as several strategies that apply to all sectors.

This section aims to support efforts to implement the CPS and, more generally, strengthen approaches in the sector. The paragraphs below take up several types of initiatives in which ADB has indicated an interest and suggest several subject areas for attention together with questions to guide analysis and program design.

Support for skill development in relation to physical infrastructure for energy, transport, and municipal services (including design, construction, maintenance, and management) could include attention to these areas:

- Women's access to training in skilled construction trades: What strategies have been developed for outreach to the pool of women in construction for skill development, upgrading, and certification? Is there potential to build on the experience gained to date by innovative initiatives such as SEWA's Karmika School for Construction Workers?
- Training-employment linkages: Can ADB and its partners and contractors show leadership in supporting gender equality by employing qualified women in technical and skilled trade areas? Can the project support linkages between training institutes and industry associations aimed at promoting recruitment of women trained? Would this be an area for experimentation and innovation that responds to the government's "finance plus" requirements?

Box 12: ADB Gender Strategy for	Box 12: ADB Gender Strategy for India for 2013–2017: Education Sector and General Commitments			
Education Sector Commitments	Under the country partnership strategy, 2013–2017 ADB will give further attention to the following issues and objectives to enhance impacts on women's empowerment and gender equality: • increased access by women to quality training in marketable skills and subsequently to employment, and • improved facilities and environment for women in technical and vocational training establishments.			
Strategies for All ADB Sectors	ADB will strengthen its gender equality outcomes in collaboration with government partners at both central and state levels through (i) improving the quality of gender analyses done during the project preparatory technical assistance, in particular by aligning the analyses more closely with project objectives; (ii) reflecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents; (iii) monitoring achievement of key gender equality outcomes in design and monitoring frameworks; (iv) selectively using technical assistance resources to build knowledge and capacity to deliver gender-responsive outcomes; and (v) engaging in gender-responsive policy, legal reform, and legal empowerment in ADB priority sectors.			
Source: ADB. Country Partnership Str	Source: ADB. Country Partnership Strategy 2013–2017 (draft).			

Support for state-level partners in developing skill development missions or reform of vocational training approaches could include attention to these areas:

- Capacity of state partners to address gender equality issues in planning and management of skill development missions: What steps are needed to increase information about and awareness of barriers faced by girls and women in gaining adequate skills? How will the potential economic benefits of addressing gender gaps be promoted? Do data systems need attention to be able to generate the sex-disaggregated data about trainees and the labor force needed for policy development in the sector? Can links be established with research institutes and civil society organizations with experience and interests in gender equality?
- · Strategy to address gender gaps in access to and subjects of vocational education and training: Have such gender gaps been specifically identified as an issue to be addressed? What steps can be taken to ensure that skill development for girls and women is not marginalized into "women's" sectors and institutions? What steps are needed to ensure that existing women-specific institutions are diversified and market-oriented?
- Targets for the participation of girls and women: Are there specific targets for the different types of skills or professions? Are there specific strategies to achieve those targets? Is there capacity to monitor progress toward achieving those targets?

 Access to training for poor adult women in the labor force: Can training opportunities be strengthened for this underserved group? Have strategies paid adequate attention to the need to make the training market relevant and to provide a stipend so poor women can take time off from current economic activities to participate?

Support for vocational training institutions, such as industrial training institutes or other existing or new public or public-private training providers could include attention to the following areas:

- · Policies on equal access and treatment: Can these institutions, public or private, be assisted to develop effective policies and practices in support of equal opportunities for girls and women?
- · Women in nontraditional fields: What is needed to strengthen access by girls and women to quality training in a wider range of fields, including those considered nontraditional for women?

Interventions in support of the universalization of secondary schooling, including facilities, teaching staff, and general policies, could include the following:

• Equitable treatment of girls within the classroom and the school: Are there policies on equitable treatment of girls at the state or institution level? Does training for headmasters and teachers provide guidance in implementing this policy through institutional leadership and teacher behavior? Is enough being done to protect girls from harassment at school, in hostels, or on the way to school?

- · Curricula and teaching materials: Do textbooks and other materials reflect positive attitudes toward girls and women and to their capacities and roles in society? Do they encourage girls (and boys) to consider a broad range of vocational and professional choices?
- · Adequate physical facilities: Do current and planned facilities meet the needs of adolescent girls, including the number and design of toilets to allow for privacy and physical security?

Box 13: ADB Gender Categories and Specific Requirements for the Effective Gender Mainstreaming Category

Gender Equity Theme (GEN)

- Directly supports gender equality and women's empowerment
- All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- See specific requirements for EGM (at right)

Some Gender Elements (SGE)

Does not meet EGM criteria BUT

- provides some direct and substantial benefits to women because of the nature of the project OR
- includes some gender-related design features in project design or resettlement

No Gender Elements (NGE)

Gender issues not integrated in design

Effective Gender Mainstreaming (EGM)

Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. Projects with an EGM categorization must meet the following requirements:

- The **social analysis** conducted during project preparation included careful consideration of gender issues highlighting both constraints and opportunities.
- Specific gender design features are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs and/or components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are included in the project design and monitoring framework.
- A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the related project administration manual.
- The RRP main text discusses how the project will contribute to improving women's access to or benefits from the project, at a minimum in the **Poverty and Social** subsection under the **Due Diligence** section.
- A covenant or a condition is in the policy matrix to support implementation of the gender action plan.

Source: Guidelines for Gender Mainstreaming Categories of ADB Projects. www.adb.org/Gender/gender-categories.asp

Gender Mainstreaming in ADB Sectors

Energy

A major challenge for India is to ensure safe, clean, and convenient energy services to support economic growth and the basic energy needs of households across the country, both of which are critical to achieving the country's human development goals. The 2006 Integrated Energy Policy Report recognized that energy security would require increased efficiency, reduced energy requirements, and an expansion of domestic resources. It also highlighted the particular challenges of achieving household energy security and the critical importance of policies and initiatives in this area to gender equality and women's well-being.¹

The energy sector has been one of the top priorities for the ADB–India partnership and it accounted for \$7.3 billion, or 28.5% of Asian Development Bank (ADB) assistance to India, in the period 1986–2010.² An initial focus on national public sector enterprises gave way to collaboration with states to strengthen transmission and distribution systems and undertake policy reforms. More recently, clean energy, energy efficiency, and renewable energy (hydropower and solar) have received increasing attention and resources.

These new directions have increased the scope to support gender equality in ADB energy investments through, for example, initiatives that address the particular energy needs of women and households and further steps to draw on women's potential as energy entrepreneurs and service providers. This chapter aims

to assist in efforts to ensure that ADB energy sector investments follow up such opportunities and thus contribute to the gender equality objectives of both ADB and the Government of India. It is organized into four sections:

- a brief review of gender equality issues relevant to the ADB areas of activity in the energy sector,
- an overview of government policy commitments pertinent to ADB initiatives in the sector,
- a summary of how ADB has approached gender mainstreaming in its energy investments, and
- points for attention in sectoral analyses and project preparation to strengthen gender equality outcomes (with a "tip sheet" to aid analysis and design).

Key Gender Equality Issues in the Sector

Access to appropriate and affordable energy is an important issue for all citizens, but differences between women and men in household responsibilities, asset ownership, and livelihood options mean that there are gender-specific dimensions to energy access that require attention. At the same time, where there are appropriate enabling conditions, women can make significant contributions to the energy sector and use energy as an instrument for enhancing their livelihoods.

 The continued reliance on traditional biomass for household energy has significant negative impacts on women.

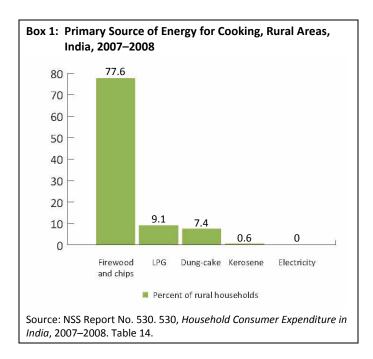
Energy use patterns, particularly in rural India, are predominantly based on traditional biomass-based fuels. In 2007–2008, more than 85% of households in rural India depended on firewood, dung cake, and

Planning Commission. 2006. Integrated Energy Policy. Report of the Expert Committee. See overview and Chapter VIII on household energy security.planningcommission.nic.in/reports/ genrep/rep_intengy.pdf

For an overview of assistance in the energy sector, see ADB. 2011. India–ADB Development Partnership. www.adb.org/publications/ india-adb-development-partnership.

coal/charcoal for cooking, with only 9% using liquefied petroleum gas (LPG) and a negligible proportion using electricity for cooking (Box 1).3 Current forecasts show that the predominance of biomass as the main cooking fuel is expected to remain significant at 52% in 2031-2032. The burden of this reliance on biomass fuels falls disproportionately on women, and the implications are many and well documented. The time spent per day on collecting such fuels ranges from 40 minutes to 2 hours, with women in some parts of India such as Rajasthan walking as far as 1–2 kilometers for fuel wood. 5 Indoor air pollution resulting from the combustion of biomass fuels in traditional cook stoves is a leading cause of disease and death in India. Exposure to smoke and fumes from burning of biomass caused the premature death of an estimated 570,000 women and children in India in 2005. Indoor air pollution also has an effect on productivity—about 800 million days of potentially productive work are estimated to be lost annually due to diseases related to indoor air pollution caused by burning of biomass.

In short, these traditional fuels are inefficient, often unreliable, and create health risks, and the chore of collecting them places a heavy burden of drudgery on women and girls. At the same time, women's daily tasks require huge quantities of human energy. Women's workdays are longer than those of men because they undertake survival activities such as collecting and carrying fuel and water, cooking, food processing, transport, agriculture, and small enterprises—most of it fueled by human energy and most of it nonmonetized work that is largely invisible in national energy accounts and labor force statistics.



The reliance on traditional biomass cook stoves also contributes to greenhouse gas emissions.

In addition to their impacts on indoor pollution and on health, particularly for women and children because of they are more exposed to these pollutants than men, traditional biomass cook stoves are important contributors to outdoor pollution and greenhouse gas emissions. It has been estimated that cleaner cooking energy (through improved cook stoves or cleaner energy sources) could cut India's greenhouse gas emissions by about 4%.8

Energy access policies and energy investments do not recognize the gender issues in energy use patterns.

Energy access is not an end in itself—the purpose of energy projects is to supply energy services that will meet user needs. Users include both men and women, who often have different energy roles, needs, and priorities. However, energy access policies and programs generally do not pay sufficient attention to women's needs and priorities. Energy policies and investments continue to emphasize petroleum fuels and electricity and reduced subsidies on fossil fuels, with only limited attention to and investment in noncommercial energy. The 11th Five Year Plan, 2007-2012 proposed an investment of more than \$100 billion in the energy sector, but less than 2% of this investment is likely to

Ministry of Statistics and Programme Implementation. 2010. Household Consumer Expenditure in India, 2007–2008. NSS 64th round, Report 530. Table 14R.mospi.nic.in/mospi_new/ Admin/Login.aspx

Patil, B. 2010. The Status of Rural Energy Access in India: A Synthesis. Energy Technology Innovation Policy Discussion Paper Series. Harvard Kennedy School. www.hks.harvard.edu/mrcbg/cepr/rlib_India.html

IRADe. 2009. Gender Analysis of Renewable Energy in India: Present Status, Issues, Approaches and New Initiatives. Integrated Research and Action for Development.irade.org/Gender% 20Cover.pdf

Venkataraman, C. et al. 2010. The Indian National Initiative for Advanced Biomass Cookstoves: The benefits of clean combustion. Energy for Sustainable Development 14:63-72. http://media .cigionline.org/geoeng/2010%20-%20Venkataraman%20et %20al%20-%20The%20Indian%20National%20Initiative %20for%20Advanced%20Biomass%20Cookstoves.pdf

IRADe (footnote 5).

Venkataraman (footnote 6).

Women are not always able to benefit from energy investments.

The legal framework in India supports gender equality and women's empowerment. However, because of the persistence of traditional practices, women's lack of awareness of their legal rights, and gaps in law enforcement, women have less access to productivity-enhancing resources such as land, labor, collateral, credit facilities, information, and training. These inequalities often restrict women's ability to benefit from available opportunities, and hence it cannot be assumed that energy interventions that benefit men will necessarily also benefit women. Special enabling conditions may need to be created to ensure that women are able to access energy services and benefit from them on an equal footing with men.

In real terms, barriers to women benefiting from energy investment can take various forms. For example, women-headed households are less likely to have the financial resources to pay the fees required to connect to the grid. Further, household electrification is not oriented toward improving women's livelihoods and women's needs for cooking energy technologies are not prioritized within household expenditure. Women are also poorly represented in decision making and in organizations at all levels of the energy sector, and they lack the voice to make known their energy needs and priorities.

Increased access to modern energy services can be a means to promote gender equity.

Women spend huge amounts of time in basic subsistence activities, including the collection of fuel, fodder, and water. Access to clean, reliable, and appropriate energy services for lighting, cooking, heating, refrigeration, pumping, communications, and productive uses could release time spent on these activities. Less time spent on basic subsistence activities coupled with access to modern energy services could contribute toward other income-generating activities both within and beyond the household. More efficient productive work and savings in both energy and health expenditures could improve household economies, which again could lead to improved access to education and the empowerment of both young girls and boys. ¹⁰

9

Box 2: Potential of Electricity to Improve the Lives of Women

Some of the well-documented impacts of rural electrification on women in other countries include

- women in electrified households reading more (India);
- savings of 1–2 hours per day in travel time for battery charging, kerosene purchase, and household activities such as grain grinding (Sri Lanka);
- improved homework and school performance, reduced eye problems, increased enrollment of girls, and safety through street lighting (Tunisia);
- increased opportunities for employment of women in electrified households and greater control over their income (Bangladesh); and
- maternal health benefits from electrification of clinics (Philippines).

Source: E. Cecelski. 2011. ENERGIA-assisted experiences in gender mainstreaming in rural electrification projects in Asia and Africa. Slide presentation, Workshop on Gender Mainstreaming in Rural Electrification Projects in Uganda. 19 July. Kampala.

Some of the benefits to women of rural electrification that have been documented in India and elsewhere are highlighted in Box 2.

Women-managed energy enterprises can contribute to the development of the energy sector and to women's economic empowerment.

Given the opportunity, women have demonstrated their capacity as producers and suppliers of energy products and as service providers (Box 12). As yet, most initiatives that support women entrepreneurs who are engaged in manufacturing or assembling energy technologies have been small and experimental, but these initiatives demonstrate the potential for women to be an asset in the development of the energy sector. In most settings, a variety of constraints impinge upon women's ability to participate in energy markets as producers and operators. Constraints related to women's access to credit, banking services, and information need to be addressed systematically in order to successfully scale up experiments.

Displacement associated with energy projects can have gender-differentiated impacts.

Energy projects can be accompanied by local effects such as population displacement and resettlement,

IRADe (footnote 5).

Norad. 2011. Gender Equality in Financing Energy for All. Genderresponsive energy financing can contribute to basic human rights

and economic efficiency. Paper developed by Norad's gender team in cooperation with ETC/ENERGIA & Nord/Sør-konsulentene consortium

www.norad.no/_attachment/384007/binary/211409?download =true

which also disrupt livelihoods. When a population is displaced or resettled due to a large-scale energy project, women often face greater difficulty in reestablishing themselves because they are less likely than men to have savings or property or to be recognized on land titles. Assumptions about women's economic activity can result in inadequate attention to their requirements to reestablish household enterprises or other livelihood activities.

Possible impacts of energy projects also include disruptions to natural ecosystems. Such disruptions can result in increased work burdens for women if they increase food insecurity or walking distances to water and fuel wood. 11

Policy and Program Environment for Gender Equality Initiatives in the Energy Sector

Energy Sector Policies and Strategies

There are many players in the energy sector, including the Ministry of Power (thermal and hydropower), the Ministry of Petroleum and Natural Gas, the Ministry of New and Renewable Energy, and the Ministry of Coal. Overall guidance in the sector is provided by the Integrated Energy Policy, 2008 and by five-year plans, supplemented in some cases by subsector or state-level policy statements.

Energy sector policy documents have drawn attention to the links between gender and energy and to the importance of household energy supply. This is stated most clearly in the Integrated Energy Policy, 2008. While the approach proposed is not yet reflected in the program of all the ministries with a role in the energy sector, the policy provides a forward-looking framework. The high priority given to rural electrification and the more recent concern with renewable energy also contribute to the positive environment for initiatives in support of women and gender equality in the sector.

▶ The Integrated Energy Policy, 2008 includes attention to household energy needs.

The Integrated Energy Policy, 2008 includes some key points from a gender perspective, as highlighted in Box 3. The policy was preceded by the Integrated Energy Policy Report, a 2006 Planning Commission report that was prepared with the aim of providing an overarching policy framework document for the sector. By including a Box 3: Salient Points from the Integrated Energy Policy, 2008

The attention given by the Integrated Energy Policy, 2008 to household energy needs (including clean energy for cooking) points the way to more gender-responsive energy approaches. From the overview provided by the Press Information Bureau:

"The broad vision behind the Integrated Energy Policy is to reliably meet the demand for energy services of all sectors including the lifeline energy needs of vulnerable households in all parts of the country with safe, clean and convenient energy at the least-cost." Selected elements of the policy:

- Provide electricity to all rural households through Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY, Scheme for Rural Electricity Infrastructure and Household Electrification) and clean cooking energy such as LPG, natural gas, biogas or kerosene to all within 10 years.
- Subsidy for electricity and cleaner fuels, kerosene or LPG to targeted households should be delivered through a system of debit card in phased manner.
- A large scale socioeconomic experiment should be financed to operate community sized biogas plants as a commercial enterprise either by a community cooperative or by a commercial entrepreneur. Biogas plants on this scale could meet the need for clean cooking energy of a sizable segment of the rural population.

The Integrated Energy Policy Report on which the policy is based makes a number of recommendations that respond to women's interests, all of which are potential entry points for ADB in its energy sector projects:

- empowering women's self-help groups (SHGs) to manage franchisees running local electricity networks and encouraging decentralized distributed generation systems so that communities can organize their own electricity supply;
- setting a goal to provide clean cooking energy (such as liquefied petroleum gas, natural gas, biogas, or kerosene) to all within 10 years;
- establishing neighborhood fuel wood plantations within one kilometer of each habitation to ease the burden and reduce the time taken in gathering and transporting wood;
- financing a large-scale experiment to operate communitysized biogas plants and for women's groups to form cooperatives to develop and manage fuel wood or oilseed plantations requiring the same effort as they currently put into searching for and gathering fuel wood; and
- improving the "efficiency and convenience of using biomass through wood gasification or biogas plants."

Sources: Statement released by the Press Information Bureau December 2008: www.pib.nic.in/newsite/erelease.aspx?relid=46172 (a complete statement of the policy has not been made public); and Planning Commission. 2006. Integrated Energy Policy. Report of the Expert Committee. planningcommission.nic.in/reports/genrep/ rep_intengy.pdf

discussion of household and noncommercial energy resources (and not limiting its scope to industrial and commercial sectors), the report paves the way for energy policies more responsive to women's interests. In particular, it emphasizes the negative impacts of the use

Norad (footnote 10).

of traditional biomass for cooking, noting that dung cakes and biomass-based fuels provide 81% of domestic energy and almost one-third of India's total primary energy consumption: "This non-commercial energy for the domestic use is essentially managed by women without technology, or investment, and involves unsustainable practices, backbreaking drudgery, health problems especially for women and the girl child and likely environmental damage." 12

The report emphasizes the need to ensure electricity and clean fuels for all. It argues that the reduction of women's disproportionate burdens in gathering and preparing household energy is crucial to gender equality and women's empowerment. It also recognizes that a sustainable supply of energy is vital for the energy-intensive income-generating activities conducted by rural women.

The 11th Five Year Plan, 2007–2012 also considered the energy needs for household cooking and women's microenterprise. 13

The overarching focus of the energy chapter of the 11th Five Year Plan is on meeting energy shortages. In line with the Integrated Energy Policy Report, the plan recognizes the importance of the domestic sector and the use of traditional fuels. It states that

[m]eeting the energy access challenges and ensuring lifeline supply of clean energy to all is essential for empowering individuals, especially women and girls, who have the task of collecting and using noncommercial fuels such as fire wood, crop residues, and dung cakes that remain the primary energy source for cooking in over two thirds of the households. Provision of clean fuels or at least wood plantation within one km of habitation and dissemination of technology for use of clean fuels is vital for good health. This is essential if growth is to be inclusive.

The chapter notes the importance of renewable energy sources such as biogas, improved cook stoves, solar energy, and biomass-based systems to meet the basic needs of cooking, lighting, and water heating. It also recognizes the importance of women's microenterprises to household incomes and women's well-being, and that inadequate access to clean and convenient energy affects the profitability and safety of these enterprises.

Box 4: Women and Energy Access

In a document posted on its website, the Ministry of New and Renewable Energy (MNRE) proposed an approach for the 12th Five Year Plan that would involve women "in every step of the energy access program." The ministry provided a rationale for this approach:

"Success of electricity access projects will largely depend on involvement of women. It would therefore be important to ensure their involvement as entrepreneur, asset owner to credit access. Most poor people are women and most women are poor, yet almost all low-income women are economically active. Ensuring economic opportunity and equality for women through electricity access is likely to give rural economies a major boost." Source: MNRE. 2011. Energy Access: draft sub-group report. p. 13.

Household energy and energy access by women may get a boost in the 12th Five Year Plan.

In a 2011 presentation about issues for the upcoming 12th Five Year Plan, the Planning Commission emphasized the importance of ensuring the 7% growth in commercial energy availability necessary to achieve the planned 9% growth in GDP. At the same time, the presentation highlighted the need for a "longer-term energy solution for cooking in rural areas." Expanding the liquefied petroleum gas (LPG) network (with targeted cash subsidies rather than subsidized prices), and use of off-grid solar and biomass energy are also mentioned. This suggests an awareness of these household issues by energy policy makers that may be further elaborated as the 12th Five Year Plan develops. 14

Also encouraging was the energy access paper prepared by the Ministry of New and Renewable Energy (MNRE) in preparation for the 12th plan, which emphasized the importance of involving women throughout energy access initiatives (Box 4).

Rural electrification approaches recognize the importance of the sector to women.

Since the beginning of planned economic development, rural electrification has received high priority in India. Grid electrification has been the largest energy access program in terms of both investment and the number of people reached. The Electricity Act 2003 requires state and central governments to endeavor to provide electricity to all areas, including villages and hamlets. 15 The follow-up Rural Electrification Policy, 2006 specified an ambitious goal of extending access to electricity to all households by

IEP Report (footnote 1), p. 38.

Planning Commission. 2008. Chapter 10: Energy. Eleventh Five Year Plan (2007-2012). Vol. III. planningcommission.nic.in/plans/ planrel/fiveyr/welcome.html

Planning Commission 2011. Issues for Approach to the 12th Five Year Plan. Presentation, 21 April 2011.

Ministry of Law and Justice. 2003. Rural Electricity Act, 2003. www.cercind.gov.in/08022007/Act-with-amendment.pdf

year 2009. 16 It also aimed to provide good-quality and reliable power supply at reasonable rates and a minimum "lifeline" consumption of one unit per household per day by 2012. The policy recognizes that "... the maximum burden of the absence of supply of commercial energy, including electrical energy to households falls on women..." and specifies that women are to be represented in the district committees that oversee the implementation of rural electrification programs. To date, the centralized grid power has reached 83% of villages and 56% of rural households. 17

Renewable and nonconventional energy is considered likely to provide benefits and opportunities to women.

The Integrated Energy Policy Report noted the important role of renewable and nonconventional energy sources in meeting India's energy needs (solar, biomass, smallscale hydropower, etc.). It also noted that the distributed nature of renewable energy was associated with important socioeconomic benefits, despite the fact that the sector would contribute only a small percentage to overall supply even with a major increase in investment. Such socioeconomic benefits could include the ability to reach unserved areas (or to reach them earlier), the environmental friendliness of the energy source, and new livelihood opportunities. 18

In addition, women's potential to contribute to the sector's development has also been recognized through the Women Development Associates Scheme of the India Renewable Energy Development Agency. 19 The scheme provides loans on concessional terms to women to generate entrepreneurial activities related to new and renewable energy sources or efficiency and/or conservation activities. Women's involvement in this area is intended to spur the dissemination of related technologies at the grassroots level and to generate awareness and acceptance of new and renewable sources.

Box 5: Highlights of Government Policy Commitments on Gender Equality Relevant to ADB Initiatives

- Increasing women's employment opportunities: National Employment Policy, draft 2008 (equality in labor market, increased access to opportunities); National Rural Employment Guarantee Act, 2005 (33% participation by women, minimum wages paid to all).
- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (participation in vocational training); National Urban Housing and Habitat Policy, 2007 (upgrading skills of women construction workers and contractors, and facilities for them).
- Strengthening women's ownership rights: Hindu Succession (Amendment) Act, 2005 (women's inheritance rights); 11th Five Year Plan, 2007–2012 (transfers to women through antipoverty and resettlement programs).
- Increasing women's participation in decision making: 73rd and 74th constitutional amendments of 1992 (one-third reservation for women in elected rural and urban local government); Rural Electrification Policy, 2006 (women's representation on district committees).
- Increasing women's participation in all government programs: 11th Five Year Plan, 2007-2012 (at least 33% participation); reiterated in some state-level five-year plans for the same period (e.g., in Bihar).

Only limited state-specific references included. Some further statelevel information provided in ADB's Gender Equality Reference Sheets, prepared in 2011 for most ADB partner states in India. National policies listed are available on the internet; search by title.

Other Policies, Themes, and Signals Relevant to Energy Initiatives

In addition to sectoral policies, there are a number of broader policy themes and signals related to women's participation and empowerment that are relevant to the ways in which ADB plans and manages its energy initiatives in India. These are briefly reviewed in the paragraphs below (highlights in Box 5).

National policies aim to strengthen women's access to skill training for employment.

The National Policy on Skill Development, 2009 aims to increase women's participation in vocational training to at least 30% through counteracting discrimination and providing support such as scholarships, loans, and transport. The policy promotes both vocational training in fields employing women and women's participation in nontraditional areas.²⁰ ADB can play a role in supporting implementation by ensuring that project-financed skill

Ministry of Power. 2006. Rural Electrification Policy. powermin.nic.in/whats new/pdf/RE%20Policy.pdf

World Bank. 2011. Empowering Rural India: Expanding Electricity Access by Mobilizing Local Resources. Slide presentation. siteresources.worldbank.org/INDIAINHINDIEXTN/Resources/empow ering-rural-india-through-localized-generation-supply-ingers-visit.pdf

IEP Report (footnote 1), p. xxiii, chapter VII.

Indian Renewable Energy Development Agency (IREDA) is a public agency under the Ministry of New and Renewable Energy, and provides financing for renewable energy and energy efficiency projects. IREDA web page for the scheme: www.ireda.gov .in/homepage1.asp?parent_category=1&category=19

National Policy on Skill Development, 2009. www.skilldevelopment .gov.in/node/163

development activities reflect the policy, including the aim of promoting women's access to skill training in a range of fields.

National policies show a commitment to increasing women's employment opportunities and wages.

This commitment is evident in the National Rural Employment Guarantee Act, 2005 that provides the basis for the national flagship program in support of rural livelihoods (the Mahatma Gandhi National Rural Employment Guarantee Scheme). The act calls for 33% participation by women and for the payment of minimum wage to all workers (i.e., equal wage rates for women and men). The program has been found to provide major benefits to women by enabling them to access wage employment at the minimum wage where wage employment opportunities were otherwise very limited for women and wage practices were biased against them.²¹ The aim of broadening opportunities for women and providing equal wages would also be relevant to construction and maintenance employment related to energy projects.

▶ A cross-sectoral commitment calls for 33% participation of women in all government programs.

The 11th Five Year Plan included the requirement that women constitute at least 33% of the direct and indirect beneficiaries of every central government scheme (and this is reiterated in some state-level five-year plans also). ADB and other development partners collaborating with government in the energy sector could contribute to reinforcing this commitment by aiming for at least the 33% level of participation in the employment generated by construction of new infrastructure, employment related to infrastructure maintenance, and training related to operation and maintenance.

High priority has been given to women's participation in local decision making.

Since the 73rd and 74th constitutional amendments were adopted in 1992, there has been a one-third reservation for women in both rural and urban local governments. State governments are responsible for the implementation of these provisions, and several have raised the reservation to 50% for rural local governments (including Bihar, Karnataka, Madhya

Pradesh, Maharashtra, West Bengal, and Uttarakhand), and others have applied the 50% level to urban local governments (including Andhra Pradesh, Kerala, Maharashtra, and Tripura). This concern by both central and state governments to ensure women's participation provides a strong signal about the importance of women's representation in any community decisionmaking forums that ADB establishes in relation to energy projects.

Resettlement schemes have been identified as having a role in securing women's property rights.

The 11th Five Year Plan emphasized the importance of property and land rights to women's economic empowerment and security. It states that 22

... [t]he Eleventh Plan will carry out a range of initiatives to enhance women's land access. It will ensure direct transfers to them through reforms, anti-poverty programmes, and resettlement schemes. It will include individual or group titles to women in all government land transfers.... In case of displacement, a gender sensitive rehabilitation policy that includes equitable allocation of land to women will be devised. The Eleventh Plan will also ensure the rights of poor, landless, and tribal women over forest land, commons, and other resources.

The central government is promoting more systematic attention to gender equality and women's interests in policy development in all sectors at national, state, and local levels.

The 11th Five Year Plan promoted wider adoption of "gender budgeting" as a means to achieve more systematic attention to gender equality and women's interests in every sector and level of government. The midterm appraisal noted the increased number of gender budgeting cells in central government ministries and progress in introducing the concepts and analytic tools to state and local bodies. However, it also noted that implementation is a continuous process "that constantly needs reinforcement." 23 Echoing this theme, the preparatory documents for the 12th Five Year Plan call for continued efforts to build awareness, data collection capacities, and the technical skills required for

Khera, R. and N. Nandini. 2009. Women workers and perceptions of the National Rural Employment Guarantee Act, India. Economic and Political Weekly.44 (43):49-57. http://eprints.soas.ac.uk/ 7832/; and MGNREGA website: nrega.nic.in

Planning Commission. 2007. Eleventh Five Year Plan. Vol. II, para. 6.32. planningcommission.nic.in/plans/planrel/ fiveyr/welcome.html

Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan. para. 11.25. www.planningcommission.gov.in/plans/ mta/11th_mta/MTA.html

the gender-based analysis of program and policy impacts that is the central element of gender budgeting.²⁴

ADB Experience in Supporting Gender Equality in the Energy Sector

ADB has invested in many major energy projects throughout its partnership with India. Until recently, most energy investments were categorized as having "no gender elements" but the current portfolio suggests that this is changing (see Box 6 for the distribution of projects and an overview of the ADB gender categories).

Increased attention to gender equality was promoted by ADB's country partnership strategy for 2009–2012, which outlined some of the gender and energy linkages and highlighted some particular areas for attention:

Access to electricity empowers women and improves family welfare. Women are primary energy managers in households, and their active participation will be promoted where demand-side management and energy conservation activities, or renewable energy pilot schemes, involve communities, households, and small microenterprises. Where involuntary resettlement is involved, steps will be taken to ensure that particularly vulnerable households, such as those from disadvantaged caste and tribes, or households headed by women, receive their full entitlements as well as special assistance. 25

For the 18 projects approved (or in the late stages of the approval process) under this country partnership strategy, nine were categorized as having "some gender elements" and another two as satisfying the requirements for "effective gender mainstreaming." This represents a significant improvement over earlier years.

Even so, there are few current and pipeline projects that go beyond "some gender elements." While this is a somewhat limited aim in relation to the ADB gender equality policy, it reflects the fact that the portfolio is predominantly composed of large transmission and distribution infrastructure projects, and thus the impact on energy services to households and communities is

Box 6: Energy Projects by ADB Gender Category*						
	GEN	EGM	SGE	NGE	Total	
Approved 2000–2008	-	-	ı	9	9	
Approved 2009–2012	-	2	9	7	18	
Pipeline 2013–2015**	-	4	9	-	13	

- = none.
- * Ongoing projects and project pipeline.
- **These are proposed projects and are subject to change.

Gender Equity Theme (GEN)

- Directly supports gender equality and women's empowerment
- All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- · See specific requirements for EGM below

Some Gender Elements (SGE)

Does not meet EGM criteria BUT

- provides some direct and substantial benefits to women because of the nature of the project OR
- includes some gender-related design features in project design or resettlement

No Gender Elements (NGE)

Gender issues not integrated in design

Effective Gender Mainstreaming (EGM)

Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. The following project requirements must be met to qualify as EGM:

- The social analysis conducted during project preparation included careful consideration of gender issues highlighting both constraints and opportunities.
- Specific gender design features are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs and/or components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are in the project design and monitoring framework.
- A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the project administration manual.
- The **RRP main text discusses** how the project will contribute to improving women's access to or benefits from the project, at a minimum in the Due Diligence section.
- The policy matrix contains a covenant or a condition to support implementation of the gender action plan.

See Guidelines for Gender Mainstreaming Categories of ADB Projects: www.adb.org/Gender/gender-categories.asp

Planning Commission. 2011. Report of the Working Group on Women's Agency and Empowerment. 12th Five Year Plan. pp. 75–76. planningcommission.nic.in

ADB. 2009. India Country Partnership Strategy (2009–2012): Abridged version. www.adb.org/documents/india-countrypartner ship-strategy-2009-2012-abridged-version

indirect or downstream. The project elements identified to enhance benefits to women or to support gender equality are therefore generally related to the employment generated (e.g., requirements construction contractors adhere to core labor standards) or in relation to resettlement (e.g., steps to ensure that women are consulted, and identification of characteristics that would entitle women to compensation). However, the planning documentation available suggests that even in these areas (infrastructure employment and resettlement) there is considerable scope to strengthen the social and gender assessment and the identification of options and strategies. Further attention to monitoring implementation of the steps proposed and the impacts on women is also necessary to assess results and identify lessons for future projects.

There are also three projects that demonstrate the possibility of testing innovative approaches to promote gender equality and women's empowerment in the energy sector. These projects (in Gujarat, Madhya Pradesh, and Rajasthan) each include support to enhance women's livelihoods in the energy sector or through use of energy. The gender and energy entry points pursued by other projects in the regions are highlighted in Box 7.

The Madhya Pradesh Energy Efficiency Project approved in 2011 has an innovative gender action plan. The project aims to improve power supply in rural Madhya Pradesh through installing feeders for households and pumps, improved upstream systems, and installed meters and household connections. The project also aims to assist women to take advantage of improved energy supply through an associated technical assistance project for enhancement of energy-based livelihoods for women microentrepreneurs. This will be pursued through capacity building for up to 1,000 self-help groups who will in turn provide business development services to up to 20,000 women microentrepreneurs.

The Gujarat Solar Power Transmission Project (also 2011) includes an integrated technical assistance grant that supports vocational training to support solar power development and transmission (with specific targets for women's participation) and training for women-led enterprises in alternative livelihoods made possible by energy availability.

The Rajasthan Renewable Energy Transmission Program (2012) also includes a technical assistance grant, in this case aimed at developing a community development and social mobilization framework to guide the development of future solar parks and/or projects in

Rajasthan; social inclusion and gender equity were identified as key principles in developing this plan. Other concerns addressed through the grant include uses of off-grid solar-powered technologies at the community level (such as solar-powered water pumps) and at the household level (solar-powered lanterns) and associated business and maintenance opportunities.

The attention to energy-based microenterprise and employment for women is relatively new for ADB. This important step has been achieved through a grant mechanism that is facilitating efforts to explore new strategies and to implement pilots. Rigorous monitoring and assessment of the activities and their results will be required to draw conclusions for follow-up (by ADB in future projects or by its partners in the energy sector) to maximize the value of such exploratory initiatives.

Box 7: Gender and Energy Entry Points Pursued in ADB Projects in the Region

- Increasing access to clean and/or renewable energy for poor communities:
 - Scommunity Electrification Program of NEA (Nepal), by strengthening community management of rural electrification (with increased women's participation)
- Facilitating connections for services by poor households through the design of appropriate financial instruments:
 - Spost-Tsunami Utility Connections for the Poor (Sri Lanka), by providing grant-financed connections; and the Power Fund for the Poor's low-interest revolving fund
- Increasing women's employment in the energy sector:

 □ Bhutan Rural Renewable Energy Project with Bhutan
 Power, through support for training women technicians
 in the Village Technicians Training Program
- Providing support for women's energy-based (alternative) livelihood opportunities:
 - Whadhya Pradesh Energy Efficiency Improvement Investment Program (India), technical assistance to develop women's energy-based microenterprises
- Formulating a gender-responsive users' education program:

 | Page 1/2 deals | Page 2/2 deals | Page 2/2

Bangladesh Power System Efficiency Improvement project includes a module that is being piloted for possible industry-wide use on safe energy use, energy conservation, and energy efficiency.

Source: ADB.

Box 8: ADB Gender Strategy for India for 2013–2017: Energy Sector and General Commitments				
Energy Sector Commitments	Under the country partnership strategy for 2013–2017, ADB will give further attention to the following issues and objectives to enhance impacts on women's empowerment and gender equality: • in energy distribution initiatives, increase attention to household energy needs and to women's contribution to energy efficiency as consumers and entrepreneurs; • draw lessons from innovative efforts to strengthen women's energy entrepreneurship; and • increase knowledge of women's and men's energy needs and preferences, and access to energy.			
Strategies for All ADB Sectors	ADB will strengthen its gender equality outcomes in collaboration with government partners at both central and state levels through (i) improving the quality of gender analyses done during the project preparatory technical assistance, in particular by aligning the analyses more closely with project objectives; (ii) reflecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents; (iii) monitoring achievement of key gender equality outcomes in design and monitoring frameworks; (iv) selectively using technical assistance resources to build knowledge and capacity to deliver gender-responsive outcomes; and (v) engaging in gender-responsive policy, legal reform, and legal empowerment in ADB priority sectors.			

Strengthening ADB Approaches: Challenges and Opportunities

Strengthening positive impacts on gender equality and women's empowerment of projects in the pipeline will require attention to gender equality issues and strategies throughout the planning process, as well as clear identification of the tangible benefits for women the development results—that are aimed for. As highlighted in Box 8, the ADB country partnership strategy (CPS) for 2013–2017 identifies several specific areas to be pursued in the energy sector as well as several strategies that apply to all sectors.

This section aims to support efforts to implement the CPS and, more generally, strengthen approaches in the energy sector. It begins with a discussion of points related to identifying or following up opportunities to support gender equality in the sector. The subsequent subsection draws on a review of project documents to point out several ways in which to improve the quality of project design and outcomes in support of gender equality and women's empowerment. The chapter ends with a "tip sheet" that aims to support gender mainstreaming in ADB's investments in the energy sector by suggesting possible questions and genderrelated design features to consider in the project formulation process.

Issues and Options for Further Attention in Analyses and Strategies (Sectoral and Project)

Clean cooking as an area of intervention

ADB's current energy portfolio in India does not include any investments that address a critical energy need of rural women—the need for clean cooking fuels to replace the heavy dependence on biomass.

Rural electrification cannot fully address the significant reliance on biomass mass-based energy—this is mainly for cooking and is the main energy issue for rural women. Despite compelling reasons to address the energy needs for cooking (including the dependence of rural households on biomass, the burden on women, the negative health effects), the investment in the cooking energy sector has been minimal. A major push is needed to increase access to clean cooking fuels (natural gas, liquefied petroleum gas, and biogas) and to advanced cooking stoves, particularly for biomass in rural areas.

In relation to improved stoves, a possible area to consider is the potential to support a partner such as the Ministry of New and Renewable Resources in an initiative to explore the use of carbon credits in a strategy to bring down costs and make improved stoves available to larger numbers of poor households. This would follow the lead provided by the Indian Bureau of Energy Efficiency, which is implementing a scheme to increase household use of compact fluorescent lights (CFLs). The scheme aims to replace inefficient incandescent lamps with subsidized CFLs, and to finance this through the use of carbon credits under the global

Women's participation as producers and service providers in the energy sector

In the electricity sector, the role of women's organizations and enterprises in service provision has been emphasized in central government policy documents. Several small-scale initiatives in India and elsewhere have demonstrated the potential for women's microenterprise to offer a range of energy services and for women's self-help groups to operate as franchisees (Box 12). ADB projects could draw on the experience gained in such small-scale initiatives and contribute to more widespread implementation of such strategies by electricity utilities across India. Such initiatives would also be well aligned with the emphasis of the Government of India on strengthening livelihood opportunities for the poor in rural and urban areas.

Women's energy-based livelihoods and entrepreneurship

Another set of livelihood opportunities associated with improved energy supply and access to energy are new livelihood and entrepreneurial activities that are based on, or are more efficient with, energy-using technologies. This is an element of the Madhya Pradesh Energy Efficiency Project, for example, and the experience gained in this and similar projects could enable ADB and its partners to support women to take advantage of new opportunities. While opportunities are also important to men, women likely have less access to information or the means to follow up, so specific targeting of women contributes to their ability to gain an equitable share of new opportunities. Support could include information or technical training about energy-based labor-saving technologies for the production of marketable goods or services, with related small business development support (for finance and business management, marketing strategies, access to credit, etc.).

Box 9: Potential Gender Equality Entry Points for ADB Energy Projects (India's Integrated Energy Policy Report)

The Integrated Energy Policy Report makes a number of recommendations that respond to women's interests, all of which are potential entry points for ADB in its energy sector projects:

- Empowering women's self-help groups to manage franchisees running local electricity networks and encouraging decentralized distributed generation systems so that communities can organize their own reliable electricity supply.
- Set a goal to provide clean cooking energy (such as liquefied petroleum gas, natural gas, biogas, or kerosene) to all within 10 years.
- Establish neighborhood fuel wood plantations within one kilometer of each habitation to ease the burden and reduce the time taken in gathering and transporting wood.
- Finance a large-scale experiment to operate community-sized biogas plants and for women's groups to form cooperatives to develop and manage fuel wood or oilseed plantations requiring the same effort as they currently put into searching for and gathering fuel wood.
- Improve the "efficiency and convenience of using biomass through wood gasification or biogas plants."

Source: Planning Commission. 2006. *Integrated Energy Policy. Report of the Expert Committee*. planningcommission.nic.in/reports/genrep/rep_intengy.pdf

Energy supply to social infrastructure

Reliable 24/7 supply to schools, clinics, hospitals, water schemes, telecom facilities, government offices, rural markets, and small businesses (e.g., grinding and agroprocessing) is essential to meeting the needs of rural populations for energy services. In projects on electricity transmission and distribution infrastructure as well as on clean energy projects, adding these elements will contribute strongly toward the corporate goals of ADB. Further attention to the issues and questions set out in Box 9 in the gender analyses and community consultations at the project preparation stages would contribute to more attention to these issues and a starting point for the development of project strategies.

Project Design and Management Challenges

Improve the quality and relevance of gender analysis project preparation.

A useful gender analysis focuses most of its attention on issues related to the context, aims, and implementation options of a specific project. Where the analysis is more generic, it is of limited value for project design and implementation strategies. For example, one summary gender analysis for a power sector project provided statistics on issues such as women's literacy, female

See page on the scheme on the bureau's website: www.beeindia.in (follow link for lighting, then Bachat Lamp Yojana; also for an indication of the lessons of the experience, see article in Business Today, "Flickering Hope" (19 February 2012): businesstoday.intoday.in/story/fluorescent-lamps-demandfluorescent-lamps/1/21982.html

workforce participation, household fuel use, and household access to media without making any connections between these rather generic points and the aims or implementation challenges of the project for which this analysis was undertaken.

To address this gap, teams contracted to conduct the analyses done as part of project preparation (under project preparatory technical assistance, or PPTA) need guidance in their terms of reference on the gender issues to be addressed in the background analyses and clear instructions about the need to present the gender analysis in a way that makes clear the relevance of the findings to the project aims and design. In order to ensure a good integration of the gender analysis into the overall analysis and project design, the PPTA team needs to include an experienced gender equality analyst who is allocated adequate time and resources to undertake the analysis as well as opportunities for collaboration with other team members. More in-depth analysis at the preparation stage would help establish the baseline for social and gender issues, contribute to a better understanding of the challenges and options in the project, and provide the basis for identifying appropriate design features to ensure that women will gain an equitable share of project benefits.

Some general questions that should be asked at the design stage of energy sector projects are outlined in Box 10. Box 11 complements this by considering possible gender equality outcomes and issues related to components or outcomes in many ADB energy-sector projects, together with some possible gender-related design features or activities.

Clarify the strategic rationale for the gender action plan in the main project document.

Project gender action plans (GAPs) are relatively new in energy sector loans in India, but experience elsewhere suggests that these plans, when developed with the support of appropriate expertise, can facilitate the implementation and monitoring of gender-specific design features, promote the involvement of women in project activities, and ensure that resources are allocated and earmarked to provide direct and concrete benefits to women.²⁸

Box 10: Strengthening Gender Analysis in Project Preparation

Broad questions that need to be asked at the design stage for all energy sector projects are as follows (these will vary according to the technology being promoted):

- What are the likely impacts of the energy technology that is being promoted, on both women and men? How can the benefits (for example, of electricity) be maximized for both men and women?
- What are men's and women's views about proposed technology options and design features, as well as anticipated benefits?
- How can the energy technology be promoted more effectively to both women and men?
- Can the project, through its activities, plant a "seed of change" that can promote more meaningful roles for women?
- In addition to their role as users, how can women participate more as energy producers, operators, installers, and technicians? What capacities need to be built and what additional support needs to be provided by the project to achieve this?27
- For both women and men: Who is likely to make decisions about technology options? Who will be involved in maintenance and/or repair and what training will be necessary?
- How can women's capacity be built to participate effectively in activities such as training and employment, as well as in management? What are the constraints on women's participation and how can these be overcome?

Also important as part of project preparation is ensuring that consultation processes involve women as well as men, using surveys and focus groups on electricity use, needs and constraints, and repeat consultations to get feedback on how effectively the project has incorporated their suggestions.

See also Box 11, which provides further questions in relation to different types of programming or elements of an investment together with some suggestions about gender-related design features to consider.

GAPs are generally set out in a table format that is organized by project outputs and specifies activities under each output. This has the advantage of aligning these activities as closely as possible with the mainstream project implementation plan and thus facilitating implementation. While the GAP is based on a broader analysis and strategy, the summary table version is probably the one most familiar to key stakeholders (within ADB and its partner agency and among the consultants involved in supporting

Additional support could include technical training; training on business development aspects like finance, accounting, and business management; ensuring linkages for loans and marketing; and providing long-term hand-holding support.

See ADB. 2009. Briefing Note: Project Gender Action Plans: Lessons for Achieving Gender Equality and Poverty Reduction Results. www.adb.org/publications/project-gender-action-plans-lessons-

achieving-gender-equality-and-poverty-reductionres?ref=themes/gender/publications

implementation) and it is what ADB makes available on its project website.

The presentation of the project approach to gender equality issues and results would be strengthened if the main project document spelled out more clearly the strategic underpinning for the GAP, and if this was also briefly summarized in the plan itself. If this was done, it would enable ADB to communicate more effectively with partners and communities about its aims and strategy for outreach and benefits to women, which would help to ensure that intentions are translated into action.

Monitor performance targets and indicators, but also outcomes.

The inclusion of gender-related performance targets and indicators in the project design and monitoring framework is key to ensuring systematic monitoring by ADB and executing agencies during implementation. This has been done in the two current EGM projects and will help assess progress in implementation of the gender action plans for these projects. Additional assessment will be required to identify the outcomes or changes for women achieved through the measures implemented. The design and monitoring framework targets are generally related to inputs or, at best, outputs. Hence, for example, the number of women receiving energybased livelihood training will be counted, but this will not capture the impact of the training on their incomes, livelihoods, or quality of life. Feedback on such issues will be important to assessing the value of these "pilot" approaches and should be built into more detailed project monitoring and assessment plans.

More generally, even where energy projects aim to establish electricity connections at the household level, there are seldom indicators to track who benefits and how the investment has affected livelihoods and quality of life. Indicators to monitor the distribution of direct benefits could include, for example, applications for connections by sex; and views of microentrepreneurs on whether electricity supply constraints for women have been reduced. Other community impacts could also be tracked, such as nighttime availability of electricity in health clinics and improved service provision such as for street lighting and water pump functioning.

Make ADB's commitment to gender equality outcomes in energy more visible in publications.

Recent high-profile publications do not draw any links between gender and the energy sector, either in outlining issues or reporting on ADB investments. This includes the discussion of the energy sector in the ADB-India Development Partnership, which outlines past strategies and new directions and provides case studies on project experiences. A companion publication, Facilitating Infrastructure Development in India: ADB's Experience and Best Practices in Project Implementation, is similarly silent on challenges or aims related to women's participation and gender equality in the energy sector. 29 As such documents are important avenues for communicating priorities and issues for discussion with partners and project personnel and therefore for setting the stage for joint action, they provide important opportunities for conveying ADB aims and efforts related to women's participation and gender equality.

Tip Sheet on Questions and Design Features for Gender Mainstreaming

The tip sheet in Box 11 aims to aid with gender mainstreaming in projects in the energy sector. It suggests possible gender equality outcomes related to more general ADB project outcomes, provides examples of questions to consider in preparatory analyses to assist in formulating project strategies, and suggests possible gender-related design features that could be elaborated if applicable in the project context.

Further resources include some brief notes on promising approaches related to women's involvement in the energy sector (Box 12) and to women's access to energy (Box 13), and a listing of resources for further reading (Box 14).

²⁹ Both documents available at: www.adb.org/publications

Box 11: Tip Sheet on Questions and Design Features for Gender Mainstreaming in ADB Projects: Energy			
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)	
Policy reforms in the energy sector o Greater attention to household-level energy needs and energy supply (including energy for cooking)	 Do women in poor households have access to the energy required for cooking, household chores, household-based enterprises? What are the key energy access problems (e.g., related to availability, reliability, costs, etc.)? Do sectoral analyses and reforms consider energy issues and needs at the household level, especially energy sources for cooking? Do analyses factor in the benefits of improved household access to clean cooking fuels or improved stoves on greenhouse gas emissions, reduced workloads for women, improved health of women and children? 	 Strengthen information available on household needs (e.g., through special study or improved mechanisms for data collection). Ensure that consultation processes in the sector (on policies, policy reform, proposed initiatives, etc) seek the views of women. Consult with women's advocacy organizations in the energy sector. Explore options to increase access to clean cooking fuels and improved cook stoves. 	
Improved energy supply (conventional or renewable) o Increased energy access by poor households	 How will the improved supply respond to the energy issues and problems at the household level (e.g., related to availability, reliability, costs, etc. for cooking, household enterprises)? Do installation or connection costs and rate structures take account of the energy needs at the household level? Or women's participation in household decision making about subscribing? Or constraints on the ability to pay? 	 Explore options for reducing cost of household connections for poor households or for making affordable credit available to them for this purpose. Ensure that steps to consult or inform households about services and connections target women as well as men (in all households, not only female-headed households). 	
New market opportunities and businesses in the energy sector, particularly renewable and clean energy technologies o Increased participation of women as entrepreneurs and service providers in the energy sector	What are the opportunities and constraints facing women in relation to small-scale enterprises providing energy products or services? Are women being targeted for demonstrations of new technologies and business models for renewable energy? Can women be encouraged and supported to take a greater role as owners or operators of energy service providers? Are they aware of government programs that support women's energy entrepreneurship?	 Target women's organizations and enterprises as possible producers and suppliers of energy products. Consider the potential to involve women's enterprises or self-help groups as franchisees for management tasks such as meter reading, billing, consumer information. Facilitate linkages with existing government programs for women's energy entrepreneurship. 	
More entrepreneurship using new or improved energy supply (conventional or renewable) o More efficient and/or profitable women's enterprises due to use of new energy supply	 How will current and/or prospective entrepreneurs in communities served learn about uses of these services and the new technologies they support? Will these mechanisms reach women (taking account of factors such as literacy, access to media such as radio, etc.)? What are the barriers to increased participation by women as energy producers and service providers? How could these be addressed by the project? 	 Develop public awareness activities that will reach women across barriers identified (e.g., through peer networks, community outreach). Partner with nongovernment organizations to develop programs to inform/train women about the use of labor-saving energy technologies and provide related entrepreneurship support (management and marketing strategies, access to credit). Facilitate linkages with existing government programs supporting women's entrepreneurship. 	

Box 12: Examples of Initiatives to Support Women's Involvement in the Energy Sector

Engaging women's self-help groups as franchisees in rural electrification (electrical utilities in India)

India has some experience with engaging women's self-help groups (SHG) as franchisees for rural electrification. Uttarakhand was the first electrical utility in India to initiate a women's empowerment approach by employing local women through SHGs, as franchisees, for meter reading, bill distribution, and revenue collection. Uttarakhand Powercaters to the power development activities in 13 districts of the state. More recently, in Odisha, women's SHGs have been engaged as franchisees. Training is provided to SHG members in meter reading, billing, revenue collection, and consumer motivation. Two or three educated members are involved in the processes of meter reading, billing, revenue collection and its proper accounting, and generation of receipts. Limits on the number of panchayats served and on the client base ensure that quality services can be provided (each SHG can provide services in up to two panchayats (village) and up to 1,000 consumers). Repeat visits by SHG members in their areas of operations also improve collection of tariffs. In the Nayagarh district, women's SHGs are working as franchisees in all 227 panchayats. A recent performance review by the Odisha Electricity Regulatory Commission noted significant improvements: in February-March 2011, Nayagarh Division achieved 113% of its target, with the SHGs collecting almost twice their target (approximately \$355,000 collected). Improvements were also seen in overall performance of the utility, reflected in increase in low-tension realization per unit by 33% and a reduction in distribution loss by 7%.

Sources: Odisha Electricity Regulatory Commission. 2011. Memo titled Review of Performance of CESU for the FY 2010–2011, taken up on 30.05.2011. orierc.org/CESU_Review_for_FY_2010-11.pdf; Uttarakhand Power website: www.upcl.org and R. Sehgal. 2009. Women recruited to stop power theft in villages. Infoexchange News and Features: infochangeindia.org/governance/news/women-recruited-to-stop-power-theft-invillages.html

Demonstrating that women, even if illiterate or semiliterate, can be effective solar technicians (Barefoot Women Solar Engineers, India)

India's Barefoot College program of solar electrification of remote rural villages began in 1989. The college's approach is to involve villages in producing, installing, repairing, and maintaining sophisticated solar lighting units, drawing on illiterate and semiliterate women and men of the villages reached. The college launched a specific course for women in 2005 and with the success experienced in India it began to receive women students from other countries. In 2008, the college was officially recognized by India's foreign affairs ministry as a training centre for Women Barefoot Solar Engineers from least-developed countries in Asia, Africa, and Latin America. By 2011, the solar engineers trained had provided electricity to more than 600 villages in 33 countries.

The program has produced a cadre of women solar technicians who install solar panels, build solar lanterns, and provide repair and maintenance support through local workshops. Women are taught to handle sophisticated charge controllers and inverters, to install solar panels and link them to batteries, to build solar lanterns; and to establish a local electronic workshop where they can carry out all major and minor repairs to the solar power system themselves. The mostly illiterate trainees learn to identify parts by shape and color, develop the skills required by following mimed instructions, and learn to execute technical tasks by example.

In addition, the college has also supported a program of Barefoot Women Solar Cooker Engineers who produce parabolic solar cookers, again training illiterate and semiliterate women in tasks that require a high degree of accuracy and craftsmanship.

Sources: Various articles available on the Barefoot College website at www.barefootcollege.org/sol resources.asp see also its webpage on Rural Women Social Entrepreneurs; AlertNet. 2011. India's women solar engineers light up rural life. www.trust.org/alertnet/news/indias-women-solarengineers-light-up-rural-life and pamphlet on Women Barefoot Solar Cooker Engineers Society: www.barefootcollege.org/Solar%20Cooker%20Pamphlet.pdf

Note also that this experience has been drawn on by ADB in a project in Bhutan: see "Women become solar engineers" in ADB. 2009. Powering the Poor: Projects to Increase Access to Clean Energy for All. www.adb.org/sites/default/files/Powering-the-Poor.pdf

Manufacturing energy products and providing energy services through women's microenterprise (Bangladesh)

Prokaushali Sangsad Limited, a Dhaka-based organization, has been promoting a rural women's microenterprise through a cooperative model. The project is on an isolated rural island in southern Bangladesh. Despite having a population of about 2 million people, an electric grid extension to this area will not be economically viable within at least the next 20 years. In 1999, 35 women came together to form the Coastal Electrification and Women's Development Cooperative. The cooperative manufactures high-quality DC lamps and charge controllers suitable for solar home systems. Other services include battery charging; selling, installing, and maintaining solar home systems; selling electrical goods; and market electrification. Besides lamp manufacturing, women are also learning about quality control, business development, and marketing.

Source: A. Huque. 2003. Opportunity for Women in Renewable Energy Technology Utilization in Bangladesh – A Case Study. Energy and Development. www.energyanddevelopment.com/issue0304.htm

Box 13: Examples of Initiatives to Facilitate Women's Access to Energy

Outreach to women and poor households to increase connection rates (rural electrification pilot program, Lao People's Democratic Republic).

The World Bank's rural electrification pilot in the Lao People's Democratic Republic was faced with a challenge: in electrified villages, 20%-40% of households were not connecting to the grid because they could not afford the connection charges (\$80-\$100). In response, the program provided a revolving loan fund to subsidize household connection costs for the poorest and women-headed households. The project also ensured that all information and dissemination materials reached out to women by highlighting the benefits of electricity to them. The project also aimed to have women as well as men participate in the consultative process by, for example, scheduling meetings at times when women were available. In the Lao People's Democratic Republic, female-headed households account for 43% of poor households, and the subsidy is estimated to have raised the connection rates among this group by 63% to 90% (and from 78% to 95% overall) across the participating villages. Households repay the loans through the regular monthly billing process; the savings from foregoing the use of traditional fuels (estimated at more than twice the monthly electric bills) eases the repayment.

Source: World Bank. Undated. Shining a Light on Women. Results from the Power to the Poor Rural Electrification Pilot in Lao PDR. Presentation by Helene Carlsson Rex and Jie Tang. www.esmap.org/esmap/node/565

Addressing credit needs for accessing energy technologies: Self-Employed Women's Association in partnership with India's Solar Electric **Light Company**

The Self-Employed Women's Association (SEWA) was founded in 1972 as an organization of poor, self-employed women who earn a living through their own labor or small businesses. SEWA also launched a bank that lends to women and provides financial management training. As of March 2008, the SEWA Bank had 300,000 savers, 22,000 borrowers, and \$25 million in total assets. Most of SEWA's account holders are urban (80% urban, 20% rural). In 2006, SEWA partnered with India's Solar Electric Light Company to create Project Urja, a microfinance scheme for energy products. The initiative was based on a study that found that, on average, households spent 3-4 hours per day to collect firewood or \$8 per month to buy it. It concluded that the time and money spent on unreliable energy sources would be better spent on income-generating activities, and that reliable power is essential to the livelihoods of the large numbers of women working from their homes. Key elements of the Project Urja strategy include the following:

- · Borrowers need to open savings accounts in SEWA Bank to take loans for energy products.
- Banking services are provided at doorstep through banksathis (frontline workers), who identify potential borrowers, identify their credit needs, provide information about the products, train people how to use the product, and monitor loans.
- Demonstration vans display all solar-based products or systems to create awareness about this system and also to popularize the loan mechanism of SEWA Bank.
- · Technical staff from the Solar Electric Light Company are responsible for the installation and servicing of systems.

The loans allow women to purchase solar lanterns and smokeless gas stoves for cooking and are also used to light up vegetable stands and tea stalls. SEWA has already provided more than 6 million rupees (\$124,000) in loans for solar appliances to approximately 10% of their 300,000 members.

Sources: Dutta, S. and S. Oparaocha. 2010. Energy Services for Productive Uses: A Route to Women's Empowerment. Paper prepared for Expert Group Meeting on Gender and Productive Resources: Women's Entitlements to Land, Livestock and Energy, New Delhi, India, 17–18 August 2010; and E. Southworth. 2009. Microfinance and the Aryavart Gramin Bank provide alternative power to the rural poor. Micro-Capital.Org. www.microcapital.org/microcapitalorg-story-sewa-sks-microfinance-and-the-aryavart-gramin-bank-provide-alternative-power-to-the-rural-poor SEWA Bank. Undated. URJA-Energizer For SEWA Members, A Project Report. http://nexus.som.yale.edu/design-selco/sites/nexus.som.yale .edu.design-selco/files/imce_imagepool/Project%20Urja.pdf

Box 14: Useful Resources for Further Reading on Gender Equality in the Energy Sector

India-specific research and analyses on gender and energy

- Brettonwoods Project. 2011. Power Surge: Lessons for the World Bank from Indian Women's Participation in Energy Projects. www.brettonwoodsproject.org/doc/env/powersurge.pdf
- IRADe. 2009. Gender Analysis of Renewable Energy in India: Present Status, Issues, Approaches and New Initiatives. Integrated Research and Action for Development.irade.org/Gender%20Cover.pdf
- Venkataraman, C. et al. 2010. The Indian National Initiative for Advanced Biomass Cookstoves: The benefits of clean combustion. Energy for Sustainable Development. 14:63-72. http://media.cigionline.org/geoeng/2010%20-%20Venkataraman%20et%20al%20-%20The%20Indian%20National%20Initiative%20for%20Advanced%20Biomass%20Cookstoves.pdf
- United Nations Development Programme (UNDP). 2011. Women's Power: Energy Services for Rural Women in India. Energy Access Case Study 9. www.snap-undp.org/elibrary/Publication.aspx?ID=611
- · Batliwala, S. and A.K.N. Reddy. 2003. Energy for women and women for energy (engendering energy and empowering women). Energy for Sustainable Development. 7 (3):33-43. esmap.org/esmap/sites/ esmap.org/files/Energy%20for%20Women%20and%20Women%20for%20Energy.pdf

Other research and analyses on gender and energy

- For a repository on articles and resources on gender and energy, see www.energia.org
- Norad. 2011. Gender Equality in Financing Energy for All. Gender-responsive energy financing can contribute to basic human rights and economic efficiency. Paper developed by Norad's gender team in cooperation with ETC/ENERGIA &Nord/Sør-konsulentene consortium. www.norad.no/_attachment/384007/binary/211409?download=true
- · Oparaocha, S. and S. Dutta. 2011. Gender and energy for sustainable development. Current Opinion in Environmental Sustainability. 3 (4). 265–271. www.sciencedirect.com/science/article/pii/S1877343511000601
- · Kohlin, G. et al. 2011. Energy, Gender and Development: What are the Linkages? Where is the Evidence? World Bank Policy Research Working Paper 5800. go.worldbank.org/GVSDC9EPB0 (search by number of paper).
- Dhanapala, K. 1998. Beyond project boundaries, improving gender impacts of village micro hydro systems. Energia News. 2(3): 12-14. www.energia.org/knowledge-centre/energia-news/energianews0898
- UNDP. 2007. Will tomorrow be brighter than today? Addressing gender concerns in energy for poverty reduction in the Asia-Pacific region. Regional Energy Programme for Poverty Reduction, UNDP Regional Centre, Bangkok. regionalcentrebangkok.undp.or.th/practices/energy env/rep-por/documents/Gender and Energy.pdf
- Clancy, J. and S. Dutta. 2005. Women and Productive Uses of Energy: Some light on a shadowy area. Paper presented at the UNDP Meeting on Productive Uses of Renewable Energy, Bangkok, Thailand, May 2005. www.docstoc.com/docs/82737950/Women-and-Productive-Uses-of-Energy--Some-light-on-a-shadowy-area
- Dutta, S. 2005. Energy as a key variable in reducing hunger and poverty: A gender and energy perspective on MDG 1. Report to ENERGIA/DfID KaR Research Project R8346. www.dfid.gov.uk/r4d/PDF/Outputs/Energy/R8346 mdg goal1.pdf

Guides and case studies on gender and energy

- World Bank. 2010. Making Infrastructure Work for Women and Men: A Review of World Bank Infrastructure Projects 1995-2009. www-esd.worldbank.org/gapdatabase/index.cfm?Page=Search&RecordID=305&sr=1
- Misana, S. and G. Karlsson, eds. 2001. Generating opportunities: Case studies on energy and women. New York: UNDP (see in particular Khan H. "Battery-Operated Lamps Produced by Rural Women"). www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/Generating%20Opportuniti es-%20Case%20Studies%20on%20Energy%20and%20Women.pdf
- Karlsson, G. and Clancy, J. 2004. Gender and Energy for Sustainable Development: A Toolkit and Resource Guide. UNDP and ENERGIA. www.undp.org/content/undp/en/home/librarypage/environmentenergy/sustainable energy/energy and genderforsustainabledevelopmentatoolkitandresourcegui.html

ADB practical resources for project planning and management in the sector

- ADB. 2006. Gender, Law, and Policy in ADB Operations: A Tool Kit. www.adb.org/documents/gender-law-andpolicy-adb-operations-tool-kit
- · ADB. 2003. Gender Checklist: Resettlement. www.adb.org/themes/gender/checklists-toolkits
- · Other ADB gender checklists and toolkits: these are currently available for a number of themes and others are planned (including checklists on energy and public sector management). www.adb.org/themes/gender/checklists-toolkits
- ADB. 2009. Project Gender Action Plans: Lessons for Achieving Gender Equality and Poverty Reduction Results. www.adb.org/publications/project-gender-action-plans-lessons-achieving-gender-equality-and-povertyreduction-res?ref=themes/gender/publications
- Further resources and guides on gender action plans: www.adb.org/themes/gender/project-action-plans

Gender Mainstreaming in ADB Sectors

Finance and Public Sector Management

Financial inclusion has become a major policy theme of the Government of India. Financial inclusion is seen as an important underpinning for economic growth as well as a means of enabling broader participation in the economy and more equitable development. While the term came into widespread use with policies introduced in 2005, the history of efforts to extend banking services to rural areas began decades earlier. 1 With the launch of the Swabhimaan Financial Inclusion Campaign in 2011 under the banner "taking banking the last mile," the government aimed to give additional momentum to reach all habitations with populations of over 2,000 with at least a branchless means of banking by 2012. The objective is to increase access to various financial services for individuals and households (including savings, transmittal of remittances, insurance, and credit).2 Better access to banking services and credit is also intended to support the needs of micro, small, and medium-sized enterprises (MSMEs), which are also viewed as critical to inclusive growth because of the employment they generate.

Sound public finances at the state level and the ability to invest in infrastructure development and services for the public that are necessary for inclusive growth have also been identified as requiring attention under the 12th Five Year Plan.

Loans for finance and public sector management projects have been an important component of the Asian Development Bank (ADB) partnership with India, accounting for \$5.7 billion or 22.4% of ADB assistance in the period 1986-2010.3 This assistance has taken various forms over the period, but current themes are financial inclusion (including employment generation through MSMEs), public sector management at the subnational level (concerning both fiscal consolidation and improvements in service delivery), and support for infrastructure financing (with an emphasis on attracting private sector financing). This chapter mainly focuses on issues related to the first two areas as they provide significant opportunities to support gender equality, supplemented with a brief discussion on the potential for raising gender equality issues with financial intermediation partners in infrastructure loans.

This chapter aims to assist in efforts to identify ways in which ADB projects in this sector could have positive impacts on women's opportunities and quality of life and thus contribute to the gender equality objectives of both ADB and the Government of India. It is organized into four sections:

Planning Commission. 2009. A Hundred Small Steps. Report of the Committee on Financial Sector Reforms. Chapter 3 on broadening access: planningcommission.nic.in/reports/genrep/rep_fr/cfsr _all.pdf and Reserve Bank of India. 2008. Financial Inclusion. In Report on Currency and Finance, 2006–2008. Vol. II, Chapter VII. rbi.org.in/scripts/AnnualPublications.aspx?head=Report+on+Curre ncy+and+Finance (select left for year–2008).

See feature on Swabhimaan: Taking Banking the Last Mile in Inclusion, January–March 2011 (comment plus extracts of speeches by Minister of Finance at the Swabhimaan launch). www.inclusion.in/index.php?option=com_content&view=article &id=639&Itemid=284

For an overview of assistance in the sector, see ADB. 2011. *India-ADB Development Partnership*. www.adb.org/publications/india-adb-development-partnership.

- · a brief review of gender equality issues relevant to the ADB areas of activity in the sector,
- · an overview of government policy commitments pertinent to ADB initiatives in the sector,
- a summary of how ADB has approached gender mainstreaming in its investments in finance and public sector management, and
- points for attention in sectoral analyses and project preparation to strengthen gender equality outcomes (and a "tip sheet" to aid analysis and design).

Key Gender Equality Issues in the Sector

Financial Inclusion

While there is no one agreed-upon definition of "financial inclusion" in India, it is evident from the statements in Box 1 that all the major actors on the issue are concerned with access to a broad range of financial products and services, including savings, insurance, pensions, and other products as well as credit.

While financial services have yet to reach a large proportion of the population, women are disproportionately represented among those without access.4

Data from the Reserve Bank of India shows that women owned less than one-third of deposit accounts of commercial banks in 2010. There was considerable variation among regions, with the proportion being lowest in the eastern region (22.4%) and higher in the southern states (43.4%). Rural women and women who are members of scheduled castes or tribes are less likely than urban women to have access to deposit accounts.

In addition, when deposits and credit participation are compared, women seem to benefit less than men. Across India, women's savings accounted for 28% of the total amount in deposit accounts. They had a much lower share of credit accounts from the commercial banks (14.2%) or of credit extended (14.3%). A study that looked at these patterns over a longer period found

Box 1: What Is Meant by "Financial Inclusion"?

Committee on Financial Inclusion (Rangarajan Committee):

Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. The essence of financial inclusion is in trying to ensure that a range of appropriate financial services is available to every individual and enabling them to understand and access those services.

Source: Report of the Committee on Financial Inclusion (Rangarajan Report). 2008. National Bank for Agriculture and Rural Development. www.nabard.org/report_comfinancial.asp

Committee on Financial Sector Reform:

Financial inclusion, broadly defined, refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products. Households need access to finance for several purposes, the most important being for contingency planning and risk mitigation. Households build buffer savings, allocate savings for retirement (for example via pension plans) and purchase insurance and hedging products for insurable contingencies. Once these needs are met, households typically need access to credit—for livelihood creation as well as consumption and emergencies (in the event that they do not have savings/insurance to fund them). Finally, wealth creation is another area where financial services are required. Households require a range of savings and investment products for the purpose of wealth creation depending on their level of financial literacy as well as their risk perception.

Source: Planning Commission. 2009. A Hundred Small Steps. Report of the Committee on Financial Sector Reforms. p. 50. planningcommission.nic.in/reports/genrep/rep_fr/cfsr_all.pdf

Ministry of Finance, Department of Financial Services:

"Inclusive growth as a strategy for economic development aims at making products and services, including financial services, available to those who for various reasons stand excluded. Financial inclusion is important as it provides an avenue to the poor for bringing their savings into the formal financial system, an avenue to *remit money* to their families in villages besides weaning them away from the clutches of usurious money lenders. It is thus essential to extend banking services to the rural hinterland at the earliest in order to include these regions in India's growth story. The provision of banking and financial services to the rural hinterland would be an enabler for inclusive growth."

Source: Ministry of Finance website, Financial Inclusion page," Overview of Efforts" accessed January 2012 (emphasis in original).

that in 2004–2006 women received as credit only 11% of the amount of deposits they contributed (while the figure for men was 20% in the same period). More recent figures show that by 2010, this had increased to 17% for women (but had increased even more among men, to 28%).

This paragraph and the one following draw on Pallavi, C. 2008. Gender Inequality in Banking Services in India: A note (online version of article published in *Economic and Political Weekly* 43 (47):18-21, www.macroscan.org/fet/aug08/ fet02082008Banking.htm which considers data up to 2006; more recent data for 2010 is from Reserve Bank of India, 2010. Basic Statistical Returns of Scheduled Commercial Banks in India. Tables 1.15, 1.21, and 1.23. www.rbi.org.in/scripts/AnnualPublications .aspx?head=Basic+Statistical+Returns. Data includes self-help group accounts.

▶ Poor women are less likely than men to have the identity documents needed to open bank accounts.

The most common identity cards—ration cards (to access the public distribution system), Kisan Credit Cards (introduced to allow kisan [farmers] more timely access to credit), and PAN cards (from the income tax department)—are usually in the name of a woman's father or husband. Ration cards are in the name of the "head of the family" who is traditionally a man in India, although the National Food Security Bill, 2011,5 introduced in the Lower House of Parliament in December 2011, aims to change this practice by requiring that ration cards be in the name of an adult woman member of the family. In the case of Kisan Credit Cards, the National Commission on Farmers has expressed concern that very few of the 45 million cards issued have been issued to women farmers (though specific data is not available). 6 PAN cards are in the names of individuals who pay taxes, but this includes very few women (estimated at fewer than 3%). While a letter from a recognized public authority or public servant (e.g., an elected official, or a block development officer) can also serve as proof of identity, cultural and mobility constraints on women mean that they are often unknown to relevant public authorities.

While group-based lending and microfinance have increased women's access to credit, the amounts remain small and do not cover needs.

A central government program that has considerably increased access to financial services for women is the Self-Help Group (SHG)-Bank Linkage Program (further described in the next section), which supports groupbased savings and credit. This is the predominant form of microfinance in India, involving some 2.9 million SHGs and Rs110 billion (about \$2.5 billion) of loans outstanding in March 2007. A second model is on lending from microfinance institutions (MFIs), whose outstanding loans amount to about one-third of those made through the SHG model in the same year. 8 Despite the scale of these programs, they account for a very small proportion of total bank credit in India (estimates suggest that the total credit under these two forms of

Box 2: Differences Amo	ng Regions in Women's Knowledge
and Use of Micro	ocredit Programs

and Use of Microcredit Programs			
	Women who know of a microcredit program (%)	Women who have taken a microcredit program loan (%)	
India	38.6	4.0	
North			
Punjab	40.8	0.9	
Rajasthan	12.3	0.6	
Uttaranchal	13.7	1.6	
Central			
Madhya Pradesh	30.6	1.0	
Uttar Pradesh	14.1	0.4	
East			
Bihar	27.0	1.0	
Jharkhand	25.5	1.9	
Odisha	69.4	6.9	
West Bengal	41.4	2.7	
Northeast			
Assam	41.7	1.4	
Manipur	65.1	4.2	
Meghalaya	22.8	1.5	
West			
Gujarat	45.0	1.7	
Maharashtra	35.5	2.1	
South			
Andhra Pradesh	59.6	16.3	
Karnataka	55.0	9.2	
Kerala	82.6	8.0	
Tamil Nadu	79.0	13.4	
		- 4	

Source: National Family Health Survey, 2005-2006 (NFHS-3). Chapter 14, Table 14.14. www.rchiips.org/NFHS/chapters.shtml

microfinance account for less than 1% of the total credit from the two major credit institutions, commercial banks and regional rural banks, in 2007). Further, the distribution across the country is uneven, with considerably higher occurrence of both programs in the southern region than elsewhere.

Many, though not all, SHG members are women, possibly as many as 90%. 10 Women also predominate among MFI clients, though their representation seems to differ by type of institution. A national impact study of

National Advisory Council. 2011. National Food Security Bill, 2011. Section 33(2). nac.nic.in/foodsecurity/nfsb_final.pdf

National Commission on Farmers. 2006: Year of Agricultural Renewal. p.8. agricoop.nic.in/NCF/NCF%20Report%20-%203.pdf

Chakraborty, P. et al. 2010. Gender equality and taxation in India: An unequal burden? (subheading on horizontal and vertical equity). web.idrc.ca/fr/ev-156085-201-1-DO_TOPIC.html

Planning Commission (footnote 1), p. 57.

Chavan, P. and B. Birajadar. 2009. Micro Finance and Financial Inclusion of Women: An Evaluation. Reserve Bank of India Occasional Papers. Vol. 30., No 2. rbidocs.rbi.org.in/rdocs/Content/PDFs/4PCHBB060810.pdf

Report of the Committee on Financial Inclusion (Rangarajan Report). 2008. National Bank for Agriculture and Rural Development. Chapter 7, para. 7.08. www.nabard.org/report_comfinancial.asp

25 MFIs found that women constituted 80% of the total clientele, but their representation differed by type of institution (the range was from 96% to 98% of clients of institutions with SHG or group loan approaches, but only 30% of MFIs doing individual banking). 11

Data from a major national survey done in 2005-2006 provides another perspective on the reach of microcredit programs. Women were asked whether they knew of a program in the area that gave loans to women to start or expand a business, and whether they had ever taken a loan from such a program. Overall, only 39% of women knew about microcredit program, and only 4% had ever taken a loan to start or expand a business. The responses varied greatly by region (Box 2).

One of the objectives of microfinance is to decrease dependence on high-cost moneylenders. Survey data suggests that low-income members of SHGs borrow less from moneylenders, friends, and family than do nonmembers, but they still borrow a considerable amount from such sources. 12 A national impact study of MFIs also showed that with low loan amounts, microfinance clients continued to borrow from moneylenders, friends, and other sources (though the amounts of such additional lending had gone down since the baseline). 13

▶ There seems to be a significant unmet need for savings services among women.

An interesting finding of the impact study on microfinance was that the most popular microfinance service among clients (80% women) was savings (see also Box 3). The importance of savings products and services in financial inclusion strategies was also emphasized in the recent report of the Committee on Financial Sector Reforms, which highlighted the role of savings in providing financial security and increasing creditworthiness among the poor (and providing an alternative to borrowing when larger or unexpected expenses had to be covered). 14

However, MFIs have limited capacity to provide savings services under current regulatory provisions, except through taking a role as a business correspondent for a regular financial institution. One of the advantages of

Box 3: Savings Opportunities Are an Important Element of Financial Inclusion

Focus group discussions in an impact study on microfinance institutions found that savings were the most popular microfinance service, particularly among women. The reasons given for this high rating of savings programs were that they provided the ability to:

- · maintain savings account at their doorstep;
- save small amounts on regular basis which was not possible in any formal financial institution;
- create emergency fund to give them a kind of security against the odds;
- contribute to their family or near and dear ones during distress;
- pay monthly installments in case of paucity of funds;
- exercise control over the expenditure decision;
- create fellow feelings/bondage among the members of the group; and
- help in emergency situations, including release of mortgaged land or house, medical purposes, children's education and social and religious functions.

Source: SIDBI. 2008. Assessing the Development Impact of Micro Finance Programmes: Findings and Policy Implications from a National Study of Indian Micro Finance Sector. www.sidbi.in/NOTICES/Impact_study.pdf

the SHG-Bank Linkage model is that the initial bank linkage is for savings, with the credit linkage only made once the group is firmly established; lending by the group to members is from the savings augmented by the bank loan. According to senior officials responsible for program, the SHG-Bank Linkage demonstrated the ability of poor women to save, with benefits to both women and banks: "loans to SHGs is one of the most profitable portfolios of any bank." They further note that the ability to repay loans in small amounts is another confirmation of the ability of women to save. 15 Further, survey data shows that a substantial proportion of women have money that they can decide how to use (44.6%), and this is much higher than the number that have a bank or savings account that they themselves use (15%). 16

The points above would suggest that further outreach to women to respond to the desire to save would not only serve women but should be attractive to banks and

SIDBI. 2008. Assessing the Development Impact of Micro Finance Programmes: Findings and Policy Implications from a National Study of Indian Micro Finance Sector. (However, this conclusion was drawn from 5 individual banking MFIs vs. 21 others using the group lending model): www.sidbi.in/NOTICES/Impact_study.pdf

¹² Planning Commission (footnote 1), p. 57.

SIDBI (footnote 13).

¹⁴ Planning Commission (footnote 1), pp.6–7 and Chapter 3.

¹⁵ V. Tagat and R.B. Kumar (respectively CGM and AGM, NABARD), SHG-Bank Linkage Model—Why is it better? Editorial on India MicroFinance website. indiamicrofinance.com/shg-bank-linkagemodel-2793u72k.html

National Family Health Survey, 2005–2006 (NFHS-3). See Table 14.11 for variations by background characteristics and Table 14.14 for variations among regions/states (which are significant). www.rchiips.org/NFHS/chapters.shtml

serve another of the objectives of financial inclusion, namely to mobilize national resources.

▶ Few women benefit from insurance to protect against risks.

Insurance was recognized in the Rangarajan Report on financial inclusion as a critical element of financial services for the poor because of their high exposure to multiple risks. The report reviews various recent studies on microinsurance needs, coverage, and delivery mechanisms. It noted the low participation despite intense need, particularly in rural areas, and that "the most vulnerable rural population—in particular women—are largely excluded from the insurance market."17 At the same time, a 2008 study suggested that women were more receptive customers for insurance products than men, especially if these products also benefited their spouses and children because women were more willing to save, however small the amount, for the well-being of their immediate families. 18 The government is now considering a lowpremium integrated insurance plan, aimed initially at poor women, for a package of health insurance, pension, and school scholarships for daughters (cost-shared between central and state governments). 19

Livelihoods and Micro, Small, and Medium-Sized **Enterprises (MSME)**

Rural women's limited access to credit affects both agricultural production and women's participation in nonfarm employment.

While women are an increasing proportion of the agricultural cultivators in the country (most recent census data shows an increase from 20% in 1991 to 33% in 2001), they receive only 6% of direct agricultural credit.²⁰ This discrepancy is likely linked to land titles and ownership, in which women are at a considerable disadvantage. Women's rights to inherit land have increased with the changes introduced by the Hindu Succession Amendment Act, 2005, which is likely to have a positive effect on actual inheritance patterns, 21 and

Rangarajan Report (footnote 10), p. 98.

possibly credit, although more needs to be done to increase awareness of women's rights among women, communities, and officials.²²

A recent World Bank study concluded that the lack of finance was an important part of the explanation for the representation of women in employment.²³ Women's share of nonagricultural wage employment in India was only 18.6% in 2009-2010 and is projected to reach at best 23.1% by 2015.²⁴ (Women's share of nonagricultural wage employment is one of the gender equality indicators for the Millennium Development Goals, and is important in showing the extent to which women have been able to move into employment with higher returns on their labor).

Women are owners and managers of enterprises, even though access to credit is an additional barrier to entry and/or expansion by women in micro, small, and medium-sized enterprises.

The most recent survey of micro, small, and mediumsized enterprises (MSMEs) shows that in 2006-2007, women owned 13.9% of all registered enterprises and managed another 10.1%. In the much larger category of unregistered enterprises, women owned 1.7 million enterprises or 7.0% of the total (Box 4). No other data on the MSMEs is sex-disaggregated, but it can be assumed that they are predominantly microenterprises as fully 95% of all registered enterprises fall in this category, and the predominance of the micro category is likely even greater in the larger unregistered category.²⁵

While the MSMEs sector is generally plagued by lack of adequate working capital, unavailability and high cost of credit, and need for collateral, 26 women face additional

MicroCredit Ratings International Ltd (M-CRIL). 2008. Micro-Insurance regulation in the Indian financial landscape: a case study. p. 98. www.afminetwork.org/fichiers/ressources/56955.pdf

Business Standard. 2012. Govt may bring multiple covers under one policy. 9 January. www.business-standard.com/india/news/ govt-may-bring-multiple-covers-under-one-policy/461166/

Pallavi (footnote 4).

Deininger, K., A. Goyal, and H. Nagarajan. 2010. Inheritance Law Reform and Women's Access to Capital: Evidence from India's

Hindu Succession Act. World Bank Policy Research Working Paper 5338.go.worldbank.org/CNLI8M1800

Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan, Chapter on agriculture, paras. 4.139-140. www.planningcommission.gov.in/plans/mta/11th_mta/MTA.html

World Bank. 2011. Poverty and Social Exclusion in India. p. 156. go.worldbank.org/U2WJNKI8H0

Central Statistics Organization, Ministry of Statistics and Programme Implementation. 2011. Millennium Development Goals: India Country Report 2011. p. 54–55. www.undp.org/ content/india/en/home/library/mdg/mdg_india_country_report _2011.html

As set out in the MSME Development Act 2006, manufacturing microenterprises are those with investments up to Rs2.5 million in plant and machinery; service microenterprises are those with investments of up to Rs1.0 million in equipment.

Government of India. 2010. Report of the Prime Minister's Task Force on Micro, Small and Medium Enterprises. p. ii.msme.gov.in/PM_MSME_Task_Force_Jan2010.pdf

Box 4: Characteristics of Micro, Small, and Medium-Sized Enterprises (MSME), by Sex, 2006–2007				
Number of MSMEs and the proportion of these owned or managed by women				
Registered Unregistered Total				
All enterprises	1.55 million	24.55 million	26.10 million	
Women- owned #	0.22 million	1.7 million	1.35 million	
%	13.9%	7.0%	7.4%	
Women- managed #	0.16 million			
%	10.1%	n/a	n/a	
Emp	Employment in MSMEs by sex (all MSMEs)			
	Registered	Unregistered	Total	
Women	1.86 million	8.98 million	10.85 million	
Men	7.34 million	41.28 million	48.62 million	
Total	9.24 million	50.28 million	59.46 million	
Women as %	20.2%	17.00/	10 20/	

n/a = not applicable.

of total

Source: Ministry of Micro, Small and Medium Enterprises. 2010. Quick Results, Fourth All India Census of Micro, Small and Medium Enterprises 2006-2007.

17.9%

18.2%

dcmsme.gov.in/publications/books/fcensus.htm

20.3%

constraints. These include women's lower incomes, lack of collateral, lesser likelihood of having documentary proof of identity or address to satisfy "know your customer" norms, and greater unfamiliarity with paperwork and procedures. Negative perceptions of female entrepreneurs by loan officers also play a role.²⁷

▶ MSMEs are a very important source of employment for women and men, but the quality of employment remains an issue.

In 2006–2007, MSMEs provided employment for 10.85 million women, who constituted 18.2% of the total workforce in the sector. MSMEs employment tends to be in small units—on average, registered enterprises had six employees per unit while unregistered enterprises had on average two (these figures include the owner or manager). 28 The sector includes ownaccount and home-based workers, and covers a very large range of activities, with a major emphasis on food products, textiles and garments, retail trade, and various

Tambunan, T. 2009. Women Entrepreneurs in Micro, Small & Medium Enterprises: Some Evidence from Asian Developing Countries. Labour and Management in Development, Vol. 10, Table 6. www.nla.gov.au/openpublish/index.php/lmd/issue/view/116

types of services. Many of these types of enterprises are beyond the reach of labor standards and/or enforcement of standards. Issues include low wages for women and discriminatory practices in pay (e.g., wages of rural women casual workers were only 68% of those of men in 2007-2008, and for urban women the proportion was even lower at 57%).²⁹ Also of concern are poor health and safety practices. Thus, while the MSMEs sector is expected to be the major source of employment growth, the impact on poverty and quality of life for women and men working in the sector will be influenced by the extent to which labor standards and working conditions are also improved.³⁰

Public Sector Management

Reaching and serving women equitably requires attention to gender differences in socioeconomic position and needs.

Women are an important part of the clientele or public to be reached by government services in all sectors, including education, health, agricultural extension, skill training, and MSMEs support, among others. The 30% target for women in government-funded schemes that was specified in the 11th Five Year Plan reflects a concern that women's participation is generally less than this, despite women being almost half the population. The arbitrary 30% target flags the issue but actual improvements in service delivery will require data and analysis to identify gender-related factors in both the context and delivery methods that constrain equitable participation and benefit.

Data and information systems of government agencies often do not generate the sex-disaggregated data needed for more appropriate and better-targeted programs. For example, important areas where data that allows comparisons between women and men is scarce include land ownership, employment and wages by sector, and MSMEs ownership by sector or industry grouping, all areas in which the data is generally

Ministry of Micro, Small and Medium Enterprises. 2010. Quick Results, Fourth All India Census of Micro, Small and Medium Enterprises 2006–2007. dcmsme.gov.in/publications/ books/fcensus.htm

NSS Report No. 531: Employment and Unemployment Situation in India: July 2007-June 2008. Statement 21.1 (casual laborers). mospi.nic.in/mospi_new/admin/Login.aspx

³⁰ For further information on working conditions, see National Commission for Enterprises in the Unorganised Sector. 2007. Women Workers in Non-Agriculture. Chapter 5 in the Report on Conditions of Work and Promotion of Livelihood in the Unorganised Sector; and Geetika, D. et al. 2011. Women Working in Informal Sector in India: A Saga of Lopsided Utilisation of Human Capital. International Proceedings of Economics Development and Research, Vol. 4. www.ipedr.com/vol4/106-M00051.pdf

gathered through major surveys. Administrative data gathered by agencies within their sectors of responsibility also provides very limited information by sex, so it is difficult to determine what share women have in flagship programs concerned with, for example, support to entrepreneurs through credit schemes.

Policy reform initiatives provide openings for a broader review of gender equality implications of the policy and regulatory framework, but these opportunities are often missed.

When a process of policy review and reform is initiated, there are opportunities to address key elements of the policy and regulatory framework that limit women's ability to participate or benefit equitably. Such broad reviews are only undertaken at long intervals, which makes it critical that these opportunities are seized to bring specific areas of policy into conformity with the broad commitments to gender equality and women's empowerment undertaken together with international community (e.g., in the Millennium Development Goals) and in national five-year plans.

Policy and Program Environment for Gender Equality Initiatives in the Sector

As the issues covered in this chapter are of several different types, key points about the policy and program environment are summarized under several headings: financial inclusion, the MSMEs sector, and public sector management. In several of these areas, the objectives of the central government are pursued through major schemes, and a point relevant to all of these is the commitment in the 11th Five Year Plan that "at least 33% of the direct and indirect beneficiaries of all government schemes are women and girl children."31 Several additional general policy commitments with cross-sector implications are highlighted in Box 5.

Financial Inclusion

Efforts to extend financial services to rural areas before the 2005 policies under the "financial inclusion" banner included the development of a network of cooperative banks to provide agricultural credit, the development of regional rural banks, the SHG-Bank Linkage Program, and the introduction of Kisan Credit Cards to facilitate access

Box 5: Highlights of Government Policy Commitments on Gender Equality Relevant to ADB Initiatives in the Sector

- · Increasing women's participation in all government programs: 11th Five Year Plan, 2007–2012 (minimum of 33% participation); reiterated in some state-level five-year plans for the same period (e.g., in Bihar).
- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (at least 30% women's participation in vocational training, to be achieved through proactive measures); also addressed at the state level, such as in Rajasthan 11th Five Year Plan (expanding technical training facilities and employment-related courses for women).
- Increasing women's employment opportunities: National Employment Policy, draft 2008 (equality in labor market, increased access to opportunities); Mahatma Gandhi National Rural Employment Guarantee Scheme (33% participation by women and equal pay for women); state-level policies on the public service (e.g., reservation of 33% of government jobs in Madhya Pradesh, 30% on Karnataka); state programs supporting women's enterprise (e.g., for women's agroenterprise in the Orissa State Agriculture Policy, 2008).
- Eliminating discrimination in wages, recruitment, and working conditions (including training): Equal Remuneration Act 1976 (equal pay and equal treatment in recruitment, promotions, and training for same and similar work for women and men).
- Strengthening women's ownership rights: Hindu Succession (Amendment) Act, 2005 (inheritance); 11th Five Year Plan, 2007-2012 (transfers to women through land reform, antipoverty and resettlement programs, government housing in women's or joint names).
- Increasing women's participation in decision making: 73rd and 74th constitutional amendments of 1992 (one-third reservation for women in elected rural and urban local bodies, respectively); implemented and in some cases augmented by state legislation.

See overview chapter of this report for further discussion of these commitments. Some further state-level information is provided in ADB's Gender Equality Reference Sheets, prepared in 2011 for most ADB partner states in India.

to credit by farmers.³² New elements introduced in 2005 included provisions for "no frills" basic bank accounts, the availability of banking information in regional languages, simplified "know your customer" norms, and liberalization of the appointment by banks of business correspondents to act on their behalf. 33

In 2010, when about 40% of the country remained "unbanked," the central government set a target of bringing banking facilities to all habitations larger than

Planning Commission. 2007. Eleventh Five Year Plan. Vol. II, para. 6.7. planningcommission.nic.in

See Planning Commission (footnote 1), Chapter 3 on broadening access.

R. Gopalan. 2011. Financial inclusion needs a boost. *Inclusion*. January–March. www.inclusion.in/index.php?option=com _content&view=article&id=639&Itemid=284

Box 6: Key Inst	itutions, Programs, and Terms in the Sector
RBI	Reserve Bank of India: the central bank. www.rbi.org
SIDBI	Small Industries Development Bank of India: apex financial institution for promotion, financing and development of micro, small, and medium-sized enterprises (MSMEs). www.sidbi.in
NABARD	National Bank for Agriculture and Rural Development: responsible for the SHG-Bank Linkage Program. Also supervises the Regional Rural Banks and cooperatives. www.nabard.org
HUDCO	Housing and Urban Development Corporation: apex body to provide long-term finance and technical help for housing and urban developmentwww.hudco.org
RRB	Regional Rural Banks: banks that cover one or more districts in a state and cater to small farmers, agricultural laborers, and rural artisans. www.nabard.org/pdf/report_financial/Chap_V .pdf
DCMSME	Development Commissioner, Ministry of Micro, Small and Medium Enterprises: advocacy and services for the sector. dcmsme.gov.in/
NSCI	National Small Industries Corporation: facilitates growth of MSMEs in the areas of marketing, technology, credit, and information. www.nsic.co.in/
KVIC	Khadi and Village Industries Commission: responsible for the development of <i>khadi</i> and other village industries in rural areas to promote self-reliance through employment opportunities and marketing linkages. www.kvic.org.in
Kisan Credit Cards	farmer's credit cards that aim to enable timely access to credit for farm needs (kisanis a term for "farmer")
khadi	handspun and handwoven cloth
SHG	self-help group
Aadhaar	a 12-digit individual number issued by the Unique Identification Authority of India to serve as an all-purpose proof of identity (the term means "support" or "foundation")
MFI	microfinance institution
Swabhimaan	a government-initiated national campaign for financial inclusion (the term means "self-respect")

2,000 persons by March 2012. This was to be achieved through increased use of business correspondents and other types of outreach with the backup allowed by information technology. Banks were required to develop "roadmaps" for their financial inclusion plans, as a result of which 73,000 target habitations were identified and allotted to the different categories of banks (but mostly public sector banks and regional rural banks).

More recently, the Swabhimaan campaign launched in February 2011 highlighted the importance accorded by the government to achieving the outreach target. The campaign aimed to give impetus to further use of technology and business correspondents to bring services to areas still unserved. This approach allows villagers to have accounts in the formal banking sector for deposits, remittances, and withdrawals, and they can access these accounts within the village through business correspondents using mobile telephone or internet devices that allow transactions to be communicated to the bank. By March 2012, almost all the 74,400 target villages had been reached.³⁴

The central government also aims to increase access to other services and programs by expanding access to bank accounts. In particular, it aims to use this mechanism to directly credit account holders with government subsidies and social security benefits. In addition, the government envisages that the banking network will facilitate provision of services such as microinsurance, mutual funds, and pensions.³⁵ Further, there is discussion of possibly replacing the current public distribution systems that provide subsidized grains to poor eligible households with cash benefits directly deposited into bank accounts.³⁶ In short, access to a bank account will be increasingly important in linking citizens to government services.

Equitable access by women is implied by the "inclusion" approach, but reaching women may require additional steps.

The target that is driving the most recent campaigns is the number of villages covered by banking services rather than the number of persons with accounts, so progress monitoring does not track the extent to which men and women are being reached equitably. However, the data on account holders discussed in the previous

Ministry of Finance website. Financial Inclusion page (not dated, but based on data from 31 March 2012). An overview on Financial Inclusion. financialservices.gov.in/banking/financialinclusion.asp

 $^{^{35}}$ Ministry of Finance website. Remarks by finance minister at Swabhimaan launch. Inclusion. January-March 2011. www.inclusion.in/index.php?option=com_content&view=article &id=639&Itemid=284

Although the benefits and drawbacks to this are still much debated; see, for example, the discussion in Times of India, 19 May 2011: articles.timesofindia.indiatimes.com/2011-05-19/india/29559530_1_transfers-pds-system-grains

section shows that women are much less likely than men to have deposit or credit accounts.

This discrepancy suggests that gaining equitable access to financial services for women will require strategies that specifically address the barriers they face, including the lack of identification documents in their own name, limited access to information about programs and services available, and limited familiarity with the banking system. However, while reports and discussions generally refer to financial inclusion as important for the poor and marginalized, "including poor women," there do not seem to be targets or strategies to ensure that women become full participants in the new wave of outreach services, nor that the gender gap in areas already served is addressed.

> The Aadhaar identification initiative could have major benefits for women.

Aadhaar is an ambitious program that aims to provide everyone with a unique identification number and a biometric means of verifying their identity.³⁷ A critical characteristic of the Aadhaar approach from a women's rights perspective is that it is based on the individual rather than the household, the father, or the spouse. Aadhaar will therefore provide a means by which government subsidies and social security benefits (and any cash-based variation on the public distribution system) could be targeted directly at vulnerable women, which could be a major benefit to women in many situations, but particularly single, separated, and widowed women living in extended-family households.³⁸

Self-help groups are being given an increasingly prominent role in government strategies for financial inclusion and livelihoods.

The SHG-Bank Linkage Program was launched in 1992 with the support of the Reserve Bank of India (see Box 6 for a list of the key institutions in the sector). The program was based on three key principles: (i) banks could lend to unregistered groups that functioned well (according to criteria based on affinity, history of saving, and lending to members from savings); (ii) loans were to the group, not individuals, and were based on the strength of the group rather than the purpose of the loan; and (iii) no physical collateral was required. The program had very high participation of women—81.7%

The Aadhaar website includes further information on Aadhaar and financial inclusion: uidai.gov.in (see left, Aadhar usage).

of the 7.5 million SHGs with savings links with banks were women's SHGs. Loans were used by members for a variety of activities related to livelihoods, including agriculture, horticulture, animal husbandry, cottage industries, repayment of higher-cost loans, education, food, construction of housing and toilets, etc. 39

In 1999, another SHG-based program was developed by the Ministry of Rural Development, the Swarnjayanti Swarozgar Yojana (SGSY). It differed from the earlier NABARD program in providing more support for group capacity building, in allowing for higher loan amounts, and in complementing loans with a subsidy for asset acquisition. However, results were less than anticipated and this has been attributed to factors such as group formation motivated by the subsidy rather than on the basis of affinity, poor use of capacity-building funds, insufficient assessment before issuing loans (or haste to issue loans), and a creep toward lending to individuals rather than groups. 40 Women's participation in SGSY is somewhat lower than for the SHG-Bank Linkage Program: SGSY aims for women to be 40% of its beneficiaries and that women-specific SHGs are 50% of all its SHGs. From the inception of the program to December 2010, 4 million SHGs were formed under SGSY, of which 68% were women-specific⁴¹ (although it seems that some of these are also counted among the bank linkage groups).

The National Rural Livelihoods Mission launched in 2011, replaced SGSY with a restructured and larger investment. Under the new orientation, the aim is to broaden the focus from credit to a livelihoods approach that recognizes the complexity of the challenges facing poor households. Greater emphasis will be placed on social mobilization of poor households into self-help groups and ensuring that they are effective, on developing federations of self-help groups, and on enhanced access to bank credit and other financial and technical services. The approach focuses on households, with the objective of ensuring that all poor households

See discussion in overview chapter on issues facing single women (separated, divorced, widowed, never-married), both as heads of households and as members of extended households.

Fernandez, A. 2010. Microfinance Crisis: Whose Risk is it Anyway? www.microfinancefocus.com/latest-news/Aloysius-Fernandez/microfinance-crisis-whose-risk-it-anyway

Fernandez, A. 2009. Presentation included in Report of the Workshop on the National Rural Livelihoods Mission. pp. 31–38. www.enableindia.net/Proceedings%20of%20%20NRLM%20worksh op%20final.pdf and Ministry of Rural Development. Annual Report 2010–2011. rural.nic.in/sites/annual-report.asp

Ministry of Finance, Economic Survey 2010-2011. pp. 302-303. indiabudget.nic.in/budget2011-2012/es2010-11/echap-12.pdf

are included in an SHG through one of their members, "preferably a woman." 42

The above programs all focused on rural areas, but the Ministry of Housing and Urban Poverty Alleviation aims to build on the SHG approach in the National Urban Livelihoods Mission (NULM) proposed in January 2012. The NULM would mobilize the poor into SHGs and federations as a means of enhancing access to credit and other livelihood supports. As with its rural counterpart, the NULM envisages "universal mobilization," meaning that one member of every identified poor household, "preferably a woman," be brought into an SHG. 43

Several studies have found that women's SHGs perform better than men's SHGs and also that women derive more benefit from an SHG-based approach. 44 Promotion of women's SHGs has become a priority for the central government, both to include more women in the financial sector and as a tool to empower them.

Current approaches recognize the need for a range of financial products—including appropriate savings and insurance products as well as credit.

The committees and reports on financial inclusion all stress the need for a range of financial products and services, and the need to develop specific microsavings, microinsurance, and microcredit products for those currently unserved. This broader approach is also reflected in the recently launched Swabhimaan campaign as well as the approach to the National Rural Livelihoods Mission and its urban counterpart. This is a promising context for the development of products that respond to women's needs and circumstances.

Micro, Small, and Medium-Sized Enterprises

Approaches in the MSME sector could benefit women, but have yet to recognize the potential of women entrepreneurs.

The MSME sector has attracted increased attention in recognition of its potential contribution to growth and employment. The Micro, Small and Medium Enterprises

NRLM Mission Document, p. 6: sgsy.gov.in (select Documents, then NRLM); the Program Implementation Plan on the same website provides further details.

Development Act, 2006 introduced new definitions that expanded the scope of what had previously been called the small-scale industries sector to include mediumsized enterprises, service providers, and manufacturing enterprises. The 11th Five Year Plan emphasized the importance of the micro and small enterprises within the sector and highlighted their need for infrastructure credit and policy support. Further, it specified that home-based industries such as handlooms and food processing should also have access to the benefits and schemes in the industry. These are among the activities in the unregistered sector, which account for a large number of women entrepreneurs and workers.⁴⁵

The Office of the Development Commissioner, MSME is the apex organization for the sector. It manages a range of programs and organizations that support skill training, technology upgrading, product development, and credit subsidies. Its annual reports show that women's participation in programs varies considerably by subsector and industry. For example, women make up a small proportion of trainees (8%) in MSME Tool Rooms, which focus on the tool engineering skills and services for more productive and competitive industry; they are also a small proportion of trainees (12%) of MSME Technology Development Centres, which provide skill training in specific product groups such as electronics or sport shoes. However, the numbers are higher in the MSME training institutes in the footwear sector (40% women). In credit schemes, the reference to women's participation is in relation to credit guarantees for micro and small enterprise, but there are no special provisions in the much larger credit-linked capital subsidy scheme.⁴⁶

While there are a number of programs in this ministry and others that include women or are oriented to women in the MSME sector, the tendency is to approach women's participation from the perspective of aid to one of the "weaker sections." This welfare orientation overshadowing the potential of women entrepreneurs to participate and contribute to those aspects of the sector that make it the engine of growth envisaged in the 11th Five Year Plan. Ensuring that women are targeted with programs to develop skills, introduce new products, enhance productivity, or expand in size, for example, will be important for women to realize their potential and their contributions to the sector's dynamism.

Concept Paper, NULM, para. 4.3. indiamicrofinance.com/ national-urban-livelihoods-mission-india-2012.html. For Minister's statement on NULM, see pib.nic.in/newsite/erelease.aspx?relid=79833

Parida, P. C. and A. Sinha. 2010. Performance and Sustainability of Self-help Groups in India. Asian Development Review. 27 (1): 80-103. www.adb.org/publications/series/asian-developmentreview

Planning Commission. 2007. Eleventh Five Year Plan. Vol. III, paras. 7.1.338, 7.1.355, and 7.1.374. planningcommission.nic.in

Ministry of Micro, Small and Medium Enterprises. 2011. Annual Report 2010–2011. Chapter 4. dcmsme.gov.in/rptAnnualReport.html

Box 7: Eleventh Five Year Plan. 2007-2012 on Gender Budgeting

Gender Budgeting and Gender Outcome assessment will be encouraged in all ministries/departments at central and state levels. Gender Budgeting helps assess the gender differential impact of the budget and takes forward the translation of gender commitments to budgetary allocations. During the Eleventh Plan efforts will continue to create Gender Budgeting cells in all ministries and departments. Data from these cells will be collated on a regular basis and made available in the public domain.

Gender outcome assessment of fund flows has been made a mandatory part of the outcome budget prepared by every ministry/department as part of their budget documents. The Eleventh Plan will therefore ensure that each ministry/ department at central and state levels should put in place a systematic and comprehensive monitoring and auditing mechanism for outcome assessment. In addition, the Ministry of Women and Child Development (MWCD), Ministry of Finance, and Planning Commission will facilitate national level gender outcome assessments through spatial mapping of gender gaps and resource gaps. They will undertake gender audits of public expenditure, programmes, and policies, and ensure the collection of standardized, sex-disaggregated data (including data disaggregated for [scheduled castes/ scheduled tribes] and minority women) at national, State, and district levels.

The Eleventh Plan period will seek to make all national policies and programmes gender sensitive right from their inception and formulation stages. The MWCD is the nodal Ministry for Gender Budgeting and the coordination mechanism for gender budgeting will ensure that all policies including fiscal and monetary policies, agricultural policies, nonfarm sector, information and technology policies, public policy on migration, health insurance schemes, disaster management policies, media policy, and the legal regime among others are relevant from a gender perspective and are thoroughly examined. It will ensure that all legislations before they are presented to Parliament for enactment are cleared by the Parliamentary Committee on Women's Empowerment.

Source: 11th Five Year Plan. Vol. I, Chapter 6, paras. 6.74-6.77 (emphasis added). planningcommission.nic.in

collect sex-disaggregated data, and conduct genderbased analysis." The targets and the approach are set out in Box 7. According to the 2010 midterm appraisal of the 11th plan, implementing this approach to policy was "a continuous process and constantly needs reinforcement" and urged ministries and departments at the centre and at lower levels to make optimum use of gender budgeting tools.⁴⁷

The central Ministry of Women and Child Development (MWCD) has a lead role in promoting the adoption of gender budgeting throughout the central government and at the state level. The MWCD guidance documents outline a broad analytic approach involving analysis of policies and programs to determine their impacts on women.⁴⁸ However, it has become evident that many ministries and state governments tend to confuse gender budgeting with the earlier Women's Component Plan, which was oriented toward ensuring a 30% earmarking of program funds or benefits for women. The Planning Commission recently issued a clarification, which is posted prominently with the gender budgeting guidelines on the MWCD website, that strongly repudiates the women's component approach and urges the adoption of the more analytic approach to policy development. 49

In sum, the 11th Five Year Plan has given some impetus to gender budgeting and related approaches to ensuring more systematic attention to gender issues to achieve more appropriate and better-targeted programs. However, it remains a challenge at both central and state levels to implement this approach to improving the quality of policy and service delivery.

Public Sector Management

 Gender budgeting initiatives are seeking to promote more systematic attention to gender equality and women's interests in policy development in all sectors.

The 11th Five Year Plan sought to promote progress in developing a more systematic effort to include a gender equality perspective in government policy through broader adoption of gender budgeting. It noted that some 52 ministries and departments had established gender budgeting cells "to review public expenditure,

Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan. Chapter on Agriculture, para. 11.25. www.planningcommission.gov.in/plans/mta/11th_mta/MTA.html

⁴⁸ See documents and manual on the MWCD website: http://wcd.nic.in, Gender Budgeting in menu to the left.

MWCD website, citing Vide letter no. PC/SW/1-3(13)/09-WCD, dated 5 January, 2010: www.wcd.nic.in (under Gender Budgeting). See also Box 13 below for further resources on gender budgeting.

ADB Experience in Supporting Gender Equality in the Sector

ADB has a long history of collaboration with India related to finance and public sector management, but has only recently begun to identify opportunities to support gender equality through such projects. Current projects include two related to financial inclusion that are categorized as having a "gender equity theme" because they are designed to provide direct benefits to women. As yet, there are no other projects in implementation achieving "effective gender mainstreaming" (although there is one in the pipeline). Several other ongoing projects include "some gender elements" and provide indirect benefits. (See Box 8 for the distribution of projects and an overview of the ADB gender categories.)

The India country partnership strategy for 2009–2012 highlighted some of the issues related to gender equality to be addressed in projects in the period: this included attention to women's needs for financial services in the informal sector as well as assistance in accessing the formal sector; attention to women and women's enterprises in services for MSME development; expanding access of lower income households to housing finance; and more generally addressing genderbased barriers to accessing finance. 50

Financial inclusion

ADB loans in this area include financial intermediation and policy or institutional reform, or sometimes a combination. Where ADB's partners are financial intermediaries that do further on lending to participating financial institutions, the relation between ADB partners and ultimate beneficiaries is generally indirect. However, for such loans ADB normally specifies the eligibility criteria for subprojects and sub-borrowers. ADB policy also requires financial intermediaries that do on lending under ADB loans to meet several criteria including "adequate policies, systems, and procedures to assess and monitor the economic, social and environmental impact" of the on lent funds. 51 These provisions provide scope for ensuring that these loans further India's and ADB's policy on reaching and benefiting women. In

Box 8: Finance and Public Sector Management Projects by ADB Gender Category*

Year approved	GEN	EGM	SGE	NGE	Total
Approved 2000–2008	1	-	1	1	3
Approved 2009–2012	1	-	2	4	7
Pipeline 2013–2015**	-	1	1	1	3

Gender Equity Theme (GEN)

- Directly supports gender equality and women's empowerment
- All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- See specific requirements for EGM below

Some Gender Elements (SGE)

Does not meet EGM criteria BUT

- provides some direct and substantial benefits to women because of the nature of the project OR
- includes some gender-related design features in project design or resettlement.

No Gender Elements (NGE)

Gender issues not integrated in design

Effective Gender Mainstreaming (EGM)

Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. The following project requirements must be met to qualify as EGM:

- The **social analysis** conducted during project preparation included careful consideration of gender issues, highlighting both constraints and opportunities.
- Specific gender design features are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs and/or components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are in the project design and monitoring framework.
- A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the project administration manual.
- The RRP main text discusses how the project will contribute to improving women's access to or benefits from the project, at a minimum in the Due Diligence section.
- The policy matrix contains a covenant or a condition to support implementation of the gender action plan.

See Guidelines for Gender Mainstreaming Categories of ADB Projects. www.adb.org/Gender/gender-categories.asp

ADB. 2009. India Country Partnership Strategy (2009–2012): Abridged version. www.adb.org/documents/india-countrypartnership-strategy-2009-2012-abridged-version

ADB Operations Manual. Section D6: Financial intermediation. www.adb.org/documents/operations-manual

^{*}Ongoing projects and project pipeline.

^{**} These are proposed projects and are subject to change.

several cases, loans have been supplemented by grants that allow further exploration and learning.

The recently launched Inclusive Micro, Small and Medium-Sized Enterprise Development Project combines financial intermediation, direct lending and a technical assistance grant with a gender equality focus. This is a \$50 million loan to the Small Industries Development Bank of India (SIDBI) which will be used in part for direct financing by SIDBI and in part for on lending to other financial institutions to increase credit available to micro, small, and medium-sized businesses. The loan agreement specifies that at least 30% of the sub-loans under SIDBI direct financing will be provided to women entrepreneurs, and that SIDBI will ensure that financial institutions participating in on lending will give preference to female entrepreneurs seeking financing. The technical assistance grant accompanying the loan focuses on support to women's entrepreneurship by means of three strategies: assessing current policies and practices of SIDBI and associated institutions, and assisting them to mainstream gender issues into future approaches; training of stakeholders involved in female entrepreneurship; and the development of financial services for low-income female microentrepreneurs.

The Rural Cooperative Credit Restructuring and Development Program is another initiative that uses an accompanying grant to explore ways to reach women. The mainstream project is a very substantial loan (\$1 billion) that supports reforms to policy and legal frameworks in the rural cooperative credit sector in five states, the development of tools and strategies to enable NABARD to more effectively manage and support rural institutions, and reforms to the cooperatives themselves. An associated grant aims to collaborate with NABARD to pilot test innovative approaches for income diversification and enhanced credit outreach to poor rural women in the context of the sector reforms.

The Khadi Reform and Development Program is also concerned with microenterprise, but focuses on the policy, production, and monitoring framework for khadi and other village industries. The loan will be used for such institutional purposes and its gender action plan aims to reach women in consultations for policy reforms. The action plan also includes rights awareness campaigns for women employees of khadi institutions, and women-targeted information campaigns or training on financing, procurement, pricing, and marketing.

It is evident from the above that ADB is seeking ways to address gender issues within projects. However, the example of these initiatives suggests that future

projects for both institutional reforms and financial intermediation would be strengthened by more focused analysis on the capacity of the various institutional participants (intermediaries, retailers, societies) to ensure that women-specific needs are met.

Finally, while one of the aims of financial inclusion is to provide more options to the poor and the smallest of enterprises, another aim is to assist microenterprises to expand and to provide a more supportive environment for small and medium-sized enterprises. One of the issues highlighted in the MSME development project is the need to address the "missing middle"—the gap in financing available for enterprises that need more than microfinance can offer but are not served by the formal system. The initiative's recognition that women as well as men face this financing gap is very important because the more general tendency is to assume that financing issues for women's enterprise are limited to livelihoods and the most micro side of microenterprise.

Public Sector Management

ADB's investments in state-level public sector management initially focused on fiscal consolidation and offered few opportunities to address gender equality issues. However, the second generation of loans aims to combine fiscal consolidation with improvements in service delivery, for example in education and health.⁵² This orientation provides considerable scope for assisting partners to develop skills and procedures to strengthen results analyses and program targetingincluding assessment of the extent to which programs are reaching women equitably and serving their needs.

To date, this potential has been recognized only in part. For example, the project on Modernizing Government and Fiscal Reform in Kerala did some capacity building of community organizations on financial management through Kudumbashree, a well-respected governmentsponsored women's empowerment organization in the state. It also partnered with the same organization to test a citizens' charter with organizations of poor women and to validate the results of a poverty census with neighborhood groups. These are all valuable ways to support women's organizations and benefit from the views of women. However, there do not seem to have been any steps taken to reinforce these approaches by building knowledge, data, or analytic skills within the partner organization (e.g., among planning staff or management).

⁵² India–ADB Development Partnership (footnote 3), p. 69.

Finance and Public Sector Management Commitments	Under the country partnership strategy for 2013–2017, ADB will give further attention to the following issues and objectives to enhance impacts on women's empowerment and gender
	 equality: Assess experience in financial intermediation for women's MSMEs, including capacity needs of intermediaries in serving women.
	 Identify opportunities to integrate a gender perspective into policy, fiscal, and regulatory reforms.
Strategies for All ADB Sectors	ADB will strengthen its gender equality outcomes in collaboration with government partners at both central and state levels through
	(i) improving the quality of gender analyses done during the project preparatory technical assistance, in particular by aligning the analyses more closely with project objectives;
	(ii) reflecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents;
	(iii) monitoring achievement of key gender equality outcomes in design and monitoring frameworks;
	(iv) selectively using technical assistance resources to build knowledge and capacity to deliver gender-responsive outcomes; and
	(v) engaging in gender-responsive policy, legal reform, and legal empowerment in ADB priority sectors.

Strengthening ADB Approaches: Challenges and Opportunities

Strengthening positive impacts on gender equality and women's empowerment of projects in the pipeline will require attention to gender equality issues and strategies throughout the planning process, as well as clear identification of the tangible benefits for women the development results that are aimed for. As highlighted in Box 9, ADB's country partnership strategy (CPS) for 2013-2017 identifies several specific areas to be pursued in the Finance and Public Sector Management sector as well as several strategies that apply to all sectors.

This section aims to support efforts to implement the CPS and, more generally, strengthen approaches in the sector. It begins with a discussion of points related to identifying or following up opportunities to support gender equality in the sector. The subsequent subsection draws on a review of project documents to point out several ways in which to improve the quality of project design and outcomes in support of gender equality and women's empowerment. The chapter ends with a "tip sheet" that aims to support gender mainstreaming in ADB's investments in the sector by suggesting possible questions and gender-related design features to consider in the project formulation process.

Issues for Further Attention in Analyses and Strategies (Sectoral and Project)

Financial inclusion

ADB projects that aim to extend financial services, credit, and support to MSMEs should all have explicit targets for outreach to or participation of women. These targets may differ by sector or type of service, but should reinforce the understanding that women are legitimate participants in all aspects of the sector. In addition, such projects could give consideration to the potential (as appropriate to the main theme of the project) to assist partners to follow up on issues such as the following:

- **Financial literacy**, including knowledge and skills related to management of finances and use of financial services; information about Aadhaar (the unique identification number) and its role in facilitating access to bank accounts and to various government services; and information on rights related to financial services, such as rights to inherit land and property established through changes to the Hindu Succession Amendment Act, 2005.
- Financial services products appropriate to different target groups, with a focus on whether women's needs are met by the products on offer and whether they can access them, and further consideration of additional needs related to, for example, credit for

household emergencies and housing as well as entrepreneurship; savings products and services, including microsavings; and insurance against risks, including microinsurance. (See also the examples in Box 11 of financial inclusion initiatives that tailor products or services to women's needs.)

Outreach through business correspondents, and the specific strategies that would be needed to ensure that women are reached, including criteria for the selection of business correspondents (including the potential to increase the representation of women among business correspondents) and training on issues such as outreach to women customers.

▶ Public sector management

The partner capacity assessments ADB undertakes at the planning stage for its resource management initiatives provide an opportunity to consider issues such as the availability of sex-disaggregated and gender-specific data required for policy and planning, capacities to use such data in program planning and monitoring, and capacity to include women and women's organization in public consultation processes. Capacity-building support based on the findings of these analyses would be a means of supporting the central government's commitment to gender budgeting as a way of increasing coherence between the commitments in principle to gender equality and actual policy processes and outcomes.

Partner assessments related to policy and regulatory reform provide important opportunities to consider the extent to which the current framework serves women appropriately and to identify issues to address in the reform process to achieve more equitable outcomes. See Box 10 for questions to include in these analyses. 53

Infrastructure financing

In accordance with its financial intermediation policy, ADB could assist partners during the design and loan approval process for financial intermediation projects through one or both of the following steps:

collaborate with the partner in developing criteria and skills to assess whether subproject proposals would benefit women equitably and a strategy for acting on the conclusions of these analysis in subproject design and funding decisions; and/or

Box 10: Integrating a Gender Perspective into Assessments of Policy and Legal and/or Regulatory Reforms

Consider questions such as the following:

- What are the main policies, laws, and regulations governing the sector? Do they make any explicit references to men/women or boys/girls?
 - o If so, are any of these provisions explicitly biased or discriminatory?
 - o If policy and/or legal framework includes special measures to narrow gender disparities, have these been effective? If not, what have been the weaknesses or obstacles?
- Does the legal and regulatory framework contain any implicit gender biases or provisions that could disadvantage women? For example, does the policy and/or law and/or regulation:
 - o Allocate rights or entitlements only to heads of household, landowners, full-time registered workers, members of particular user groups, or decision-making bodies, who are more likely to be men?
 - o Condition rights or entitlements on a certain educational level or on basic literacy or numeracy? Are these requirements necessary?
 - o Require an identity card or other documentation to access services? Are they equally easy for both women and men to obtain?
 - o Require collateral to obtain credit? Are there alternative ways to provide security?
 - o Establish connection charges, registration fees, user fees, or other financial requirements that women would be less able than men to meet?
- What changes in the legal and/or regulatory framework are proposed under the program or project?
 - o Will these changes address gender biases or gaps?
 - o Could any of these changes inadvertently disadvantage women (see above)?
- Are there any other formal or informal factors that limit women's access to services or benefits the program or project? Consider, for example:
 - o Is women's participation less than men's in key decisionmaking bodies, user groups, or dispute settlement mechanisms? If so, why? Do women lack the time, funds, resources, experience, or confidence?
- What measures could be taken under the program or project to address gender biases or other barriers to women's participation? For example, could the project provide
 - o Support for the amendment of discriminatory laws?
 - o Development of institutional mechanisms to improve access to current programs or institutions?
 - o Improvement of working conditions or facilities to enable women's participation in sector organizations?
 - o Training for government staff on implementation and enforcement of relevant laws and regulations?
 - o Awareness-raising among community leaders and women's groups about women's rights and entitlements under the relevant laws and/or regulations?

Source: Adapted from ADB. 2006. Gender, Law, and Policy in ADB Operations: A Tool Kit. www.adb.org/documents/gender-law-andpolicy-adb-operations-tool-kit

An ADB gender checklist on public sector management is also forthcoming and will be available from www.adb.org/themes/gender/checklists-toolkits

provide technical assistance to enable the partner to develop experience and skills in assessing results of the subprojects they fund and their overall program, with particular attention to impacts on the wellbeing of affected communities and how benefits to women compare with benefits to men.

Project Design and Management Challenges

Strengthen gender analysis in project preparation.

While there are data gaps that can be a constraint to gender analyses in the finance and MSME sectors, the data available is not used very effectively in project planning documents. Too often the approach seems to consist of a somewhat random reference to women (most spinners in the khadi industries are women) without putting this into some context (the proportion that spinners are of the khadi and village industries targeted by a program). Gender analyses would also be more useful if they were more closely linked to the main areas to be addressed by a project.

example, a project concerned with rural cooperatives could be expected to consider whether the cooperative structure and practices support equitable participation by women as savers and borrowers and also as part of the cooperative democratic structures, and the potential for addressing gaps identified as part of the investment envisaged. Or a project that aims to support implementation of financial inclusion strategies could be expected to consider the population to be reached, whether women faced gender-specific barriers, whether the models to be used address this, and the potential to make modifications to achieve equitable results. Box 12 provides some tips on possible gender equality outcomes and issues for analysis in relation to elements of ADB projects in the sector.

Aim for evidence-based and achievable gender action plans.

The gender analysis should underpin the project strategies to ensure that women participate and benefit. The project documents reviewed suggest that this link could be strengthened. For example, one energy sector project included skill training to meet the longer-term labor demands that would be generated by the investment and set a 30% target for women. However, the documents do not discuss the potential for local employment benefits—types of existing skills, skill gaps to be overcome, gender differences in them, and any challenges in ensuring that women get a fair share of training opportunities and subsequent employment.

Further, the 30% target for women's participation in training was lower than the 36% representation of women in the labor force in the project area—this is an approach that undermines the purpose of targeting, which is to ensure that current conditions are at least matched and preferably bettered. (On the other hand, if a target related to the current work force participation had been considered unrealistic, a rationale for the particular target selected would better maintain the credibility and value of the gender action plan target.)

Take a more considered and strategic approach to targeting.

Target setting is intended as a means of stimulating or reinforcing change or progress. A target should be based on an assessment of the current situation and aim for a reasonable and achievable improvement on it, taking account of the challenges of change and the strategies or resources to be invested in achieving the target. If women are 30% of the population to be reached, a target of 30% merely maintains the status quo (women are not further disadvantaged); a target somewhat greater than 30% provides a measure of positive action. However, if women are 80% of the target to be reached, as is the case for certain institutions in the microfinance sector, then a target of 30% has little meaning and could even result in disadvantaging women if it is seen as a cap.

Ensure that the project design and monitoring framework specifies the critical gender equality commitments.

The design and monitoring framework is intended as a management tool and is the basis for the regular monitoring of progress by ADB. Where gender equality commitments are included they should be accorded regular attention through mainstream processes and are thus legitimized as integral to the project. Where they are not, they are more easily overlooked or marginalized. An explicit statement of gender-related outcomes in the design and monitoring framework is required for projects to be eligible for the "gender equity theme." If this requirement is not consistently implemented, it limits ADB's ability to gain information about progress in implementation and the extent to which women benefit.

Ensure there is a clear strategic purpose when attaching a grant to a loan.

Attaching technical assistance grants to loans provides a means of exploring issues and options, but the impact would be greater if the overall strategy was made

explicit. Documents for such grants (and the summary provided within the mainstream project document) are generally limited to a statement of the activity components without an overall statement of why it is being pursued or what will be achieved.

Various purposes could be served by the grant mechanism. For example, the grant could be used to strengthen particular components of a loan—for a loan with policy reform components, the grant could be used to support research and consultations on women's specific needs and interests in relation to the reform in question and contribute to ensuring that the outcome serves women as well as men. Another purpose could be to explore new models for delivery of particular services or programs that would reach more women, with the aim of testing approaches to be more widely used by the partner or in future collaboration. These two examples would require quite different implementation strategies to be successful. In the first case, the implementation strategy must be closely linked with the overall project strategy in order to achieve objectives within the timeframe of the reform and the project. In the second case, the implementation strategy would need to include a rigorous approach to monitoring and assessment in order to determine whether the models tested merit follow-up in future projects.

Tip Sheet on Questions and Design Features for Gender Mainstreaming

The tip sheet in Box 12 aims to aid gender mainstreaming in sector projects. It suggests possible gender equality outcomes related to more general ADB project outcomes, provides examples of questions to consider in preparatory analyses to assist in formulating project strategies, and suggests possible gender-related design features that could be elaborated if applicable in the project context. Other assistance may be found in the resources listed in Box 13.

Box 11: Examples of Financial Inclusion Initiatives that Tailor Products and Services to Women's Needs

- Vimo Self-Employed Women's Association (SEWA) has developed three "bundled" microinsurance schemes covering "cradle-to-death" risks (death, health, and assets), all offered at a low premium and at varying prices to suit different income groups. The insurance schemes are linked to members' savings accounts in SEWA Bank, giving clients the option to pay the premium with their bank interest. A single premium covers all children so that women do not have to choose how much to invest for each child. See www.sewainsurance.org
- Indian School of Microfinance for Women (established by SEWA) focuses on women in its program for financial literacy, working through the Citibank-sponsored Citigroup Centre of Financial Literacy. It has generated training material (available on the website) focusing on poor women and on household-level training. This approach recognizes that lack of awareness and understanding of financial products and services is one of the biggest barriers for low participation of women in microfinance. www.ismw.org.in
- Mentoring and nurturing of entrepreneurs in the early stages is a strategy that has been pursued by one organization and might be a useful model even though it does not have a focus on women:

Bharatiya Yuva Shakti Trust partners young entrepreneurs from disadvantaged groups with established entrepreneurs in the same sector at the start-up stage, providing personalized advice and active assistance in problem solving and business development. About 500 of the 2,000 enterprises supported to date are women-owned.

www.microfinancegateway.org/p/site/m/template.rc/ 1.11.47011

- · Assistance in obtaining finance, marketing support, counseling, and other "core support" (such as day care centers) are some of the approaches that can assist women-owned micro, small, and medium-sized businesses (MSMEs), according to women entrepreneurs interviewed for a study by the National Knowledge Commission. The commission's report identified a number of organizations that focus on women's entrepreneurship, which would therefore have explored various approaches and have considerable experience to draw on:
 - Association of Lady Entrepreneurs of Andhra Pradesh: www.aleap.org
 - Association of Women Entrepreneurs of Karnataka: lifeasia.org/cn/page.php?id=MjAw
 - Federation of Indian Women Entrepreneurs: http://fiwe.org
 - National Knowledge Commission. 2008. Entrepreneurship in India, p. 26: www.knowledgecommission.gov.in
- **Dedicated funding institutions** have also proved to be beneficial for women-owned MSMEs. Dedicated provision of funds for women-owned MSMEs, supported with training and advisory functions have proved to be very beneficial for the sustainability of women-owned MSMEs and overcome the biggest barrier—the credit gap. The best examples are

SEWA Bank, a cooperative bank that funds its women members' petty and small businesses in rural and urban Gujarat: www.sewa.org; and Friends of Women's World Banking, a national network co-sponsored by SEWA in 1982 that provides "wholesale" loans to microfinance institutions, including nongovernment organizations, for on lending to poor, disadvantaged women to build their enterprises and for their self-empowerment: fwwbindia.org

Box 12: Tip Sheet on Questions and Design	Features for Gender Mainstreaming in ADB Pro	jects: Finance and Public Sector Management
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)
Financial inclusion and micro, small, and me	edium-sized enterprises	
Broader access to financial services o Increased access by women to various financial services, including savings options	Do partner institutions (and their partners to which they do on lending) track the clients for deposit and credit accounts by sex? Are they able to assess whether women and men are being equally reached? Or whether women have equal access to services, including savings, credit, microinsurance, etc.? Are services adapted to meet the needs of small savers, small borrowers? Are other financial needs also met?	 Assist partner institutions to strengthen data systems to generate sexdisaggregated data on clients (depositors, borrowers, service users). Support partner institutions in formulating strategies for equitable access to the services they provide. Support partner institution in studies and consultations in identification of needs of women (and other excluded groups) and on the design of products and services to meet those needs.
Broader access to finance by MSMEs Equitable access to credit by women-owned and womenmanaged MSMEs (not only to livelihood and very micro level) Innovative lending models that respond to the needs and problems of women entrepreneurs	What proportion of MSMEs credit goes to women-owned enterprises? How does average loan size compare with credit to men in similar enterprises sizes? Is the credit to women entrepreneurs limited to certain niche areas dominated by women entrepreneurs? Do women entrepreneurs in other areas continue to face significant gender-based constraints?	 Assist partner to modify data systems so that they generate sex-disaggregated information about borrowers and credit extended. Consult women entrepreneurs about the issues in access to credit related to both demand and supply (i.e., the assets and/or products and/or enterprises of the women entrepreneurs, and the financial products and terms of the partner and related lending agencies). Explore options for alternative or innovative credit products or credit terms that respond to barriers identified. Facilitate awareness and linkages with government schemes to assist women entrepreneurs.
Improved access to information and to advisory and support services by MSMEs O Reduced gender gaps in access to information, technology, business support services, infrastructure facilities (industrial estates, export processing zones) O Better access by women entrepreneurs to entrepreneurship training Increased capacity of enterprise owners/	 Are women using existing information services for MSMEs? Are there genderspecific barriers to access that need to be addressed? To what extent are women participating in training programs to enhance entrepreneurial skills and the performance and competitiveness of MSMEs? (That is, in the mainstream training as well as initiatives specifically targeted to women.) Are the hiring and pay practices of MSMEs 	 Target women for training, information, and advice related to enterprise expansion and profitability (for small and medium enterprises, not only the micro and livelihoods levels). Assist partner to develop training modules suited to women's needs for adequate backward linkages and profitable forward linkages. Collaborate with mainstream business
managers in the MSME sector for human resource management o Better awareness and compliance with core labor standards, including those specific to women	consistent with the provisions of the Minimum Wages Act and the Equal Remuneration Act regarding nondiscrimination in wages between women and men? • How common in the MSME sector are the sexual harassment committees mandated by the Supreme Court? • To what extent are women workers aware of these rights and able to act on them?	associations (e.g., chambers of commerce, sectoral or regional associations) to increase awareness among enterprise owners of core labor standards.

Box 12: Tip Sheet on Questions and Design Features for Gender Mainstreaming in ADB Projects: Finance and Public Sector Management			
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)	
Increased work force skills in MSMEs o Reduction in the skills (and income) gap between women and men	 What training opportunities are available in sectors in which women predominate? Are MSMEs being encouraged and supported to upgrade worker skills? Do women have equitable access to such training? 	Facilitate linkages with government initiatives under the <i>National Skills Development Policy, 2009;</i> encourage and support women workers in the MSMEs sector to gain access to such training.	
Public sector management			
Strengthened data systems and institutional capacity of subnational governments o Increased capacities to service women and men equitably	 Do existing data systems generate the sex-disaggregated data required to identify gender-related patterns, problems, and issues for policy attention? Do professional staff have the knowledge and skills to identify whether existing or proposed programs have equitable impacts on women and men? 	 Assist partner institution to develop systems to generate sex-disaggregated data on services users. Support partners in developing training sessions on use of sex-disaggregated data and the analysis of policies and programs from a gender perspective. 	
Improved financial management in fiscally distressed states o Reforms that distribute costs and benefits equitably, avoid widening gender gaps	 Is there potential for new taxes or tax collection methods to inadvertently result in costs to women's enterprises or activities? Or for new approaches, such as user charges, to widen gender gaps? Could fiscal consolidation result in cuts to services or jobs that would have results that fall more heavily on women (due to their economic or household activities)? 	 Commission a study on the implications of proposed approaches for gender equality and women's well-being. Structure any cuts to programs and services to minimize burdens on women and the poor. Ensure that women's employment targets and gender equity principles are part of any public sector downsizing initiatives. 	
Improved service delivery in key areas (such as health, education) o More appropriate and better targeted policies that serve women as well as men	 In relation to the services targeted, are women benefiting equitably with men? Have gender gaps and gender-specific issues been identified? (e.g., gender gaps in secondary and vocational education, inadequate maternal health services) Are public accountability measures (such as citizen report cards) structured to capture gender differences in views on services delivered? 	 Collaborate with women's experts and organizations to provide briefings for government officials about gender equality issues related to the services at issue. Support partners in developing their data and research capacity on gender issues in the sector. Support partners in establishing targets for improved service delivery that contribute to reducing gender gaps. 	
Improved human resource management approaches o More equitable employment practices	 Does the state have targets for women's representation in public sector employment? Have these been achieved? What is the proportion of women in the various categories of employment and management of the organization? 	Assist partner to develop or update an equal opportunity policy that states equal opportunity principles and addresses biases identified in policies and practices related to recruitment, promotion, training, and salaries.	
Infrastructure financing			
 Enhanced institutional capacity to screen and monitor subprojects Increased capacity of ADB partner to guide subproject proposers to do a gender analysis as part of subproject planning and to follow up during implementation 	 Does the ADB partner have the information and skills to assess whether subprojects proposed are appropriate to the needs of both women and men? What types of data does the ADB partner have to assess infrastructure needs and use patterns by the population? Is this data sex-disaggregated? 	 Assist partner to develop a strategy for its approach to gender issues in its on lending operations (e.g., the criteria related to outreach or benefits to women in its subproject assessment framework). Assist partner in developing guidance materials for subproject proposers on gender issues in infrastructure design. 	
MSMEs = micro, small, and medium-sized enter	rprises.		

* Related possible gender equality outcomes refer to changes that reduce gender gaps or otherwise benefit women.

Box 13: Useful Resources for Further Reading on Gender Equality Issues in Finance and Public Sector Management

India-specific research and analyses related to gender and financial inclusion (including MSMEs)

- Chavan, P. and B. Birajadar. 2009. Micro Finance and Financial Inclusion of Women: An Evaluation. Reserve Bank of India Occasional Papers. Vol. 30., No 2. rbidocs.rbi.org.in/rdocs/Content/PDFs/4PCHBB060810.pdf
- · Chavan, P.2008. Gender Inequality in Banking Services in India: A note. Online version of article published in Economic and Political Weekly. 43 (47):18-21. www.macroscan.org/fet/aug08/fet02082008Banking.htm
- Chen M. and D. Snodgras. 2001. Managing Resources, Activities and Risk in Urban India: The Impact of SEWA Bank. USAID. http://pdf.usaid.gov/pdf_docs/PNACN571.pdf
- Deininger, K., A. Goyal, and H. Nagarajan. 2010. Inheritance Law Reform and Women's Access to Capital: Evidence from India's Hindu Succession Act. World Bank Policy Research Working Paper 5338.go.worldbank.org/CNLI8M1800
- Menon, N., and Y. van der Meulen Rodgers. 2009. Self-Employment in Household Enterprises and Access to Credit: Gender Differences during India's Rural Banking Reform. Paper presented at the World Bank conference, Female Entrepreneurship: Constraints and Opportunities, Washington, DC. 3 June. http://ipc.umich.edu/working-papers/pdfs/ipc-86-menon,meulen-rodgers-self-employment-householdenterprises-access-to-credit-gender-differences-india-rural-banking-reform.pdf
- Parida, P. C. and A. Sinha. 2010. Performance and Sustainability of Self-Help Groups in India: A Gender Perspective. Asian Development Review. 27 (1). pp. 80-103. http://www2.adb.org/Documents/Periodicals/ADR/ADR-Vol27-1-Parida-Sinha.pdf
- Centre for Micro Finance. 2006. Reaching the Other 100 Million Poor in India: Case Studies in Urban Microfinance. http://ifmr.ac.in/cmf/casestudies.html
- International Labour Organisation. Small Premiums, Long-term Benefits: Why Poor Women Need Microinsurance (web article). www.ilo.org/global/about-the-ilo/press-and-mediacentre/insight/WCMS 123840/lang--en/index.htm

India-specific materials on gender budgeting and gender analysis of public policy

- · Ministry of Women and Child Development. Definitions, and resources for gender budgeting.wcd.nic.in (under Gender Budgeting, accessed from menu on the left); also see Department of Women and Child Development. Gender Budgeting Scheme.wcd.nic.in/schemes/gbscheme.pdf
- Das, S. and Y. Mishra. 2006. Gender Budgeting Statement: Misleading and Patriarchal Assumptions. Economic and Political Weekly. XLI (30) (July 29). www.cbgaindia.org/files/featured_articles/ Gender%20Budgeting%20Statement-%20Mis.pdf

ADB practical resources for project planning and management in the sector

- ADB.2006. Gender, Law, and Policy in ADB Operations: A Tool Kit. www.adb.org/documents/gender-lawand-policy-adb-operations-tool-kit
- · Other ADB gender checklists are currently available for a number of themes (including water supply and sanitation, urban development, and housing) and others are planned (including checklists on public resource management and energy). www.adb.org/themes/gender/checklists-toolkits
- ADB. 2009. Project Gender Action Plans: Lessons for Achieving Gender Equality and Poverty Reduction Results. www.adb.org/publications/project-gender-action-plans-lessons-achieving-gender-equality-andpoverty-reduction-res?ref=themes/gender/publications
- Further resources and guides on gender action plans: www.adb.org/themes/gender/project-action-plans

Gender Mainstreaming in ADB Sectors

Transport

Improved connectivity in rural areas and improved mobility in urban areas have been identified as priorities for inclusive growth by the Government of India. According to the approach paper for the 12th Five Year Plan, India has one of the largest road networks in the world, with a total of 4.2 million kilometers, but the quality of many roads is poor. The network includes national highways and state roads as well as the rural roads that enable inhabitants of villages to reach markets, health facilities, and schools. The Prime Minister's Rural Roads Program, launched in 2000, is a continuing national initiative to reach all villages with good quality roads that enable them to benefit from economic opportunities and social services. 1 Urban transport is also being prioritized, based on the National Urban Transport Policy, 2006 and its emphasis on "the mobility needs of people and not vehicles." 2 Such approaches to transport, with their orientation toward inclusive growth and the needs of people and villages, provide a conducive environment for innovations to ensure that transport infrastructure and services meet the needs of women as well as men.

Transport has been the lead sector in the ADB–India partnership, with an investment of \$7.9 billion over the

This chapter aims to assist in efforts to identify ways in which ADB transport sector projects could have positive impacts on women's opportunities and quality of life and thus contribute to the gender equality objectives of both ADB and the Government of India. It is organized into four sections:

- a brief review of gender equality issues relevant to the ADB areas of activity in the transport sector;
- an overview of government policy commitments pertinent to ADB initiatives in the sector;
- a summary of how ADB has approached gender mainstreaming in its transport investments; and

period 1986-2010 (30.6% of all ADB assistance in the period). Initial projects were in partnership with the central government and focused on national highways, railways, and ports, but in the last decade the approach has expanded to include state and rural roads. Most of the investment is for road construction, but ADB also supports partners to build institutional capacity, undertake sector reforms, improve planning processes, and incorporate lessons and best practices in the sector. These nonconstruction activities may provide entry points to support national and state partners in formulating inclusive transport approaches that serve women and men equitably. In urban transport, the support to date has been provided as an element of urban sector development initiatives, but the project pipeline includes several transport-focused initiatives for urban areas.

Planning Commission. 2011. Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan. pp. 54–55. planningcommission.nic.in

Ministry of Urban Development. 2006. National Urban Transport Policy. urbanindia.nic.in; see also address by Shri Kamal Nath, minister of urban development, to the Urban Mobility Conference, Delhi, December 2011:

www.iutindia.org/urban2011/images/stories/pst_atUMI11/Speech _UDM_UMI11.pdf

For an overview of assistance in the sector, see ADB. 2011. *India–ADB Development Partnership*. www.adb.org/publications/india-adb-development-partnership; also see the project list in Box 4.

 points for attention in sectoral analyses and project preparation to strengthen gender equality outcomes (including a "tip sheet" to aid analysis and design).

Key Gender Equality Issues in the Sector

▶ The link between gender equality and transport becomes clear when attention is given to transport needs, purposes, and modes.

Where the focus of transport analyses is on roads, bridges, and other infrastructure, it is generally difficult to bring gender equality issues into view. However, when consideration is given to the purpose of transport investments—to facilitate the mobility of persons and goods, and to facilitate access to jobs, markets, health centers, and other destinations—the relevance of a gender perspective is much clearer, as this shift in perspective focuses attention on questions such as these:

- What types of journeys do people make? Who makes them? Why do they make them? How? What types of goods do they move?
- · What are the costs of journeys undertaken (in time, effort, cash, and opportunities foregone)?
- · What types of opportunities would a particular transport intervention provide? Who could take advantage of these? What services could be brought into the community with improved transport, and which groups would this benefit?

These are critical questions to be addressed if transport investments are to contribute to inclusive growth, including equitable benefits for women.

Women and men differ in the purposes for their trips and the transport modes used.

A major difference is that a much larger share of women's journeys are for household and family needs, including journeys to collect water and fuel wood, taking children to school, visits to health centers, and visits to family members. Many of these journeys may be relatively short or local, but must be taken frequently and absorb considerable time and energy, which affects overall work burdens and the time available for economic activities. Women's journeys tend to combine multiple stops to meet different purposes, and this can be more difficult if pathways or services are planned without regard to these patterns or if fares charged penalize short journeys or multiple stops. Costs of transport are another important concern with gender

Box 1: Illustration of Transport Issues Facing Rural Women

The following excerpts from a study by the Self-Employed Women's Association (SEWA) in northern Gujarat illustrate some of the transport issues facing rural women. The study looked at the availability and utility of transport services from women's perspective, particularly given their responsibility for providing water in this arid area for domestic, agricultural, and other uses. The most striking feature that emerged from the research is the extraordinary amount of time and energy that the women expend to collect and transport water from the source to the home. Secondly, the primary means of transporting water is head

In addition, many villages continually face an acute shortage of potable water. Lack of access to safe drinking water, the effects of head loading on women's health, lack of access to adequate transport facilities and the burden of women's household responsibilities all have a detrimental effect on women's income earning abilities. The general welfare of the family suffers as a result....

The only formally regulated transport facilities (set routes and fares) are the buses operated by the State Transport Corporation (STC)... It is affordable to many villagers, but they usually have to walk to the nearest main road or district center (several kilometers) to catch a bus, and they are infrequent, often making one journey out in the early morning and not returning until nighttime. This means that if the women use the bus to collect food, for access to medical care or to collect raw materials for incomeearning (e.g. embroidery), they may lose a whole day's work and therefore income.

The alternative is to walk long distances or use private (more expensive and much less safe) transport. The buses remain empty and villagers are forced to pay more for transport. More frequent and more convenient bus routes would be the best alternative In the few instances where the women have approached the ST Corporation to demand a better service the results have been negligible. Women have been told by Corporation officers to come back with their requests in writing, knowing that most of them are illiterate.

Source: Adapted from IFRTD. 2002. Women, Water and Transport in Arid Areas. Based on case study published in Balancing the Load prepared by P. Bid, R. Nanvaty, and N. Patel. www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/module6/index-p3.html (under IFRTD case studies).

dimensions, given women's lower incomes and limited claims on household resources.

 Facilitating travel on foot and for water and fuel collection as well to markets are among the gender issues to be considered in rural areas.

Data on transport patterns by sex in India is scarce. However, Box 1 provides an illustration from one regional study of the transport issues facing rural women. It highlights women's heavy dependence on their own energy for transport and how available transport services and responsible agencies fail to respond to their needs. This illustration underscores the

importance of footpaths that are located and maintained to reduce the time and energy required to obtain water and fuel. Women and children transporting water and fuel on foot also benefit from rural roads that are planned to allow safe use by pedestrians as well as vehicles, and from the provision for safe crossing points on larger roads.

This illustration also points to issues in relating rural public transport services to the needs of users, women as well as men: these include attention to frequency and timing of services, the accessibility of stops, and the responsiveness of service providers to their clientele.

In urban areas, workloads and opportunities of low-income women are closely related with transport infrastructure and services.

In urban as well as rural areas, travel on foot is a major means of transit. Women are more likely to be pedestrians than men. For example, a study of a slum in Delhi found that 52% of women walked to work, compared with 26% of men. Another Delhi study refers "hostile infrastructure designs" and "hostile environments" for pedestrians that characterize this city and likely many others in India. 5 A transport scientist with the India's Central Road Research Institute looked at pedestrian service levels from the perspective of users and found differences between women and men in factors rated important, with women giving more attention to security (including safety provided through street lighting and police patrols) and comfort (including mountable curbs, benches, and restrooms).⁶ All these researchers lament the lack of attention to the needs of pedestrians in planning for road infrastructure.

More attention to sidewalks, safe crossings, and street lighting are transport improvements that would benefit

Anand, A. and G. Tiwari. 2006. A Gendered Perspective of the Shelter-Transport-Livelihood Link: The Case of Poor Women in Delhi. Transport Review. Vol. 16 (1): 63-80. tripp.iitd.ernet.in/publications/paper/planning/Anvita%20tansp%2 Orev%2005.pdf also Shah, R. 2011. Modelling travel behavior of men and women. Presentation to Urban Mobility India 2011 Conference, New Delhi, December 2011. Section 1A. iutindia.org/urban2011/index.php?option=com_content&view=art icle&id=71&Itemid=39

women in particular. A related issue is that certain mobility improvements designed to increase the speed of motorized modes of movement (such as new roads, flyovers, overpasses, or heavy rail) can have the result of diminishing accessibility for those traveling on foot by making it harder to cross streets to reach jobs, shops, health centers, or bus stops. A better integration of neighborhood and transport planning that takes account of such interactions and their costs in time and effort would therefore also be of benefit to women.

As users of nonpedestrian modes of movement, women are more dependent on public transport than men. Here, there are important issues related to bus routes and fare structures, which tend to be oriented toward the longer commutes more typical among men rather than the shorter but multiple-function journeys that are more characteristic of women due to their domestic responsibilities. As pointed out by a study in Delhi, the trade-off between speed and costs means that lowincome women must spend more time traveling on less expensive and slower means of transport, and that time constraints restrict their opportunities to jobs or work that is located close to their homes.8

For women, the hazards of travel are not only road and pedestrian safety but the risk of harassment.

Road safety is an issue of increasing concern in both rural and urban areas of India. Some particular issues of the safety and comfort of pedestrians were noted above, including safe use of shared-use roads, safe crossing points for those head loading, and adequate sidewalks and street lights in urban areas. These are also among the issues highlighted in a recent national workshop on road safety, at which the presentations pointed to the risks faced on India's roads by pedestrians, cyclists, and users of nonmotorized vehicles due to transport planning that privileges vehicle flow and ignores the needs of pedestrians. ⁹ This puts women at particular risk due to their reliance on pedestrian movements. Travel and road accidents affecting other family members also place a heavy burden on women, whether in providing care to the injured or, in the case of a fatality, filling the

Tiwari, T. 2001. Pedestrian infrastructure in the city transport system: A case study of Delhi. World Transport Policy and Practice, Vol. 7, No. 4. tripp.iitd.ac.in/publications/paper/planning/ World%20Transport%207-4.pdf

Parida, P. 2009. Appreciation of gender differences in development of qualitative level of service for sidewalks. Women's Issues in Transportation. Summary of the 4th International Conference, September 2009. Vol. 2. Technical Papers. pp. 246-253. onlinepubs.trb.org/onlinepubs/conf/cp46v2.pdf

Srinivasan, S. 2008. A Spatial Exploration of the Accessibility of Low-Income Women: Chengdu, China and Chennai, India. In T. P. Uteng and T. Cresswell, eds. Gendered Mobilities. Hampshire, UK: Ashgate Publishing. pp. 143–158.

Anand and Tiwari (footnote 4).

Ministry of Road Transport and Highways. 2012. National Workshop on Road Safety: Improving the Safety of the Most Vulnerable Road Users. See in particular the presentation by N. Mittal on road user behavior. morth.nic.in/index2 .asp?slid=814&sublinkid=468&lang=1

gap in household needs with the loss of an incomeearning member, particularly a husband. 10

Another critical safety issue for women in both rural and urban is the pervasive risk of harassment they face as pedestrians, in passenger waiting areas, and in buses and trains. A study in Chennai found that 66% of women respondents had been sexually harassed while commuting (groping, stalking, accosting), with the worst experiences on buses and trains that had no separate section for women. 11 Irregularity of service and overcrowding of waiting areas and buses are other factors increasing the risk of harassment. A study in Bangladesh, where there are similar concerns, resulted in a set of suggested improvements to bus services to better suit women: more frequent bus services with more frequent stops, "women and family buses" that exclude lone male passengers, two-door buses, female bus conductors, and gender training for operators. 12

There has only been limited progress in gaining attention for gender equality issues in transport policy and decision making.

The linkages between gender and transport and/or mobility questions have been researched and documented over several decades, but they are not yet well reflected in transport policy and planning. 13 One area that has received attention is the potential for employment for women in labor-based construction and maintenance. However, ensuring that transport infrastructure and services meet the needs of women as well as men has had less attention. 14

▶ Employment and enterprises in the transport industry remain male-dominated.

Employment in the transport sector has increased significantly over the last 3 decades and is an important source of nonagricultural employment for men.

However, few women have found employment in the sector. In 2007–2008, 11.9% of rural men but only 1.2% of rural women with nonagricultural employment were in the transport sector; in urban areas, the figures were 11.6% for men and 2.1% for women. This category includes activities related to passenger or freight transport by road, rail, water, etc. as well as postal and telecommunications services, and casual and salaried workers as well as self-employed and employers. 15

Investments in transport infrastructure can result in new opportunities for employment and entrepreneurship in the provision of transport services. No studies or data were found to assess the extent to which women were participating in such new opportunities, but the findings of a study in Dhaka suggest that this issue deserves further attention. The Dhaka study looked at the employment outcomes of an investment in upgrading rural roads. It found a significant increase in the number of motorized vehicles (trucks, buses, auto rickshaws, tempo) and nonmotorized vehicles (rickshaws and rickshaw vans) compared to the pre-project situation, providing new opportunities to those who owned, operated, or maintained these vehicles or provided related services—but this included very few women. 16

While many women work in construction, most are in unskilled manual tasks with few chances for training and employment in skilled work.

Women are an important part of the labor force in the sector (by some estimates, as much as half), 17 but are employed almost exclusively as casual manual laborers—headload workers carrying bricks, cement, sand, and water; or workers who dig, mix mortar, or break stones. These women have few opportunities to gain skills in the better paid trades such as carpentry, masonry, plumbing, or electrical work, and those trained struggle to be accepted as workers in these areas. 18

ADB. 2012. Road Safety Action Plan. p.27. www.adb.org/sites/default/files/road-safety-action-plan.pdf

Mitra-Sarkar, S. and P. Partheeban. Abandon All Hope, Ye Who Enter Here: Understanding the Problem of "Eve Teasing" in Chennai, India. In Women's Issues in Transportation (footnote 6).

Zohir, S.C.. 2003. Case Study: Bangladesh: Dhaka Urban Transport Project. In World Bank 2006 Gender and Transport Resource Guide, Module 6, Part 3: www4.worldbank.org/afr/ssatp/ Resources/HTML/Gender-RG/index.html

Turner, J. and M. Spitzner. 2007. Reality Check: How effective have efforts been to integrate gender into donor agency transport intervention? In ESCAP. Gender and Transport. Transport and Communications Bulletin for Asia and the Pacific. No. 76. www.unescap.org/publications/detail.asp?id=1247

See section "Transport planning" in World Bank (footnote 12), Module 1, Part 2.

National Sample Survey Organization. NSS Report No. 531: Employment and Unemployment Situation in India: July 2007–June 2008. Statement 15. mospi.nic.in/mospi_new/admin/Login.aspx

Khatun, H. 2003. Integrating gender into World Bank financed transport programs: Case Study, Bangladesh, Third Rural Infrastructure Development Project. p. 16. In World Bank (footnote 12), Module 3, Part 3.

Figure provided in the 11th Five Year Plan, Vol. II, para. 6.23; and also in Baruah, P. 2010. Women and globalization: challenges and opportunities facing construction workers in contemporary India. Development in Practice. 20 (1): 31-44. http://csulb.academia.edu/BipashaBaruah/Papers/568911/Wome n_and_globalisation_challenges_and_opportunities_facing _construction_workers_in_contemporary_India

Baruah (footnote 17); see also Baruah P. 2010. Women and Property in Urban India. Vancouver: UBC Press.

Several studies by the Self-Employed Women's Association (SEWA) provide insights into gender differences in skills, opportunities, and rewards. 19 An initial survey in 1998 found that most women were in unskilled work while most men were doing semiskilled or skilled work. About 10% of women were in semiskilled work (mostly assisting male masons in plastering or concrete mixing) but were generally still paid the female manual wage rate, which was about half the male manual rate. Following another survey in 2003 that found an increasing preference for skilled workers that was mirrored by an increasing wage gap in favor of skilled workers, SEWA established a school to provide women with specialized training in construction. The experience of the school shows that nonliterate and semiliterate women can benefit from skills training to trade standards and certification recognized by the Construction Industry Certification Council. 20

A follow-up study in 2007 found that there had been many positive results (increased workdays, more skilled work, higher incomes, and more confidence in dealing with sexual harassment at construction sites). However, preconceptions and biases against women skilled workers and discriminatory practices in the industry continue to be constraints, and show the need for advocacy and other measures to encourage construction firms and contractors in the public and private sectors to recognize the contribution that skilled women can make.

Hazards of sexually transmitted infections, including HIV, and of trafficking may be exacerbated by easier interregional movement.

Transport improvements facilitate movement between areas and therefore the dispersion of viruses and infections, including sexually transmitted infections, particularly in the context of the high-risk behavior often associated with truck drivers and the migrant workers employed in road construction.²¹ Increased transport routes and flows can also increase the risk of trafficking of vulnerable women and children to other regions and across borders. Measures to increase awareness of health hazards and the risk of trafficking are therefore an important component of transport initiatives and need to target members of affected communities,

Information about the SEWA studies is from Baruah (footnote 17).

community leaders, and officials concerned with health, law and order, and transport provision.

Policy and Program Environment for Gender Equality Initiatives in the Sector

Both central and state governments have responsibilities for the transport sector in India. Ports, railways, and national highways are managed by the central government, while state highways, rural roads, and urban transport are state responsibilities. However, the central government provides support and leadership in many areas of state responsibility, including rural roads and urban transport, as well as on road safety, which is of concern to all sectors.

The approach paper for the 12th Five Year Plan emphasizes the role of rural roads as a catalyst for economic development. The Prime Minister's Rural Roads Program (PMSGY, Pradhan Mantri Gram Sadak Yojana) has not yet met the objective set over a decade ago of reaching all habitations with populations over 1,000, but Planning Commission studies have shown major benefits for villages reached by roads built under the program. The approach paper proposes the "universalisation of rural connectivity" as an aim for the 12th plan.²² The detailed discussion by the 12th Five Year Plan Working Group on Rural Roads emphasizes the importance of decentralized planning and the involvement of the Panchayati Raj Institutions (the three-tier structure of rural local government). The report also considers the maintenance of rural roads, and proposes labor-intensive approaches that draw on the lessons of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in creating productive assets while providing decent employment.²³ While the working group is not explicit about involving women in decentralized management or in employment related to road maintenance, their approach provides considerable scope to do so, particularly given the related policy signals outlined below.

With regard to urban transport, the central government provides leadership through the strategic directions set out in the National Urban Transport Policy, 2006.²⁴ This policy emphasizes the need to focus on the purposes

Baruah. Women and Property, footnote 19; see also the web page www.sewahousing.org under Activities.

GTZ. 2005. Why Transport Matters: Contributions of the Transport Sector Towards Achieving the Millennium Development Goals. pp. 7-8. www.gtz.de/de/dokumente/en-why-tranportmatters2005.pdf

Planning Commission (footnote 1). pp. 54–55.

Ministry of Rural Development. 2011. Report of Working Group on Rural Roads. Working Group for 12th Five Year Plan. Chapter 4, sections 4.7 and 4.9. planningcommission.nic.in

²⁴ Footnote 2.

of urban transport before turning to the means. It highlights the time, cost, and safety considerations that inhibit the flow of people and goods in urban areas: the traffic congestion that increases the time required; the greater risks to cycling and walking with the press of motorized traffic on the same routes; the increased costs of transport, particularly to the poor, as nonmotorized transport becomes too risky; and the longer distances to be covered due to urban sprawl. The importance of such issues was recently reiterated by the Minister of Urban Development in an address to the 2011 Urban Mobility Conference, where he said,

We are fortunate to have the National Urban Transport Policy that sets the term of this new development and renewal. The NUTP upholds clearly [that we should] focus on the mobility needs of the people and not vehicles. It focuses on equity, integrated land-use and transport planning, alternatives to cars that include public transport, cycling and walking....²⁵

While there are few references to women-specific transport needs in this policy or related discussions, the focus on enabling people to reach jobs, schools, and health facilities and to move their goods in safe and affordable ways shifts the discussion to transport uses and users, which is the critical first step in taking a gender perspective on urban transport.

Concern about the heavy toll of road accidents on urban and rural roads throughout the country is reflected in the National Road Safety Policy, 2010.²⁶ The policy provides a foundation for central government action in collaboration with other levels of government. The emphasis it places on safer road infrastructure and on needs related to nonmotorized transport are important steps to addressing the needs of women and other pedestrians outlined above.

In addition to these sectoral strategies, there are a number of other policy themes and signals related to women's participation and empowerment that are relevant to ADB support to the rural transport sector that are discussed below (also see highlights in Box 2).

Box 2: Highlights of Government Commitments on Gender **Equality Relevant to ADB Initiatives in the Sector**

- Increasing women's employment opportunities: National Employment Policy, draft 2008 (equality in labor market, increased access to broader range of opportunities); Mahatma Gandhi National Rural Employment Guarantee Scheme (33% participation by women and equal pay for
- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (women's participation in vocational training); National Urban Housing and Habitat Policy, 2007 (upgrading skills of women construction workers and contractors, facilities for them).
- **Strengthening women's ownership rights:** *Hindu Succession* (Amendment) Act, 2005 (women's inheritance rights); 11th Five Year Plan 2007–2012 (transfers to women through land reform, antipoverty and resettlement programs, and government housing in women's or joint names); Model Property Rights to Slum Dwellers Act, 2011 (legal entitlements to women alone or jointly; while this central government initiative has no legal effect, it provides guidance to state governments for their legislation); also various measures at state level.
- Increasing women's participation in local decision making: 73rd Constitutional Amendment, 1992 (one-third reservation for women in elected rural bodies); 74th Constitutional Amendment (one-third reservation for women in elected urban local bodies); implemented and in some cases augmented through state legislation.
- Increasing women's participation in all government programs: 11th Five Year Plan, 2007-2012 (at least 33% participation); reiterated in some state-level five-year plans for the same period (e.g., in Bihar).

Only limited state-specific references included. Some further statelevel information provided in ADB's Gender Equality Reference Sheets, prepared in 2011 for most ADB partner states in India. National policies listed are available on the internet; search by title.

High priority has been given to women's participation in local decision making.

Since the 73rd and 74th constitutional amendments were adopted in 1992, there has been a one-third reservation for women in both rural and urban local governments. State governments are responsible for the implementation of these provisions, and several have raised the reservation to 50% for either rural or urban local governments or both. (States adopting the 50% reservation include, for rural governments, Bihar, Madhya Pradesh, West Bengal, and Karnataka, Uttarakhand; for urban local governments, Andhra Pradesh, Kerala, and Tripura; and for both, Maharashtra.)

The target of one-third representation of women is also used in a number of other forums for community

Footnote 2.

Ministry of Road Transport and Highways. 2010. National Road Safety Policy. morth.nic.in/showfile.asp?lid=388

or sector management, thus providing a strong signal from both central and state governments about the importance of women's representation in any community decision-making forums that ADB establishes in relation to rural transport projects.

National policies aim to strengthen women's access to skill training for employment.

The National Policy on Skill Development, 2009 aims to increase women's participation in vocational training to at least 30% by 2012 through proactive measures such as scholarships, transport, and loans as well as steps to counter discrimination. The policy promotes vocational training in fields employing women and women's participation in nontraditional areas.²⁷ ADB can play a role in supporting implementation by ensuring that project-financed skill development activities reflect the policy, including the aim of promoting women's access to skill training in a range of fields.

National policies show a commitment to increasing women's employment opportunities and wages.

This commitment is evident in the Mahatma Gandhi National Rural Employment Guarantee Scheme, the national flagship program in support of rural livelihoods, which aims for 33% participation by women and equal pay for women and men. The program has been found to provide major benefits to women by enabling them to access wage employment at the minimum wage where job opportunities were otherwise very limited for women and wage practices biased against them. 28 The aim of broadening opportunities for women and providing equal wages is also relevant to ADB-supported construction and maintenance employment.

▶ A cross-sectoral commitment calls for at least 33% participation of women in all government programs.

The 11th Five Year Plan included the requirement that women constitute at least 33% of the direct and indirect beneficiaries of every central government scheme (and this is reiterated in some state-level five-year plans also). ADB and other development partners collaborating with government in the transport sector could contribute to reinforcing this commitment by aiming for at least that

Resettlement schemes have been identified as having a role in securing women's property rights.

The 11th Five Year Plan emphasized the importance of property and land rights to women's economic empowerment and security:

The Eleventh Plan will carry out a range of initiatives to enhance women's land access. It will ensure direct transfers to them through land reforms, antipoverty programmes, and resettlement schemes. It will include individual or group titles to women in all government land transfers.... In case of displacement, a gender sensitive rehabilitation policy that includes equitable allocation of land to women will be devised. The Eleventh Plan will also ensure the rights of poor, landless, and tribal women over forest land, commons, and other resources.²⁹

The central government is promoting more systematic attention to gender equality and women's interests in policy development in all sectors at national, state, and local levels.

The 11th Five Year Plan promoted wider adoption of "gender budgeting" as a means to achieve more systematic attention to gender equality and women's interests in every sector and level of government. This effort has been led by the national Ministry of Women and Child Development (MWCD), which reports that it has focused on ministries that have large budgetary allocations but see their work as "gender neutral" because they do not have a direct focus on beneficiaries. One such ministry that has collaborated with MWCD is the Ministry of Road Transport and Highways; see Box 3 for a summary of the outcome of the initial discussions about ways to mainstream gender issues into this ministry's schemes and programs.

The midterm appraisal of the 11th Five Year Plan noted the progress in establishing gender budgeting cells in central government ministries and in introducing the concepts and analytic tools to state and local bodies. However, it also noted that implementation was a continuous process "that constantly needs

Khera, R. and N. Nandini. 2009. Women workers and perceptions of the National Rural Employment Guarantee Act, India. Economic and Political Weekly, 44(43):49-57. http://eprints.soas.ac.uk/7832/; and MGNREGA website: nrega.nic.in

level of participation in the employment generated by construction of new infrastructure, employment related to infrastructure maintenance, training related to the operation and maintenance of transport systems, etc.

National Policy on Skill Development, 2009: www.skilldevelopment.gov.in/node/163

Planning Commission. 2007. Eleventh Five Year Plan. Vol. II, para. 6.32. planningcommission.nic.in/plans/planrel/ fiveyr/welcome.html

Box 3: Summary of Outcomes of Initial Discussion on Mainstreaming Gender Issues in the Ministry of Road **Transport and Highways**

- Gender Audit of ADB and World Bank funded projects to be initiated as part of social audit.
- Specific gender concerns to be addressed in the Detailed Project Report (DPR) or prepared by the Ministry for new projects. Accordingly modified guidelines can be prepared and issued to the Engineers for undertaking the exercise.
- Taking a look at the existing manuals for preparing roads and bridges from the gender lens; for review and redesigning, if necessary.
- Issue standing instruction to the Contractors for the new/existing projects for ensuring that equal pay for equal work as well as work site facilities is extended to the hired
- The dimensions of Road Safety to have a broader outlook including gender perspective, from the existing provision of accident and rescue of accident victims only.

Source: Ministry of Women and Child Development. Annual Report 2010–2011. p. 73. http://wcd.nic.in/ (under Publications/Reports).

reinforcement." 30 This is also a theme of the preparatory documents for the 12th Five Year Plan, which call for continued efforts to build awareness, data collection capacities, and technical skills required for the genderbased analysis of program and policy impacts that is the central element of gender budgeting. 31

ADB Experience in Supporting Gender Equality in Transport Investments

ADB has undertaken many major transport projects over the 25-year partnership with India. In the period 1986-2010, 33 projects were approved, most for amounts well in excess of \$200 million. The investments have been in ports, telecommunications, and railways as well as in the network of national, state, and rural roads. Ongoing projects are mainly focused on state roads, with some additional investment in national highways and the railway sector. Pipeline projects pursue many of the same themes but also include some new areas of highspeed rail and urban transport.

The India country partnership strategy (CPS) for 2009-2012 noted the steps that ADB had already taken in its

Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan. para. 11.25. www.planningcommission.gov.in/plans/

assistance to India to integrate preventive and mitigation measures against HIV/AIDS and human trafficking, particularly in investments in national and state highways. It proposed continued collaboration with governments and the strengthening of links between projects and national strategies in these areas. The CPS 2009–2012 also aimed to provide gender-equal wages and other facilities to meet health and sanitation needs in civil works contracts where there were opportunities women's employment in construction rehabilitation.32

Most of the projects now in implementation have been categorized as including at least "some gender elements" (Box 4). A few more recent projects and several in the pipeline aim to meet the standard for "effective gender mainstreaming," **ADB** categorization that requires specific measures in project design to ensure women's participation and access to benefits (also outlined in Box 4).

A review of project documents found that the gender sections often suggest that women will benefit from roads projects because of easier access to schools, health facilities, and markets. However, this is generally an assumed benefit and the logical links between roads and better access are not set out—that is, it is not clear whether better access would be because roads make it possible for women to reach those destinations more easily or faster on foot; or because affordable bus services would be extended to villages reached by the roads program; or because rickshaw or other transport services are expected to develop and meet women's mobility needs and budget; etc.

The type of transport initiatives that have predominated in ADB's India program have provided less scope for gender mainstreaming than in some other countries in the region. In particular, ADB rural roads projects in India result in broad, largely surfaced roads for which mechanized construction methods have been more appropriate than the labor-based approaches that have offered many employment opportunities for women in other countries. Similarly, opportunities to engage in community-based management and maintenance have also been limited to date by the nature of partnerships in this sector in India. Although women do participate in unskilled pre-construction work, sweeping, and in some work related to maintenance, drain cleaning, planting saplings, this tends to be very short term.

mta/11th_mta/MTA.html. Planning Commission. 2011. Report of the Working Group on Women's Agency and Empowerment, 12th Five Year Plan. pp. 75–76. planningcommission.nic.in

³² ADB. 2009. *India Country Partnership Strategy (2009–2012):* Abridged version. Para. 115. www.adb.org/documents/indiacountry-partnership-strategy-2009-2012-abridged-version

Box 4: Transport Projects by ADB Gender Category*					
Year approved GEN EGM SGE NGE Total					
Approved 2000–2008	-	-	7	4	11
Approved 2009–2012	-	2	9	-	11
Pipeline 2013–2015**	-	4	8	-	12

- = none.
- * Ongoing projects and project pipeline.
- ** These are proposed projects and are subject to change.

Gender Equity Theme (GEN)

- Directly supports gender equality and women's empowerment
- · All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- · See specific requirements for EGM below

Some Gender Elements (SGE)

Does not meet EGM criteria BUT

- provides some direct and substantial benefits to women because of the nature of the project OR
- includes some gender-related design features in project design or resettlement.

No Gender Elements (NGE)

· Gender issues not integrated in design

Effective Gender Mainstreaming (EGM)

Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. The following project requirements must be met to qualify as EGM:

- The social analysis conducted during project preparation included careful consideration of gender issues highlighting both constraints and opportunities.
- **Specific gender design features** are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs and/or components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are in the project design and monitoring framework. A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the project administration manual.
- The RRP main text discusses how the project will contribute to improving women's access to or benefits from the project, at a minimum in the Due Diligence section.
- The policy matrix contains a covenant or a condition to support implementation of the gender action plan.

See Guidelines for Gender Mainstreaming Categories of ADB Projects, www.adb.org/Gender/gender-categories.asp

However, specific initiatives to benefit women have been taken in a number of projects. For example, several national highway initiatives have included campaigns to counteract the spread of HIV/AIDS and trafficking of women and children, which are problems that can accompany improvements to road networks. Highway and rural transport projects have also aimed to implement equal pay principles where women are employed. A major new project for rural roads envisages further engagement in community-based maintenance with targets for women's participation, as well as professional and management training of project partners, again with targets for women's participation. Projects that involve resettlement, which is often required in conjunction with road and highway construction, generally undertake consultations with women (often focused on women-headed households).

Strengthening ADB Approaches: Challenges and Opportunities

Strengthening positive impacts on gender equality and women's empowerment of projects in the pipeline will require attention to gender equality issues and strategies throughout the planning process, as well as clear identification of the tangible benefits for women the development results that are aimed for. As highlighted in Box 5, the ADB country partnership strategy (CPS) for 2013–2017 identifies several specific areas to be pursued in the transport sector as well as several strategies that apply to all sectors.

This section aims to support efforts to implement the CPS and, more generally, strengthen approaches in the transport sector. It begins with a discussion of points related to identifying or following up opportunities to support gender equality in the sector. The subsequent subsection draws on a review of project documents to point out several ways in which to improve the quality of project design and outcomes in support of gender equality and women's empowerment. The chapter ends with a "tip sheet" that aims to support gender mainstreaming in ADB's investments in the transport sector by suggesting possible questions and genderrelated design features to consider in the project formulation process.

Box 5: ADB Gender Strategy for Ir	ndia for 2013–2017: Transport Sector and General Commitments
Transport Sector Commitments	 Under the country partnership strategy for 2013–2017, ADB will give further attention to the following issues and objectives to enhance impacts on women's empowerment and gender equality: continued attention to mitigation measures related to sexually transmitted infections and human trafficking in major port, rail, and highway construction projects; and increase attention to urban women's transport concerns, particularly safety while waiting for and using public transport services and affordability of mass transit for access to employment and services.
Strategies for All ADB Sectors	 ADB will strengthen its gender equality outcomes in collaboration with government partners at both central and state levels through (i) improving the quality of gender analyses done during the project preparatory technical assistance, in particular by aligning the analyses more closely with project objectives; (ii) reflecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents; (iii) monitoring achievement of key gender equality outcomes in design and monitoring frameworks; (iv) selectively using technical assistance resources to build knowledge and capacity to deliver gender-responsive outcomes; and (v) engaging in gender-responsive policy, legal reform, and legal empowerment in ADB priority sectors.

Issues for Further Attention in Analyses and Strategies (Sectoral and Project)

▶ Foundation for project planning provided by sector analyses and technical assistance projects

Better use could be made of the opportunities provided by technical assistance projects and sector studies to deepen understanding of gender disparities and women's interests in relation to the sector and about possible approaches or effective strategies.

For example, ADB technical assistance grants related to urban transport have resulted in guidelines and toolkits for developing urban transport in medium-sized cities. To date the resources developed have made no mention of gender concerns relevant to the issues addressed, including the development of mobility plans, bus service improvement, nonmotorized transport measures, etc. This seems a missed opportunity to both inform ADB project investments and to provide government partners with tools to enhance their capacity to develop transport systems that respond to gender-specific needs.

Institutional capacity of partner governments to identify and address gender equality issues and women's needs

Some of ADB's transport sector partners have ongoing responsibilities to ensure that road networks and urban transport arrangements serve the economy and the public, both women and men. ADB institutional and sectoral analyses for transport projects rarely consider the issues related to the knowledge and capacities of transport sector partners with respect to reaching and serving women; for example, whether they have done any research or consultation related to this, or whether they have access to the sex-disaggregated data on transport use and related needs and issues. Capacitybuilding assessments done for project planning provide an opportunity to identify these types of capacity gaps along with others, and to assess whether the initiative can assist the partner to address such gaps.

Guidance from the ADB Sustainable Transport *Initiative*

The Sustainable Transport Initiative recently adopted by ADB aims to ensure a good alignment between transport operations and the agenda set by Strategy 2020. The initiative defines sustainable transport as transport that "accessible, safe, environment-friendly affordable." As outlined in Box 6, the initiative highlights a number of social dimensions of sustainable transport to be addressed in transport projects, all of which are relevant to achieving transport systems more relevant and accessible to women in India.

Potential livelihood opportunities related to transport services and to road maintenance

Strengthened road networks are expected to make major contributions to inclusive growth, but this Since ADB's overarching goal is poverty reduction, its work on transport should contribute to providing effective solutions to the transport needs of the poor. More effective approaches are also needed for addressing other social dimensions of transport, including gender mainstreaming, participation, and social risks other than those covered by ADB's safeguard policies. These include:

- more participatory approaches to project planning and project strategies to protect against associated HIV/AIDS and human trafficking risks,
- incorporating complementary development programs and community-based maintenance,
- · improving transport services,
- providing improved facilities such as public toilets and pedestrian and bicycle lanes to make transport accessible and safe for all users and social groups including women and the elderly,
- · applying core labor standards, and
- using tariff and subsidy options to increase access for vulnerable groups.

Source: ADB. 2010. Sustainable Transport Initiative: Operational Plan. www.adb.org/documents/sustainable-transport-initiative-operational-plan

outcome depends on the establishment or expansion of transport services that enable greater mobility of people and goods. The transport services themselves—whether by bicycle, rickshaw, auto-rickshaw, car, bus, truck, or other means—provide employment and entrepreneurial opportunities for owners and operators. Assisting women to gain access to such new opportunities in conjunction with road investment projects would coincide with the ADB poverty reduction rationale for investing in the transport sector, as well as with the government emphasis on inclusive growth and strengthening livelihood opportunities for women.

Road maintenance could also be a source of livelihood opportunities. The Sustainable Transport Initiative encourages greater attention to maintenance and also suggests that women's involvement in community-based maintenance is a means of supporting both road maintenance and gender equity objectives. The potential for community-based approaches is likely greatest in relation to rural roads and in collaboration with rural local governments. While current ADB projects use the more mechanized approaches required for higher-level rural roads, any initiatives at the community level could

draw on ADB experience in other countries in the region with maximizing women's involvement. 33

▶ Gender equality issues in resettlement

The reestablishment of livelihoods is a key challenge for households resettled to make way for new roads and other transport. As poor households depend on the contributions of both women and men, women as well as men need support in reestablishing enterprises or finding employment—and this includes single women and married women in various household formations as well as women-headed households.

An important measure that supports women's economic opportunities and security is to ensure that titles to land and property in resettlement sites are in the name of women or awarded jointly to husbands and wives. A greater emphasis on land titles for women in resettlement plans would reinforce the commitment to this approach made by the government in the 11th Five Year Plan.

Project Design and Management Challenges

> Strengthen gender analysis in project preparation.

Many project approval documents rely on rather generic information about women, such as information about women's health or literacy, without relating this information to the transport aims of the project (increased connectivity and mobility) or to related issues or opportunities (e.g., road safety, employment opportunities in road construction and maintenance, possible entrepreneurial opportunities related to transport services). This seems to be the case even where efforts have been made to have focus groups or other consultations with women.

As a result, projects are launched with limited guidance on how to deal in a meaningful way with the gender equality issues related to the project despite the considerable resources that are allocated for project preparatory technical assistance (PPTA). Improving performance at the PPTA stage will require that terms of reference for the team members provide a clear outline of the gender issues to be addressed, that consultants engaged to undertake the social and gender analysis are sufficiently senior and experienced, and that these consultants are provided with enough professional time to undertake the analysis and work with other team

See, for example, the discussion of the Third Rural Infrastructure Project in ADB. 2006. Gender Equality Results in ADB Projects: Bangladesh Country Report. www.adb.org/sites/default/ files/pub/2005/ger-bangladesh.pdf

members to ensure that issues and strategies are integrated throughout the project design.

Greater involvement of the government partner (the executing agency) in the social and gender analyses and strategy development at the PPTA stage would also contribute to ensuring that gender analyses are linked to their concerns and capacities, which would also contribute to greater momentum for implementation.

▶ Ensure that gender analyses consider key transport issues for women and provide a baseline against which changes in mobility can be assessed.

Transport investments that are intended to increase the ability of rural or urban inhabitants to reach jobs, markets, schools, clinics, and other key destinations need to be planned in light of reliable information about transport needs and gaps. Data collected should be sex-disaggregated so that the specific needs of women and men can be better identified, but as pointed out in Box 7, investigations need to go beyond sexdisaggregation of community surveys to gain a better understanding of needs. The collection of such data at the outset is also necessary to provide a baseline against which to assess impacts of the project.

▶ Identify opportunities to support equitable employment and pay for women in construction.

ADB transport initiatives generate a range of employment opportunities in project management, engineering and planning, construction, maintenance, etc. As transport projects represent major public investments, they provide an important opportunity for ADB to assist its partners in providing leadership in reinforcing women's rights and the legitimacy of access to employment and equal pay for women.

Approaches to date in this area could be strengthened by setting targets for women's employment that are appropriate to the local supply of women for particular types of jobs; ensuring awareness among partners and contractors of national core labor standards for equal employment and equal pay; and promoting the provision of appropriate facilities for women (such as separate toilets and rest facilities). Further, because a key outcome for the sector identified by ADB is the development of the local construction industry, ³⁴ it is important to ensure that the local construction industry adopts practices that reflect core labor standards and India's commitment to equal opportunities and pay for women.

Box 7: Better Transport Surveys: Giving Women Voice

In a paper prepared for the 2002 Earth Summit, Deike Peters called for better transport surveys that would give voice to women's views and needs (as well as those of men). Peters points out that disaggregating survey responses by sex is a necessary first step to better identify women's needs, but also emphasizes that disaggregation is not enough—it is "only a prerequisite for subsequent gender analysis, not a substitute." Peters identifies several approaches to gaining a better understanding of transport needs, which are briefly summarized here:

- Gender-sensitive interviewing. Interviews in which one household member answers for the needs of all, often the head of household, likely emphasize the respondent's own experience and obscure the needs of other household members, with the result that the needs of women and adolescent girls may not be identified.
- Documenting women's latent demand. User surveys at bus stops, markets, etc. provide useful information on current users but fail to capture the needs of those (mostly women) who do not travel because transport is unavailable or unsuitable. Household surveys used to assess needs must also ask about why someone did not travel, the obstacles to travel, and improvements that would facilitate travel.
- Documenting women's willingness to pay for better transport. Differences between male and female travel patterns are often attributed to women's inability to pay. However, there are studies that suggest that while women pay less for transport than men, they are willing to pay more where services are appropriate to needs.
- Documenting mode shares at district levels. In urban areas in particular, there may be considerable difference by residential location in patterns of use by women and men of different transport modes (walking, rickshaw, public transport), so sex-disaggregated data collection should be done at sub-metropolitan levels to gain an accurate understanding of availability of services for women.
- Documenting the daily reality of women transport users. This would include perceptions of the attractiveness, efficiency, safety, relative cost, social status, etc. of particular transport modes as experienced by women in order to better understand factors that shape their travel experience, including the impact of sexual harassment and practices such as overcharging by drivers.
- <u>Gender-sensitive stakeholder consultation.</u> Open-ended focus groups are a means of gaining a better understanding of the subtleties of cultural and/or social access and mobility constraints that are not easily captured in standardized survey responses.

Source: Adapted from Peters, D. 2001. Gender and Transport in Less Developed Countries: A Background Paper in Preparation for CSD-9. Prepared for the expert workshop, Gender Perspectives for Earth Summit 2002: Energy, Transport, Information for Decision-Making. www.earthsummit2002.org/workshop/Gender%20&%20Transport %20S%20DP.pdf

³⁴ India–ADB Development Partnership (footnote 3). p. 117.

Monitor performance targets but also outcomes.

The inclusion of gender-related performance targets and indicators in the project design and monitoring framework is key to ensuring systematic monitoring during implementation. Also important to monitor are indicators of inclusive development and gender equality outcomes. These could include, for example, outcomes related to mobility and accessibility and impacts on livelihoods; income effects of employment created directly and indirectly by road construction; the involvement of small contractors in delivering new or expanded transport-related services; and impact on local enterprises and employment (in all cases comparing outcomes for women and men compared with the baseline situation). Other important gender equality indicators could include time saved by women in collecting water and fuel wood and increased access to health centers, schools, and workplaces.

Tip Sheet on Questions and Design Features for **Gender Mainstreaming**

The tip sheet in Box 8 is an aid to gender mainstreaming in projects in the sector. It suggests possible gender equality outcomes related to more general ADB project outcomes, provides examples of questions to consider in preparatory analyses to assist in formulating project strategies, and suggests possible gender-related design features that could be further developed if applicable in the project context. Other assistance may be found in the resources listed in Box 9.

Box 8: Tip Sheet on Questions and Design	Features for Gender Mainstreaming in ADB	Projects: Transport
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant or adaptable
Increased connectivity of rural communities and increased mobility of persons and goods Increased access to markets and employment by women Increased access and/or decreased time and effort for women's work in water and fuel collection	 What do local people identify as their transport needs and problems? Are they being asked about needs related to both economic and household and/or personal activities and how they are met? How do the perspectives of women and men compare? Will the roads themselves address these concerns? What else is needed to be able to move on these roads to the destinations or for the purposes identified? 	 Ensure that consultations identify issues and priorities for women and men separately, to better identify and respond to local needs. Plan rural roads for safe use by pedestrians as well as vehicles (pedestrians walking alongside, pedestrians seeking to cross busy stretches, etc.) Consider options for stimulating provision of transport services by women and men of the local communities reached.
Increased used of rural community-based approaches for ongoing repair and maintenance, in collaboration with local bodies o Increased employment of women in repair and maintenance of rural and rural-state connectivity roads (at equal pay rates)	Considering the local labor force in unskilled and semiskilled work, what proportion is accounted for by women? What types of work do they do? How does this differ from men? How do pay levels for women and men compare?	 Fund exposure visits for partner agencies and community leaders to communities that have employed women in community-based maintenance. Set targets for women's employment that reflect women's current level of participation in this type of labor in the project area, plus an achievable increase to provide a measure of affirmative action. Ensure a commitment from community and private sector managers to equal wages and working conditions and to adequate facilities for health and safe work (e.g., separate rest areas and toilets).
New or upgraded <i>urban transport</i> plans, infrastructure, and services o Increased ability for women to reach jobs and public services o Increased safety for women on urban streets and urban transport services o Increased affordability of transport for women	 How do women get to work, to market, and to health services? Are current arrangements adequate, affordable, and safe to use? What are the problems, and what are the implications on women's time use and economic activity? What are the personal security concerns of women in the project area related to their journeys to work? Are they subject to harassment as pedestrians or transit users? What would be required to reduce this hazard? 	 Explore options for a transport approach that results in services that respond to the particular needs of women at different income levels (i.e., through the mix of various types of services, including public buses, taxis, rickshaws, etc.). Coordinate transport planning with urban planning to address mobility problems related to different modes (e.g., for pedestrians: poor sidewalks, infrequent safe crossing points). Make allocations for safety features such as safe waiting areas, lighting in bus bays, and separate seating or buses for women. Explore options for public transport pricing that do not penalize short and/or multistop journeys that women tend to take.
Increased capacity at state and municipal levels for <i>urban transport</i> planning and analysis Output Better awareness and responsiveness to the mobility needs of women in national and state transport policies Output Agencies and staff more capable of assessing and responding to gender-differentiated transport needs	 Is data on transport patterns and needs sex-disaggregated (including journeys taken, by whom, how, why)? Do managers and planners have the skill to formulate and analyze questions about the gender aspects of transport requirements and the gender implications of transport interventions? Are urban transport planners aware that women might have different needs and 	 Assist partner to develop data systems that generate sex-disaggregated data needed for urban transport planning (i.e., data on needs for and uses of different transport modes, including pedestrian modes). Provide training or exposure visits to transport planners on gender and transport. Assist partners to develop links with gender equality advocates and researchers

Box 8: Tip Sheet on Questions and Design	n Features for Gender Mainstreaming in ADB	Projects: Transport
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant or adaptable
	views on transport priorities, rates, and services?	concerned with urban women's transport and mobility requirements. • Assist partners to develop consultation policies and practices that ensure outreach to women and better information on women's needs and priorities.
New opportunities for employment and entrepreneurship in providing transport services (rural or urban) o Increased participation of women as transport operators and owners and transport professionals in rural and urban areas	What opportunities could arise to provide transport services on new roads constructed (e.g., offering services in private rickshaws, vans, etc.)? What services would those service providers need (e.g., parts, maintenance)? Are women participating in such enterprises? What opportunities or constraints might women face in becoming owners or operators of enterprises in these areas? Are there central or state-level programs encouraging women's entrepreneurship that could be applicable to transport services?	 Set targets for women in any training provided for skilled work or technical services in providing or managing transport services. Provide information and support to women's enterprises that offer or could offer transport services on roads constructed, or provide products or services to transport providers. Facilitate linkages with government programs supporting women's entrepreneurship.
Improved employment policies and practices of public sector authorities responsible for transport o More equitable employment opportunities for women	What is the representation of women on staff of ADB project partners (road or transport ministries, municipal transit agencies, etc)? To what extent have they entered technical, professional, and management jobs? What barriers to entry and promotion can be identified? Are there opportunities to support greater participation by women at professional, technical, and management levels?	 Provide technical assistance to assist partner agencies to develop an equal opportunities strategy (for recruitment, promotion, training, working conditions). Build links between transport sector partners and vocational and professional training institutes in support of increased participation and follow-up employment for women.
Successful resettlement of those displaced by new infrastructure Restoration of women's livelihoods and income Maintenance or rebuilding of social networks Strengthened property rights of women	 Are there barriers to women's participation in consultation processes (related to, for example, transport availability or costs, household duties, local social mores about women's mobility or public role)? How can these be overcome? What will be the impacts of displacement or resettlement on women's livelihoods? Are there adequate and affordable transport services to reach places of employment? Can previous livelihoods in self-employment or trade be reestablished and be viable? Is retraining required? What other services have been disrupted (e.g., child care, schooling)? Is the information gathered on property and assets sex-disaggregated? Are women and men informed about their rights in relation to land and/or compensation? 	 Develop a consultation strategy that addresses the barriers identified to ensure that women in various types of households are reached (female-headed households, widows, married women, single women). Develop and fund a plan to facilitate reestablishment of livelihoods (responding to findings of analysis on needs). Include information on government commitments to women's property ownership and women's land rights in consultation sessions. Follow up government commitments to strengthen women's land rights in resettlement processes (equitable land allocations to women and direct transfers to women). Provide training and support to assist partner ministries or agencies to better understand the gender dimensions of resettlement and rehabilitation.

Box 9: Useful Resources for Further Reading on Gender Equality in Transport India-specific research and · Anand, A. and G. Tiwari. 2006. A Gendered Perspective of the Shelter-Transport-Livelihood Link: The Case analyses on gender and of Poor Women in Delhi. Transport Review. 16 (1): 63-80. tripp.iitd.ernet.in/publications/paper/planning/ transport Anvita%20tansp%20rev%2005.pdf • Mitra-Sarkar, Sheila and P. Partheeban. 2010. Abandon All Hope, Ye Who Enter Here: Understanding the Problem of "Eve Teasing" in Chennai, India. In Women's Issues in Transportation. Summary of the 4th International Conference. September 2009. Vol. 2. Technical Papers. onlinepubs.trb.org/onlinepubs/conf/cp46v2.pdf Other research and • Kusakabe, Kyoko. 2009. Gender mainstreaming in Transport Sector in ADB. Slides summarizing a paper analyses on gender and presented at Technical Session on Gender Mainstreaming in Infrastructure Projects, 10th Session of the External Forum, on Gender and Development. Overview of issues with lessons learned and transport recommendations. www2.adb.org/Documents/Gender/Kusakabe-Gender-Transport.pdf Duchène, Chantal. 2011. Gender and Transport. International Transport Forum Discussion Paper 2011— 2011. www.internationaltransportforum.org/jtrc/DiscussionPapers/DP201111.pdf · Peters, Deike. 2001. Gender and Transport in Less Developed Countries: A Background Paper in Preparation for CSD-9. Background paper for the expert workshop, Gender Perspectives for Earth Summit 2002: Energy, Transport, Information for Decision-Making. www.earthsummit2002.org/workshop/ Gender%20&%20Transport%20S%20DP.pdf • Peters, Deike. 2011. Gender and Sustainable Urban Mobility. Prepared for the Global Report on Human Settlements 2013. Provides a gender perspective on various forms of urban transport (nonmotorized, public, informal, commercial goods) as well as on transport planning and policy approaches): http://www.toronto.ca/legdocs/mmis/2012/cc/bgrd/CC20 1 app3 24.pdf • Babinard, Julie. 2011. World Bank Gender Transport Surveys: An Overview. World Bank Transport Notes. TRN-43, September.go.worldbank.org/O5I149H4G0 Zohir, S.C. 2003. Integrating Gender in World Bank Financed Transport Programs, Case Study: Bangladesh: Dhaka Urban Transport Project. www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/module6/index-p3.html Guides and case studies on • World Bank. 2010. Making Transport Work for Women and Men: Tools for Task Teams. Practical manual. gender and transport go.worldbank.org/UW1GDCX260 • World Bank. 2006. Gender and Transport Resource Guide. Useful resource consisting of six interactive modules that aim to clarify issues, outline approaches, provide links to relevant studies and examples, etc. www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/index.html. Also see World Bank gender and transport website: go.worldbank.org/EQK4CKYNIO · World Bank. 2010. Mainstreaming Gender in Road Transport: Operational Guidance for World Bank Staff. Transport Papers, Transport Sector Board.go.worldbank.org/C2EOVAJRF0 ADB. 2007. Socially Inclusive and Gender-Responsive Transport Projects: A Case Study of the Timor-Leste Road Sector Improvement Project. www.adb.org/publications/socially-inclusive-and-gender-responsivetransport-projects-timor-leste-road-improvement-project ADB. 2011. Community-Based Routine Maintenance of Roads by Women's Groups: Guide for Communications Bureaus. www.adb.org/publications/community-based-routine-maintenance-roadswomens-groups-guide-communications-bureaus. See also the complementary manual targeted to the maintenance groups: www.adb.org/publications/community-based-routine-maintenance-roads-womensgroups-manual-maintenance-groups?ref=themes/gender/publications • ADB. 2006. Gender, Law, and Policy in ADB Operations: A ToolKit. www.adb.org/documents/gender-law-ADB practical resources for project planning and and-policy-adb-operations-tool-kit management in the sector ADB. 2003. Gender Checklist: Resettlement. www.adb.org/themes/gender/checklists-toolkits · Other ADB gender checklists and toolkits: these are currently available for a number of themes (including agriculture and natural resources, urban development, and housing) and others are planned (including energy and public sector management): www.adb.org/themes/gender/checklists-toolkits • ADB. 2009. Project Gender Action Plans: Lessons for Achieving Gender Equality and Poverty Reduction Results. www.adb.org/publications/project-gender-action-plans-lessons-achieving-gender-equality-andpoverty-reduction-res?ref=themes/gender/publications Further resources and guides on gender action plans: www.adb.org/themes/gender/project-action-plans

Gender Mainstreaming in ADB Sectors

Urban Development

While India's population remains predominantly rural, it also has a significant urban population of 377 million citizens—only one other country has a larger urban population. In 2011, 31% of India's inhabitants lived in urban areas, up from 28% in 2001; it is projected that the level of urbanization will be 40% by 2030 in India overall and more than 50% in five large states (Tamil Nadu, Gujarat, Maharashtra, Karnataka, and Punjab). 1 Most of today's urban population (70%) live in towns or urban agglomerations of 100,000 or more and this is the size category that has grown most quickly; over 40% of the urban population is in urbanized conglomerations of over 1 million. Much of this growth is through increasing density of populations in rural and peri-urban areas around large towns, and much of this area remains outside of the structures for urban governance and of urban infrastructures for water and sanitation.² Poverty levels in urban areas, though high, are lower than in rural areas and in some cases much lower.3 The contribution of urban areas to GDP has increased sharply from 29% in 1950-1951 to about 62%-63% when the

11th Five Year Plan for 2007–2012 was formulated, and is expected to reach 70%–75% by 2030. 4

The approach paper for the 12th Five Year Plan emphasizes the deficiencies in basic infrastructure in urban areas—the lack or poor state of water supply, sewage, sanitation, roads, and housing—as the major challenges to be addressed in order to realize the potential of the urban sector to provide a platform for inclusive growth. Areas identified for attention in formulating the 12th Five Year Plan include infrastructure investment, governance structures and capacities, strategic long-term urban planning, access of the poor to basic amenities, and the environmental sustainability of urban development. Living conditions and livelihoods of the urban poor are another area of concern, including affordable housing, training in skills for employment, and improved enabling environments for productive self-employment.⁵

The Asian Development Bank's (ADB's) initial urban sector projects in India were in Karnataka (1995) and Rajasthan (1998), and urban development has since then become an increasingly important part of ADB's India program. In addition to the ongoing collaboration with Karnataka and Rajasthan, projects were launched in West Bengal, Madhya Pradesh, Kerala, Uttarakhand, the

Census of India. 2011 provisional figures, Paper 2. Vol. II. censusindia.gov.in. Projections from McKinsey Global Institute. 2010. India's Urban Awakening: Building Global Cities, Sustaining Economic Growth. pp. 40, 44, 48.

www.mckinsey.com/Insights/MGI/Research/Urbanization/Urban_awakening_in_India

Planning Commission. 2011. Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan. para. 12.2. planningcommission.nic.in

See Appendix, Table A4 for details by state, rural/urban comparisons, and source information. Based on 2009–2010 data.

Planning Commission. 2010. Mid Term Appraisal of Eleventh Five Year Plan. Chapter on Urban Infrastructure, para. 18.2. www.planningcommission.gov.in/plans/mta/11th_mta/MTA.html

Approach paper for 12th plan (footnote 2). pp. 143–144.

For an overview of assistance in the sector, see ADB. 2011. India–ADB Development Partnership. pp. 4–5, 133–164. www.adb.org/publications/india-adb-development-partnership.

North Eastern Region, Assam, and Bihar. The focus has been infrastructure improvement, mainly related to water and sanitation services and waste management. A number of projects also aim to strengthen urban governance by including support for municipal reform, capacity development, and improved service delivery. Many initiatives also have community development components focusing on poor or slum areas.

Activities in all these areas—urban infrastructure, urban governance, and urban slum improvement—provide considerable scope for ADB to have a positive impact on women's opportunities and quality of life and thus contribute to the gender equality objectives of both ADB and the Government of India. This chapter aims to assist in achieving such positive impacts. It is organized into four sections:

- a brief review of gender equality issues relevant to the ADB areas of activity in the urban sector,
- an overview of government policy commitments pertinent to ADB initiatives in the sector,
- a brief summary of the main themes of ADB approaches to gender mainstreaming in the sector,
- points for attention in sectoral analyses and project preparation to strengthen gender equality outcomes (and a "tip sheet" to aid analysis and design).

Key Gender Equality Issues in the Sector

Issues Related to Urban Infrastructure and Planning

Women's interests and priorities for basic water and sanitation infrastructure and services differ from those of men.

Women's interests and priorities for basic water and sanitation infrastructure are influenced by the nature of their work and household responsibilities, by lower incomes and asset ownership, and by social inequalities that increase women's risk of physical insecurity.

In particular, deficiencies in water and sanitation services increase the time and effort for household water collection, hygiene, and waste disposal, all responsibilities generally carried by women. Better services improve quality of life for all but even more so for poor women, who are the most exposed to the drudgery of obtaining water, particularly where taps are few or far, queuing is required, water is only available at specific times of day, or the route to the water source is over difficult or insecure terrain.

Time invested by women in household maintenance (even with improved services) and other household demands, such as care of children and the sick, can influence the options for skill-development and incomeearning activities. For example, one study found that water at the doorstep increased productive working time among poor women by 2 hours daily and that provision of sanitation reduced incidence of illness by 12%. The study calculated that if water collection time could have been brought down to just 1 hour per day, women would have been able to generate additional incomes of Rs750-Rs3,500 per year (equivalent to \$17-\$80 in 1999-2000) depending on the enterprise.8 Other studies have identified costs to the economy of inadequate sanitation services on women's absence from work and girls' absence from school.9

Despite the impact of water and sanitation services on the lives of women, particularly in poor and slum communities, many factors constrain their access to services. These include administrative or legal barriers to connection (including barriers related to land ownership and tenure), weak skills in dealing with complex bureaucracy and paperwork, and connection fees that exceed low incomes and access to credit.¹⁰

Urban infrastructure and planning have important roles in making cities safe for women.

The pervasiveness of threats to women's physical security in urban public spaces in India is clear from news reports on instances of sexual harassment and assault, 11 and confirmed by national crime statistics and

Bapat, M. and I. Agarwal. 2003. Our Needs, Our Priorities: Women and Men from the Slums in Mumbai and Pune Talk About Their Needs for Water and Sanitation. Environment and Urbanization. 15:2, 71-86. www.sparcindia.org/docs/IAMBwater.pdf

James, A. et al. 2002. Transforming time into money using water: a participatory study of economic and gender in rural India. Natural Resources Forum. 26: 205-217.

http://josiah.berkeley.edu/2007Fall/ER275/Readings/DP1-3/james%20etal.2002.pdf

Water and Sanitation Program. 2011. Economic Impacts of Inadequate Sanitation in India. www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-esiindia.pdf

Water and Sanitation Program. 2009. Improving Water Supply and Sanitation Services for the Urban Poor in India. www.wsp.org/wsp/sites/wsp.org/files/publications/SA_GUIDANCE NOTES.pdf

See, e.g., Pidd, H. Why is India so bad for women? The Guardian.23 July 2012. www.guardian.co.uk/world/2012/jul/23/why-india-badfor-women

various studies of particular cities that consider the extent of risk and contributing factors. A recent study of Delhi found that women of all classes had to contend with harassment as part of their daily lives, but those at particular risk were students aged 15-19 and women working in the informal sector. Almost two-thirds of women reported having faced incidents of sexual harassment 2-5 times in the past year. Public spaces where levels of harassment were high were public transport, buses, and roadsides. Poor infrastructure including inadequate or no streetlights, unusable sidewalks, and lack of public toilets were also found to decrease safety. 12

A study of two cities in Kerala also found high levels of harassment and fear of violence, and the factors identified in influencing safety were similar: inadequate lighting, high walls on both sides of the road, the lack of public toilets (or public toilets for women placed beside those of men), and poor conditions of footpaths. 13 A study in Chennai found that 66% of women respondents had been sexually harassed while commuting (groping, stalking, accosting), with the worst experiences on buses and trains that had no separate section for women.¹⁴

These conditions reduce safety in using public spaces, but also access to public spaces. Data from Mumbai brings this into sharp relief: in a city with a reputation of being "women-friendly," women were found to account for at most 28% of the persons identified in a mapping of public urban spaces. 15

While the lack of safety is a multifaceted problem requiring a range of strategies, infrastructure choices and design can make a major difference. Three infrastructure components identified as crucial to women's safety by a recent study were improved street-

Box 1: Components of Urban Infrastructure That Are Crucial to the Safety of Women

A study in the recent UNESCO publication, *Urban Policies and the* Right to the City in India, emphasizes that urban infrastructure is crucial to women's safety, highlighting three components in

- Street lighting is inadequate in most parts of most Indian cities, and dark areas force women either to avoid going out altogether at night, or to take much longer alternative routes.
- Public toilets are equally inadequate, in their numbers as well as in their quality. The assumption that women's place is in the home is evident from the fact that the ratio between women's and men's toilets in Delhi is 1 to 10. Discrimination takes another form in Mumbai, where public toilets are more expensive for women than men. In poor areas (slums, resettlement colonies) where a substantial part of the population resides, there are often only collective toilets, which women do not use because they are too expensive or badly maintained. As a result, women go in the fields, where they are more exposed to sexual aggression. When there are no toilets in schools, as is still frequent, female students will miss school every month when they are menstruating.
- Public transport is another instance of crucially inadequate infrastructure: buses and trains are invariably crowded, which facilitates sexual harassment.

Source: Tawa Lama-Rewal, Stéphanie. 2011. Women's Right to the City: from Safety to Citizenship. In UNESCO. Urban Policies and the Right to the City in India. New Delhi. http://unesdoc.unesco.org/ images/0021/002146/214602e.pdf

lighting, more and better toilet facilities (better maintained and affordable), and less crowded public transport (Box 1). Well-located and well-lit bus shelters and stops, more frequent evening services, and separate sections for women are options identified by several observers.

The contributions that urban infrastructure can make to women's safety and thus to their rights as citizens to equitable access to public spaces has become the focus for several national and international organizations, who are developing resources to support decision making at both the project level and at the broader city planning level. 16

Property rights, including security of tenure, are particularly important for poor women.

Insecure tenure and inadequate housing are problems affecting both women and men living in slums. Ownership of housing brings a range of benefits—not only a secure place to live but also a means or place to earn a livelihood and collateral for credit for emergency

Jagori and UN Women. 2011. Safe Cities Free of Violence Against Women and Girls Initiative. Report of the Baseline Survey Delhi 2010. http://jagori.org/wp-content/uploads/2011/03/Baseline-Survey_layout_for-Print_12_03_2011.pdf

SAKHI Women's Resource Centre. Are Cities in Kerala Safe for Women? Research findings of the study conducted in Thiruvananthapuram and Kozhikode Cities, Kerala 2009–2011. www.unwomensouthasia.org/assets/safe_city_detailed_report.pdf

Mitra-Sarkar, S. and P. Partheeban. 2010. Abandon All Hope, Ye Who Enter Here: Understanding the Problem of "Eve Teasing" in Chennai, India. In Women's Issues in Transportation. Summary of the 4th International Conference, September 2009. Vol. 2. Technical Papers. onlinepubs.trb.org/onlinepubs/conf/cp46v2.pdf

Phadke, S. 2007. Dangerous Liaisons: Women and Men: Risk and Reputation in Mumbai. Economic and Political Weekly. April 28. http://tiss.academia.edu/ShilpaPhadke/Papers/215883/Dangerous _Liaisons_Women_and_Men-Risk_and_Reputation_In_Mumbai

See UN Women Safe Cities website: www.endvawnow.org/ en/modules/view/12-safe-cities.html also India-specific materials cited in Box 12 at the end of this chapter.

Box 2: Housing as a Productive Asset

My house is my asset, my savings, my workshop and my place to rest. Improved shelter increases my productivity and security, says Manjulkaben, a bidi roller.

Financial institutions have been reluctant to give women housing loans, for women are still perceived as mere housewives who are high credit risks. Housing loans are not seen as productive loans which will lead to an increase in income.

Housing, however, is a productive asset for millions of women who are poor and work out of their homes, and thus access to housing finance at long-term, affordable rates is a prime necessity. Moreover, among the poor, those with assets are less vulnerable to the vagaries of life than those without assets. Thus asset creation is important in the battle against poverty and housing a powerful weapon in the fight. Giving women credit for housing empowers them, giving greater control over their lives, homes and productivity. Now SEWA Bank gives loans of up to Rs3 lakhs [Rs300,000, approx \$5,600] for buying a house. Source: Self-Employed Women's Association brochure, Microfinancial

products at SEWA Bank. www.sewa.org

or investment uses (Box 2). For women, additional benefits of property ownership that have been documented in several studies include increased bargaining decision-making within and power households, lower levels of domestic violence, more control over the education of children, and less anxiety over physical security. 17 However, property ownership among women of all social classes remains relatively rare. Despite changes in the law to strengthen women's inheritance rights (see next section), giving practical effect to these rights will require both increased awareness and a shift in attitudes among families and officials. Land redistribution through government schemes is another way of obtaining ownership, but here too biases in favor of men have been documented.¹⁸

One recent study found that other documents in women's names also increased their sense of security of tenure, including bills or receipts for municipal and water taxes and electricity receipts issued in upgraded slums. While far short of property titles, these documents were valued by slum dwellers as they seemed to condone their occupancy. In addition, women

Baruah, B. 2010. Women and Property in Urban India. Vancouver: UBC Press. Introductory chapter, pp. 6, 9. www.ubcpress.ca/books/pdf/chapters/2010/WomenAndPropertyl nUrbanIndia.pdf

particularly valued such documents in their name as recognition of their status and contribution as individuals (separate from their husbands).¹⁹

▶ Poor women with limited housing options may be at increased risk and need specific support when services and land values rise.

Another set of issues relates to the housing options for slum-dwellers dependent on informal rentals, sublets, sharing with others, or lodging with family. These are described as the least desirable types of housing, and are largely occupied by single women and womenheaded households who tend to have the fewest choices due to low incomes and also the reluctance of landlords to rent to them. For this group, the increased land values and rents associated with slum improvements may overwhelm the benefits of service improvements and narrow their options even further, unless specific steps are taken to provide affordable alternatives.²⁰

Participatory processes do not automatically provide space for women's participation and views.

Given the points above, women's interests and views must be represented in planning processes so that plans and decisions can be based on a more informed understanding of the issues. However, a participatory process will not necessarily ensure that women's views are heard. Actual participation in forums for discussion and/or decisions affecting access to resources or opportunities is likely to reflect the power differentials in the community, including the unequal relations between women and men. In this context, women may find it difficult to voice their views, especially if they contradict men's views. Lower levels of literacy among women can also make effective participation a challenge.

Specific measures are required to overcome such constraints and to ensure that women both attend and are active participants in community discussions and in management committees. This might include, for example, measures to reserve places for women, to ensure that lack or cost of transport is not a barrier, to make information and training accessible to persons with limited literacy, and to ensure that meetings are scheduled to accommodate other demands on women to meet household and family needs.

More broadly, measures are also needed to increase understanding and capacities for participatory processes at the local level. The presence of women in meetings is

Baruah, B. 2010. Women and Landed Property in Urban India: Negotiating Closed Doors and Windows of Opportunity. UNU WIDER Working Paper. p. 12. www.wider.unu.edu/publications/ working-papers/2010/en_GB/wp2010-56/

Footnote 18, p. 5.

Footnote 18, p. 11.

misinterpreted as participation. Local governments also lack capacity for intensive, flexible, and sustained community engagement.

Central, state, and municipal agencies show gaps in capacity to incorporate a gender perspective in analysis, planning, and service provision.

Central and state governments have undertaken various legal and program measures to direct resources and benefits to women. However, the intention to improve women's position demonstrated in these measures and in government statements is not consistently reflected in sectoral analyses and major programs. Situation analyses generally refer to "slum-dwellers" or "poor households" or "urban workers" without any further comment on ways in which the experiences and needs of women and men in these categories might differ in relation to program area in question (whether it is infrastructure, housing, transit, or skill training). Data on program participants and beneficiaries is seldom provided by sex and, where data on women is provided, it is generally only for women-targeted schemes with no information on whether women are benefiting from general schemes (e.g., for housing, training, or self-employment). Or data is presented only for women-headed households, with no information on the women in the other households (some 85% of households nationwide). These practices suggest important capacity gaps—lack of capacity to generate the sex-disaggregated data required for program analysis and targeting, or lack of capacity to analyze and use such data, or both. As a result, programs may fail to meet the specific needs of women, or to deliver equitable benefits to women and men, in direct contradiction of stated objectives for inclusive growth.

Livelihood Options

Women need economic opportunities, but biases against women in labor markets and wage scales limit their options and incomes.

Women's labor force participation rates are low in India, particularly in urban areas and among better-educated women (possibly influenced by the lack of suitable jobs and wages). 21 Labor force participation is much higher among the poor, reflecting the need for all household members to contribute to survival. Most of the poor, both women and men, are in informal employment (casual or self-employment rather than wage

employment).²² Male-female wage differentials in casual employment are even higher in urban than rural areas in 2007-2008 average earnings of urban women doing casual labor were 57% of those of men.²³

A major national survey found that in 2005–2006, 36% of urban employed women were doing skilled or unskilled production work, another 20% were service workers, and a further 19% were in professional or administrative work. In comparison with men, women were more likely to be in service work and less likely to be sales workers.²⁴ Production work includes construction, an important industry, and some reports estimate that about half of India's construction workers are women, though most of them are engaged in unskilled and casual work rather than in the higher-paid skilled trades.²⁵

While many women work in construction, most are in unskilled manual tasks with few chances for training and employment in skilled work.

Women are an important part of the labor force in the sector (by some estimates, as much as half), 26 but are employed almost exclusively as casual manual laborers—headload workers carrying bricks, cement, sand, and water, or workers who dig, mix mortar, or break stones. These women have few opportunities to gain skills in the better-paid trades such as carpentry, masonry, plumbing, or electrical work, and those trained struggle to be accepted as workers in these areas.²⁷

The Self-Employed Women's Association (SEWA), which has been organizing women construction workers in Ahmedabad since the late 1990s, carried out several

See discussion in World Bank. 2011. Poverty and Social Exclusion in India. pp. 153-155. go.worldbank.org/U2WJNKI8H0

Reported as 72%-82% of men and 78%-80% of women in 2004-2005 in Planning Commission. 2011. Report of the Working Group on Urban Poverty, Slums and Service Delivery System, 12th Five Year Plan, p. 5. planningcommission.nic.in

NSS Report No. 531: Employment and Unemployment Situation in India: July 2007-June 2008. Statement 21.1 (casual laborers). mospi.nic.in/mospi_new/admin/Login.aspx

National Family Health Survey, 2005-2006 (NFHS-3). Table 3.9, p. 74. www.rchiips.org/NFHS/chapters.shtml

WIEGO. Undated. Women in India's Construction Industry. wiego.org/ informal-economy/women-india%E2%80%99s-construction-industry

²⁶ Figure provided in the 11th Five Year Plan, Vol. II, para. 6.23. planningcommission.nic.in/plans/planrel/fiveyr/welcome.html. See also Baruah, P. 2010. Women and globalization: challenges and opportunities facing construction workers in contemporary India. Development in Practice. 20 (1): 31-44. http://csulb.academia.edu/BipashaBaruah/Papers/568911/Wome n and globalisation challenges and opportunities facing constr uction_workers_in_contemporary_India

Baruah (footnote 26); see also Baruah P. 2010. Women and Property in Urban India. Vancouver: UBC Press.

Box 3: Socioeconomic Characteristics of Urban Women

A special study on eight large cities was done as part of the National Family Health Survey (2005–2006). The cities were Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai, and Nagpur. The report compared the poor with the nonpoor, slums with non-slums, and women with men. The findings provide some insight into the challenges faced by urban women and also indicate considerable variability among cities:

- Sex ratios (the number of women per 1,000 men): sex ratios in urban areas were particularly affected by migration, but the pattern was not consistent. Sex ratios were lower than the all-India figure in some cities (as low as 819 women per 1,000 men in Delhi), but higher than the all-India average in other cities (Chennai, Hyderabad, Nagpur). Sex ratios were lower in slum than non-slum areas in most but not all cities.
- Female-headed households: poor households were more likely to be headed by women than nonpoor households, with as many as 26% of households headed by women in Chennai and 22% in Kolkata (but Mumbai and Kolkata had the opposite pattern). In some but not all cities, female-headed households were more common in slums than in non-slums.
- Educational attainment: a large proportion of women in all eight cities had less than 5 years of education (ranging from 30% of women in Chennai to 43% in Meerut). The figures were even lower among the poor, with more than 70% of women in Indore, Kolkata, Meerut, and Delhi having less than 5 years of education. But at the same time, some cities also had significant numbers of women with 10 or more years of education, such as Delhi (41%) and Hyderabad (39%). Men had substantially more education in every city overall, among the poor and in both slum and non-slum areas.
- Employment: while urban women were less likely to be employed than rural women, poor urban women were much more likely to be employed than their nonpoor counterparts: in Indore, 60% of women in the poorest quartile are employed, and the figures are also high in Chennai (52%) and Hyderabad (47%) (but only 27% in Mumbai). Most women were paid in cash, but a much higher proportion of women than men were paid in kind or not at all.
- Occupation: employed urban women were engaged in service, production, and professional work, though the balance among these varied among cities as well as between the poor and the nonpoor and between slum and non-slum areas. A major difference with men was that very few women were sales workers. Also notable was the proportion of employed women in slum areas engaged in professional work—almost 20% in slum areas of Indore and Kolkata.
- Migration status: women were more likely than men to be migrants (i.e., had not always lived in their area of residence). Other studies suggest marriage and family as the primary reasons for migration by women, though work could be a secondary reason or result. A large proportion of female migrants were recent migrants (less than 5 years).

Source: Adapted from Ministry of Health and Family Welfare. 2009. Health and Living Conditions in Eight Indian Cities. www.rchiips.org/NFHS/sub_report.shtml

surveys to better understand the needs and priorities of women in construction that provide insights into gender differences in skills, opportunities, and rewards.²⁸ The first survey in 1998 found that most women were in unskilled work while most men were in semiskilled or skilled work. About 10% of women were in semiskilled work (mostly assisting male masons in plastering or concrete mixing) but were generally still paid the female manual wage rate, which was about half the male manual rate. Over 90% of women had never had any training for construction but had learned on the job. The 2003 follow-up survey found an increased preference for skilled workers and an increase in the real value of wages for them, while demand for the unskilled declined and their wages stagnated.

Responding to the conclusions of these surveys about the needs for skills training, SEWA established the Karmika School for Construction Workers in 2004 to provide women with specialized training in construction. The experience of the school shows that nonliterate and semiliterate women can benefit from skills training to trade standards and certification recognized by the Construction Industry Certification Council.²⁹

A follow-up study in 2007 that considered the impact of the training found positive results—many of the women trained reported more working days, more skilled work opportunities, higher incomes, and more confidence in dealing with sexual harassment at construction sites. However, preconceptions and biases against women skilled workers in the sector and discriminatory practices in the industry continue to be constraints and show the need for advocacy and other measures to encourage construction firms and contractors in the public and private sectors to recognize the contribution that skilled women can make.

Financial inclusion is an issue for poor urban women but there is as yet less knowledge and experience about appropriate models and products.

While bank branches may be more accessible in urban than rural areas, poor urban women face many of the same barriers to access as poor rural women. These include lack of documentation and low or irregular incomes and, on the part of the banks, a lack of appropriate financial products (including savings, insurance, and credit products tailored to the needs of the poor). To date, however, initiatives to improve

Information about the SEWA studies is from Baruah (footnote 26).

Baruah (footnote 26); see also the web page www.sewahousing .org under Activities.

access to savings and credit services have mainly focused on rural areas.

The experience with financial inclusion initiatives for women has therefore been drawn mostly from rural areas, where rural self-help groups have been assigned a major role. While the success or familiarity of this model seems to be propelling a transfer into the urban context, the extent to which it can be directly transferred can be questioned. Organizations that have been working with poor urban women have noted that, particularly in slum areas, factors such as in-migration, uneven work availability, and insecurity of tenure result in much less stable populations and greater challenges implementing the self-help group and peer lending models that have predominated in rural areas.

A set of case studies by the Centre for Micro Finance shows how several different organizations have innovated with different delivery methods and with an increasing range of financial products to meet the needs of urban women in relation to household or lifecycle events (illness, marriages, deaths);³⁰ for housing and service upgrades; and for livelihood strategies. The experience suggests that credit is but one of the financial services needed by poor urban women—also important are ways to save (even if only in small amounts deposited daily), to create a reserve to cover unforeseen events or to plan ahead, and insurance that provides some insulation in case of sickness or economic shocks.

Access to credit for home repairs, building toilets, accessing water and/or sewer connections, children's education, marriage, and festivals seems to be as important as credit for self-employment purposes. Several organizations extend loans to low-income women for housing, including SEWA, which reports that the demand is substantial—nearly 25% of the borrowers of the SEWA Bank borrow for housing. Other organizations are also considering appropriate lending models to cover larger loans for purposes such as education, housing, or business expansion, for which group-based guarantees may be less appropriate or not forthcoming.

Policy and Program Environment for Gender Equality Initiatives in the Sector

Discussions of urban issues and development in the preparatory papers for the 12th Five Year Plan highlight the potential contribution of urbanization to inclusive growth, but they also reflect a sense of urgency to act on several fronts to seize this potential. This includes actions in support of more effective decentralization to urban local bodies, to improve governance at the local level, to provide the necessary infrastructure for urban residents and for industry, and to improve livelihood opportunities for the poor. The sense of urgency responds to the pace of urbanization, the growing proportion of the poor who are urban, and the expectation that India will increasingly depend on urban areas to generate economic and employment growth.

Urban development is largely a matter of state jurisdiction in India, but the central government plays an important role in providing policy leadership through the strategic directions set out in five-year plans as well as through national policy statements or model bills that can be adapted by state governments.

The central government also provides momentum and additional financing for urban development through its major programs. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM), which was launched in 2005, was the first major national flagship program for urban development and has been credited for focusing attention on urban needs, giving impetus to critical reforms in many states, and directing investment into infrastructure and the basic needs of the poor. Another major program, the Rajiv Awas Yojana (RAY), focuses on slum redevelopment, including provision of basic amenities and affordable housing. As with JNNURM, RAY provides central support on the condition of certain reforms being undertaken, in particular a commitment to adopt legislation providing for property rights for slum dwellers—and notably "property rights to slum dwellers, preferably in the name of the wife or in the name of both wife and husband"—and the enactment of legislation to this effect within a year of participation in the scheme.³¹

Regarding urban livelihoods, the government is currently developing the National Urban Livelihoods Mission (NULM), which would consolidate and build on several earlier schemes to enhance support for productive

Centre for Micro Finance. 2006. Reaching the Other 100 Million Poor in India: Case Studies in Urban Microfinance. ifmr.ac.in/cmf/casestudies.html

Ministry of Housing and Urban Poverty Alleviation. Annual Report 2011–2012. http://mhupa.gov.in/match_column_frame.htm

-	Central Government Institutions and Programs he Urban Sector
MOUD	Ministry of Urban Development: deals with urban development, water supply and sanitation, transport, and local government: urbanindia.nic.in
MOHUPA	Ministry of Housing and Urban Poverty Alleviation: deals with urban housing, employment and poverty alleviation: mhupa.gov.in
JNNURM	Jawaharlal Nehru National Urban Renewal Mission: flagship program of the central government that aims to encourage reforms and fast-track planned development in participating cities: jnnurm.nic.in
RAY	Rajiv Awas Yojana: national program for slum redevelopment, focusing on basic amenities and affordable housing for slum dwellers (including property rights): mhupa.gov.in/ray/Ray_index.htm
SJSRY	Swarna Jayanti Shahari Rozgar Yojana: national scheme that aims to provide gainful employment to the urban unemployed or underemployed through self-employment or wage employment. Likely to be superseded by the NULM:
NULM	Mational Urban Livelihoods Mission: national scheme proposed in January 2012 that would replace SJSRY with an enhanced program that would mobilize the poor into self-help groups and federations, with associated credit and other support initiatives, and provide skill training for wage employment and self-employment: For Minister's statement and concept paper respectively, see following two sites: pib.nic.in/newsite/erelease.aspx?relid=79833andindi amicrofinance.com/national-urban-livelihoods-mission-india—2012.html
Note: A goo	d overview of existing programs and recent assessments

Note: A good overview of existing programs and recent assessments of them is provided in Planning Commission. 2011. Report of the Working Group on Urban Poverty, Slums and Service Delivery System. planningcommission.nic.in. Also useful is a review of JNNURM from a gender perspective: Khosla, Renu. 2009. Addressing Gender Concerns in India's Urban Renewal Mission. UNDP India. www.undp.org/ content/dam/india/docs/addressinggenderconcerns.pdf

livelihoods for the urban poor. The approach envisaged would include skills training and other support to selfemployment, skills training and placement for wage employment, and social mobilization (self-help groups and federations) with attention to financial inclusion.³² See Box 4 for a list of key central institutions and programs in the urban sector.

Urban local governments in India were given separate constitutional status through the 74th Constitutional Amendment (adopted in 1992), which also specified the

³² See minister's speech and concept paper for NULM cited in Box 4.

functions to be performed at the local level. However, decentralization from the state to the urban level has not progressed at the same pace in all states due to differences in the will and capacities of the states to support the process.³³ The central government has been supporting and encouraging the process of devolution through programs such as JNNURM. The 12th Five Year Plan is likely to put considerable emphasis on improved governance in relation to the urban sector, including more effective urban elected bodies, increased effectiveness of municipal agencies and their accountability to urban local bodies, and increased capacity of state agencies for support and oversight.

The paragraphs below and Box 5 highlight a number of policy themes and signals related to women's participation and empowerment that are relevant to ADB support to urban development.

High priority has been given to women's participation in local decision making by both central and state governments.

The 74th Constitutional Amendment required a onethird reservation for women in urban local bodies, including one-third of the seats reserved for scheduled tribes and for scheduled castes. This has resulted in a significant increase in the representation of women at this level—in 2011, there were some 23,000 women elected to urban local bodies, including 670 in the role of chairpersons.³⁴ The specific approach to implementation varies among states as it is governed by state legislation, and the one-third reservation has been increased to 50% for urban areas by several states (Andhra Pradesh, Kerala, Maharashtra, and Tripura). 35 A bill to further amend the Constitution to make the 50% level the norm across the country was introduced into the Lower House of Parliament in 2009 and is still being reviewed by central ministries and state departments. This amendment would also standardize the rotation cycle to two terms, which gives those in reserved seats a better chance to build on experience gained through a second term of office.³⁶

Planning Commission. 2011. Report of Steering Committee on Urbanization, 12th Five Year Plan. planningcommission.nic.in

Ministry of Women and Child Development. 2011. MWCD Draft CEDAW Report (4th and 5th), para. 167. http://wcd.nic.in/cedawdraft20nov2011.pdf

Global Database of Quotas for Women, page on India: www.quotaproject.org/uid/countryview.cfm?country=105

Footnote 34, para. 168; for updates, see website of Ministry of Urban Development: urbanindia.nic.in/programme/lsg/lsg.htm

Box 5: Highlights of Government Policy Commitments on Gender Equality Relevant to ADB Initiatives in the Sector

- Better access by women to affordable sanitation: National Urban Sanitation Policy, 2008 (special focus on hygienic and affordable sanitation for urban poor and urban women).
- Increasing women's employment opportunities: National Employment Policy, draft 2008 (equality in labor market, increased access to broader range of opportunities).
- Increasing access by women to skills and training: National Policy on Skill Development, 2009 (participation in vocational training); National Urban Housing and Habitat Policy, 2007 (upgrading skills of women construction workers and contractors, facilities for them).
- Strengthening women's ownership rights: Hindu Succession (Amendment) Act, 2005 (inheritance rights); 11th Five Year Plan, 2007–2012 (transfers to women through land reform, antipoverty and resettlement programs, government housing in women's or joint names); Model Property Rights to Slum Dwellers Act, 2011 (legal entitlements to women alone or jointly; while this central government initiative has no legal effect, it provides guidance to state governments for their legislation); also various measures at state level.
- Increasing women's participation in decision making: 74th Constitutional Amendment of 1992 (one-third reservation for women in elected urban local bodies); implemented and in some cases augmented through state legislation (reservation for urban bodies increased to 50% by Andhra Pradesh, Kerala, Maharashtra, Tripura, and possibly others).
- Increasing women's participation in all government programs: 11th Five Year Plan, 2007-12 (at least 33% participation); reiterated in some state-level five-year plans for the same period, e.g., in Bihar.
- Honourable tourism: Code of Conduct for Safe and Honourable Tourism 2010 (respect for basic rights, prevention of sexual exploitation).

Only limited state-specific references are included. Some further state-level information is provided in ADB's Gender Equality Reference Sheets, prepared in 2011 for most ADB partner states in India. National policies listed are available online; search by title.

The central Ministry of Urban Development provides financial assistance to states to provide training to women elected to urban local bodies, with the aim of better preparing them for the dual role they are expected to fulfill: to respond to the needs of their electorate and to ensure consideration of the impacts on women of urban policies. 37 In short, both central and state governments are providing strong signals to all partners about the importance of women's participation in local government decision making.

Community participation has been identified as essential for infrastructure development, including in the public-private partnership (PPP) mode.

The approach paper for the 12th Five Year Plan emphasizes the importance of community participation by referring to a "4P" or "PPPP" framework (adding people to make people-private-public-partnerships) as being critical for urban infrastructure and management related to drinking water supply, waste water recycling, solid waste treatment, and sewerage.³⁸

The emphasis on community participation is important as infrastructure choices and management have a significant impact on the quality of life of urban dwellers. Poor women in particular have strong interests in appropriate design and effective ongoing management of such infrastructure and services, as deficiencies in these areas result in increased workloads and often decreased security for women.

Antipoverty and resettlement programs have been given a role in strengthening women's property rights.

The Indian Parliament took a major step to strengthen women's property rights with the adoption of the Hindu Succession Amendment Act, 2005. The act increased women's rights to inherit agricultural land, the rights of all daughters as heirs to joint family property, the rights of all daughters to reside in or seek partition of the family dwelling house, and the rights of widows to inherit from children who die before them.³⁹

These legal provisions provide an important foundation, but the ongoing challenge is to give practical effect to new rights. The approach of the 11th Five Year Plan to strengthening implementation of the rights specified in the act includes further legal reform, increased legal awareness, and legal aid to women. The 11th Five Year Plan also required that housing provided by the government should come with land titles that were half in the name of the woman in the household or in the single name of the woman, and that priority for the allocation of housing with titles should go to single women, widows, and women in difficult circumstances. The plan also makes a commitment to direct transfers of

Ministry of Urban Development. Capacity Building Scheme for Urban Local Bodies. Appendix II. urbanindia.nic.in/programme/lsg/ lsg.htm

Approach paper for 12th plan (footnote 2), p. 149.

For a concise explanation, see Agarwal., B. 2005. Landmark step to gender equality. The Hindu: Magazine. 25 September. www.hindu.com/thehindu/mag/2005/09/25/stories/20050925000 50100.htm. For inheritance issues for non-Hindus, see Agarwal, B. 2005. Women's inheritance: next steps: a look at the disabilities non-Hindu women face. The Indian Express. 17 October. www.binaagarwal.com/popular_writings.htm

land to women through land reforms, antipoverty programs, and resettlement schemes. 40

One example of follow-up to these commitments is the model Property Rights to Slum Dwellers Act, 2011. This was drafted under the flagship slum rehabilitation program, RAY, and includes a clause providing that legal entitlements to a dwelling space will be in the names of husband and wife (or women alone, in the case of women-headed households). 41 This model legislation is intended to guide state governments, which have jurisdiction in this area and thus can adopt it in the suggested form, adapt it as required, or ignore it. However, momentum for state action is provided by the requirement for legal reforms in favor of property rights for slum dwellers in order to participate in the centrally funded RAY scheme. 42

Other measures to strengthen women's ownership of housing have also been taken by several states. For example, the Government of Karnataka has made a commitment to increased home ownership by lowincome women, particularly ownership of homes that can also serve as work sites (the state's draft Housing and Habitat Policy, 2009 aims to ensure that titles will be issued in the name of a woman or jointly with her spouse in public housing schemes, public-private partnership projects, and private agency projects). 43 The Government of Rajasthan encourages property ownership by women through reduced stamp duties for gifts of immovable property to a female relative for registration in her name; reductions in stamp duty for women are also part of the state's policy for affordable housing. 44 Such reductions in stamp duty on property transactions favoring women have been singled out as an important measure facilitating women gaining joint title with their husbands. 45

The need to address gender biases in the construction sector has been recognized.

The National Urban Housing and Habitat Policy, 2007 recognizes the extent to which women participate in construction and also that the sector "is perhaps their biggest exploiter in terms of disparity in wages." In response, it makes a commitment to concerted efforts to upgrade the skills of women construction workers, to employ them in supervisory positions, to develop them as contractors, and to encourage both public and private agencies to take a lead in these areas. It also directs construction companies and public authorities to provide adequate support services and facilities (crèche, toilet facilities) and encourages states to legislate health and safety measures for all workers and especially for women in construction. 46

The practical impact of this policy statement may be limited, as it seems that states rather than the central government have primary responsibility for many of the elements noted. However, it provides a central government policy signal that should be noted by development partners.

▶ New approaches in the Socio-Economic and Caste Census 2011 (urban) show awareness of the constraints on women within households as well as on women-headed households, and strengthen their access to programs for the poor.

The Socio-Economic and Caste Census done in 2011 was intended to enable identification of poor households to determine who should be eligible for government programs and assistance. The approach for urban areas is based on vulnerabilities (residential, occupational, and social) and is generally focused on households. However, it builds in specific efforts to recognize women-headed households as such, which reflects awareness that assumptions on the part of both enumerators and the public result in the under identification of womenheaded households. The approach also allows vulnerable women within households to identify themselves as a separate household, which provides some recognition of the particular vulnerabilities women may face within households and increases their claims to government support and their options (Box 6).

¹¹th Five Year Plan (footnote 26). Vol. II, para 6.32.

Ministry of Housing and Urban Poverty Alleviation. 2011. Draft Model Property Rights to Slum Dwellers Act, 2011. mhupa.gov.in/W_new/draft-prop-rights.pdf

This is a relatively recent development and no information on state follow-up was identified.

Government of Karnataka. Housing and Habitat Policy 2009. housing.kar.nic.in/housing.pdf

Government of Rajasthan. 2005–2006. Gender-responsive Budgeting for the Department of Registration and Stamps. www.gender-budgets.org/index.php?option=com content&view=article&id=856&g=rajasthan; and Government of Rajasthan. Affordable Housing Policy 2009. www.jaipurjda .org/pdf/others/Affordable_Housing_PolicyDec2009.pdf

Baruah (footnote 18), pp. 13-14.

National Urban Housing and Habitat Policy 2007. p. 35. mhupa.gov.in/policies/duepa/HousingPolicy2007.pdf

Box 6: Identifying Poor Households through the Socio-Economic and Caste Census, 2011 (Urban Approach)

Vulnerability-based identification of poor urban households

The purpose of this survey was to ensure better identification of poor households for targeting of state programs and benefits. Different questionnaires were used for urban and rural areas. The urban approach considered three categories of vulnerability:

- Residential or habitat-based vulnerability: urban persons/households that are houseless, living in temporary houses, facing insecurity of tenure with an absence of basic civic services.
- Occupational vulnerability: urban persons/households without access to social security, susceptible to significant periods of unemployment, and confined to undignified and oppressive working conditions.
- Social vulnerabilities: gender-based vulnerabilities such as female-headed households, age-based vulnerabilities such as minor-headed households and the aged, health vulnerabilities such as disability and/or chronic illness, education vulnerabilities, and vulnerabilities based on social stratification including religion and caste.

Source: Report of the Working Group on Urban Poverty, Slums and Service Delivery System. Working Group for the 12th Five Year Plan: planningcommission.nic.in/aboutus/committee/index.php?about =12strindx.htm

Efforts to ensure identification of women-headed households and particularly vulnerable women

Guidance for enumerators aimed to ensure that women-headed households were identified as such, by emphasizing that

- enumerators should not assume that households are headed by a male member, but rather should ask household members who is the head and record accordingly; and
- any adult woman in a household who decides to declare herself a separate household can do so.

It is also pointed out that

- · enumerators should be aware of the social factors that could prevent a woman from naming herself as head of household, even if she is (e.g., a woman who is widowed or separated, or whose husband has migrated and named a minor male child as household head, or a woman not naming herself as household head even if she is the only earning member); and
- a woman living in a disharmonious relationship may not have access to benefits under government schemes and may not be able to get out of poverty or the household, thus she should be recognized as a separate household if she wants to so declare herself.

Source: Ministry of Housing and Urban Poverty Alleviation. 2011. Instruction Manual for Enumerators (Socio-Economic and Caste Census 2011—Urban). See Chapter 3 and Annex VII: mhupa.gov.in/bpl_home/docs/instruction_manual_enumerators.pdf

Self-help groups (SHGs) are being assigned increasingly important functions in livelihood programs in urban as well as rural areas.

The proposed National Urban Livelihoods Mission (NULM) would replace the current scheme for urban employment and/or self-employment (Swarna Jayanti Shahari Rozgar Yojana) with a broader mission-based approach that would also incorporate strategies developed in rural areas (the National Rural Livelihoods Mission and its rural predecessors). Most notably, the NULM would include a major role for self-help groups (SHGs) and their federations. SHGs for joint thrift and credit activities have been more common in rural than urban areas, given that the major SHG-bank linkage program was under the aegis of an organization whose mandate did not extend to urban areas, 47 although it seems that there is some experience of linkages between urban SHGs and other banks. The NULM envisages "universal mobilization" into SHGs, meaning that one member of every identified poor household, "preferably a woman," be brought into an SHG.48 Federations of SHGs will also be encouraged and supported in order to achieve stronger organizations to represent and serve the poor.

Measures to increase access by women to skill training for employment have been recognized as important in several major initiatives.

The proposed NULM would include a skill training component relevant to a range of service, business, and manufacturing activities as well as local skills and crafts—all intended to support self-employment or wage employment with enhanced remuneration. The proposal includes a target of 30% women for the training component. 49 The National Policy on Skill Development, 2009, which presumably informs other centrally sponsored skill development initiatives, includes useful approaches to increasing women's access to skills training. The policy aimed to increase women's participation in vocational training to at least 30% by 2012 through counteracting discrimination; proactive measures (hostels, scholarships, transport, and loans); vocational training in fields employing women; and

National Bank for Agriculture and Rural Development. 2008. Report of the Committee on Financial Inclusion. (Rangarajan Report). p. 17. www.nabard.org/report_comfinancial.asp

⁴⁸ NULM Concept Paper, cited in Box 4.

⁴⁹ NULM Concept Paper, para. 4.26, cited in Box 4.

encouragement of participation in nontraditional areas. 50

In sum, central and state governments are recognizing the need for specific measures to ensure that their programs serve women equitably.

The points above suggest that central and state governments are seeking to reach women through various types of initiatives and programs. While there are gaps and inconsistencies in the policy and program framework—some policies and programs miss important issues and opportunities, and very little data is gathered to track the extent to which women participate and benefit—these seem to be issues of capacity of relevant agencies (central, state, and municipal) to follow through with a gender equity perspective in policy design and implementation, rather than a lack of awareness of the importance of a gender equality approach.

ADB Experience in Supporting Gender Equality in Urban Development Investments

ADB investments in urban sector development are becoming an increasingly important part of its portfolio in India, and the sector accounted for 20% of the amounts loaned in 2005-2010.51 Most of the projects now in implementation have been categorized as including at least "some gender elements," and a large proportion of those approved under the country partnership strategy for 2009-2012 were designed to satisfy "effective gender mainstreaming requirements" (see Box 7 for the distribution of projects and an overview of the categories). This upward shift in gender categories suggests that partnerships with several states have evolved, and it reflects ADB's intention to strengthen performance in this area in order to contribute more effectively to gender equality and women's empowerment in India.

A major focus of the gender equality approaches in ADB's urban sector projects has been to ensure representation of women in participatory processes. This includes consultative processes at the project preparatory stage and in community groups established to support implementation, which are generally in the project components related to slum rehabilitation or

Box 7: Urban Sector Projects by ADB Gender Category*								
Year approved GEN EGM SGE NGE Tota								
Approved 2000–2008	ı	3	2	3	8			
Approved 2009–2012	-	10	3	-	13			
Pipeline 2013–2015**	-	13	1	-	14			

- = none.
- * Ongoing projects and project pipeline.
- ** These are proposed projects and are subject to change.

Gender Equity Theme (GEN)

- Directly supports gender equality and women's empowerment
- All the requirements for EGM plus explicit gender equality or women's empowerment outcomes for the project

Effective Gender Mainstreaming (EGM)

- Gender equality and women's empowerment substantially integrated
- Directly supports gender equality and women's empowerment
- See specific requirements for EGM below

Some Gender Elements (SGE)

Does not meet EGM criteria BUT

- provides some direct and substantial benefits to women because of the nature of the project OR
- includes some gender-related design features in project design or resettlement.

No Gender Elements (NGE)

Gender issues not integrated in design

Effective Gender Mainstreaming (EGM)

Investment likely to deliver tangible benefits to women by improving their access to social services, and/or economic and financial resources and opportunities, and/or basic rural and urban infrastructure, and/or enhancing voices and rights, which contribute to gender equality and women's empowerment. The following project requirements must be met to qualify as EGM:

- The social analysis conducted during project preparation included careful consideration of gender issues highlighting both constraints and opportunities.
- Specific gender design features are included in the majority of project outputs and/or components (50% or more) and ensure women's participation and access to project benefits. Most of these outputs and/or components should have at least three gender design features or mechanisms.
- Gender targets and performance and monitoring indicators are in the project design and monitoring framework.
- A gender action plan is included as a linked document to the Report and Recommendation of the President (RRP) and integrated in the project administration manual.
- The **RRP main text discusses** how the project will contribute to improving women's access to or benefits from the project, at a minimum in the Poverty and Social subsection under the Due Diligence section.
- A covenant or a condition in the policy matrix supports implementation of the gender action plan.

See Guidelines for Gender Mainstreaming Categories of ADB Projects: www.adb.org/Gender/gender-categories.asp

National Policy on Skill Development, 2009: www.skilldevelopment.gov.in/node/163

⁵¹ India–ADB Development Partnership (footnote 6), p. 5.

community development. Project documents generally refer to the burdens carried by poor women when basic amenities (including water, toilets, drainage, and waste disposal sites) are poor or far or absent, and the slum development components of most projects generally include the provision of low-cost infrastructure to address these deficiencies. Women's involvement has been found to provide benefits to ADB and its municipal partners in relation to both project implementation and sustainability—as noted in one project case study, women are willing to devote time when the benefits to the community are clear, and they are effective in mobilizing communities in support of an investment. 52

Another level of community participation by women is in broader municipal planning processes. For example, a project in Madhya Pradesh included funds to support a municipal action planning process that aimed to integrate services for poor communities (water supply, sanitation, drains, roads, and street lighting) into citywide development and build capacity of municipal corporations for participatory planning with community groups. Steps to ensure women's involvement at this more strategic level and to develop the capacity of women and other municipal stakeholders to work together effectively help move toward more inclusive governance and more equitable outcomes.

components for community slum development generally include livelihood initiatives, often involving the formation or strengthening of SHGs, as a means to facilitate women's access to credit for microenterprise. The inclination to turn to SHGs to generate or expand income-generating opportunities for women echoes a broader approach by central and state governments in India, based on the positive results achieved by these groups in many areas. However, there are also indications that positive outcomes with SHGs are related to factors internal to such groups (e.g., whether they are based on affinity) as well as the type of support provided.⁵³ One concern about SHG-based approaches in ADB projects is that SHGs are often proposed with very little discussion of the environment in which they would be established, the capacities of existing groups, the support SHGs would need to flourish or expand, or similar issues that would need to be addressed to develop an effective strategy. There are

projects in which there is very little planning for skill development or upgrading related to group functioning or entrepreneurial activities, and little to prepare SHGs to get beyond conventional and limited livelihoods in handicrafts or low-grade garment work.

On the other hand, ADB has also reviewed its experience with urban SHGs in Karnataka, which was the first time this strategy had been pursued in their urban projects, and the assessment provides a useful discussion of how elements such as ensuring that groups have the time and support to mature are important to positive outcomes. The assessment also warns that community group and SHG strategies of multiple organizations in the same area can also have the unintended result of overburdening rather than empowering women.⁵⁴ ADB can also draw on its experience of productive working partnerships with established organizations with good reputations for innovation and success in working with women's SHGs, as was the case in Kerala, where ADB worked on an urban development project in collaboration with Kudumbashree, a successful and respected antipoverty and women's empowerment organization established by the Government of Kerala. 55

Another type of livelihood opportunity is employment in the infrastructure construction financed by all the urban sector projects. Most projects have established targets for women's participation and made commitments to equal pay for equal work. In one recent project, the Infrastructure Development Investment Program for Tourism, the gender action plan aimed to reinforce this approach by including a clause on core labor standards and targets for hiring women in the bidding process for construction contractors. Another project, Kerala Sustainable Urban Development, proposed orientation sessions for contractors on these matters. Even though project-related construction employment is short term, consistent attention to the equal pay principle and to providing opportunities for women contributes to broader awareness of women's employment rights.

Most major infrastructure investments result in some displacement of households and livelihoods. Most resettlement plans for urban sector projects identify the need to consult with women about resettlement approaches, although this is sometimes narrowly focused on women-headed households. Measures taken

ADB. 2007. India: Promoting Urban Social Development Through Self Help Groups in Karnataka. Evaluation Working Paper (Karnataka Urban Infrastructure Development Project). www.adb.org/publications/promoting-urban-social-developmentthrough-self-help-groups-karnataka

See also chapter on Finance and Public Sector Management.

Footnote 52.

See Kudumbashree website for more on the organization: www.kudumbashree.org This experience could be the basis of a useful case study.

the country partnership strategy for 2013–2017, ADB will give further attention to the following and objectives to enhance impacts on women's empowerment and gender equality: ngage with selected partners at the state and municipal levels that demonstrate particular interest and potential to involve and benefit women and build their capacity for gender equity initiatives, acrease gender mainstreaming in the tools and processes for urban planning, lentify opportunities to strengthen tenancy and ownership rights of poor women as part of ommunity development or resettlement, and lentify ways that ADB can contribute to safer cities for women.
nd potential to involve and benefit women and build their capacity for gender equity initiatives, crease gender mainstreaming in the tools and processes for urban planning, entify opportunities to strengthen tenancy and ownership rights of poor women as part of ommunity development or resettlement, and
entify opportunities to strengthen tenancy and ownership rights of poor women as part of ommunity development or resettlement, and
ommunity development or resettlement, and
entify ways that ADB can contribute to safer cities for women.
rill strengthen its gender equality outcomes in collaboration with government partners at both I and state levels through
nproving the quality of gender analyses done during the project preparatory technical assistance, in articular by aligning the analyses more closely with project objectives;
effecting the challenges and opportunities identified in these analyses in project gender action plans and in overall project documents;
onitoring achievement of key gender equality outcomes in design and monitoring frameworks;
electively using technical assistance resources to build knowledge and capacity to deliver gender- esponsive outcomes; and
efl nd ioi

in some projects to strengthen women's ownership rights are particularly noteworthy. The North Eastern Region Capital Cities Development Investment Program provided for recognition of joint ownership of all property allocated to households that were not femaleheaded (as well as recognition of female-headed households as property owners). Another example is the first Kolkata Environmental Improvement Project, which provided that legal titles to property in the resettlement process would be in the names of women.

Strengthening ADB Approaches: Challenges and Opportunities

Achieving "effective gender mainstreaming" with the urban development projects in the pipeline will require attention to gender equality issues and strategies throughout the planning process, as well as clear identification of the tangible benefits for women—the development results that are aimed for. As highlighted in Box 8, the ADB country partnership strategy (CPS) for 2013–2017 identifies specific areas to be pursued in the urban development sector as well as several strategies that apply to all sectors.

This section aims to support efforts to implement the CPS and, more generally, strengthen approaches in the urban development sector. It begins with a discussion of points related to identifying or following up opportunities to support gender equality in the sector. The subsequent subsection draws on a review of project documents to point out several ways in which to improve the quality of project design and outcomes in support of gender equality and women's empowerment. The chapter ends with a "tip sheet" that aims to support gender mainstreaming in ADB investments in the urban sector by suggesting possible questions and genderrelated design features to consider in the project formulation process.

Issues for Further Attention in Analyses and Strategies (Sectoral and Project)

Representation of gender equality issues in ADB sectoral analyses and reports and in the overall strategy for the urban sector.

To date such studies have included very limited discussion of issues, challenges, or opportunities related to ensuring women's participation in and benefits from ADB urban sector initiatives. As analytic studies and assessments are done to strengthen knowledge and performance in the sector, they provide an important opportunity to strengthen the integration of gender analyses into the sectoral approach and to identify relevant objectives and effective strategies. The program strategies set out every 4-5 years also provide opportunities to remind and guide all stakeholders about ADB priorities and commitments. Steps to better integrate gender issues into analytic work and strategy development could include the development of stronger links to experts, research institutes, and civil society organizations that are experienced in gender equality issues in ADB's areas of interest in the urban sector.

▶ Capacity of partners at state and municipal levels to reach women and support gender equality.

A number of ADB initiatives aim to support capacity development of partners in relation to policy development, infrastructure planning and management, or service delivery, and ADB is likely to make such initiatives increasingly important in the future. However, capacity assessments generally do not consider whether partners have capacity gaps related to reaching or serving women in the areas covered by their mandate or the project.

Given this omission, it is not surprising that most capacity development strategies do not identify objectives or actions in this area except, in some cases, steps to encourage partners to increase women's representation in participatory processes. While the capacity to consult effectively with both women and men is important, the capacity of state and local bodies to serve women equitably includes other elements and skills. One major issue is awareness of how women and men are affected differently by decisions about, for example, types and location of infrastructure, pricing and financing policies for household connections and services, hours of services, and application procedures. A related issue to consider is the availability and use of the sex-disaggregated or gender-specific data required for policy and planning purposes. Another set of capacity issues includes awareness among staff (and elected representatives, where these are partners) of policy and legislation related to the issues being addressed, including for example, women's rights to property or protection from violence and the links or outreach to research and civil society organizations in the state or municipality that have experience in reaching out to women and addressing their needs. All these issues are relevant to processes and tools for urban planning, for ongoing operation and maintenance of urban infrastructure, and for management of service delivery.

▶ Extent to which public-private partnerships lead to positive gender equality outcomes.

Central and state governments and ADB are increasingly leaning to public-private partnerships (PPPs) for urban infrastructure and service delivery. As yet there has been limited attention to the implications of PPPs for implementation of ADB gender mainstreaming objectives, or to the project design elements that could

Box 9: Supporting Gender Equality through Public-Private Partnerships

Public-private partnerships are composed of players that have different areas of experience or mandates from which to support gender equality and women's empowerment. Consider, for example, the possible outcomes from the following combination of experience and mandates:

Private sector experience + mandate

- Customization of service delivery options and rate schemes
- Range of financing models, including cross-subsidization of connections costs and rates
- · Innovation, decentralization

This combination can support more experimentation toward service delivery approaches that are adapted to different elements of the community, including different groups of women.

Nongovernment organization experience + mandate

- · Social mobilization
- Relations of trust with communities
- Involvement of women in planning and decision making

This combination can assist private and public sector players to do more effective outreach to otherwise under represented groups as beneficiaries and decision makers about infrastructure and services.

Public sector experience + mandate

- Policy and regulations setting minimum service standards
- Requirement that service provision is delinked from land ownership and/or tenure, legal status, etc.
- Required targeting of vulnerable groups for service provision and monitoring (data collection) to ensure targets are met
- Required equal opportunity employment and pay practices

This combination can ensure a conducive environment for infrastructure and service delivery that meets women's needs, and also equitable access by women to the employment generated.

Source: Adapted from presentation by R. Khosla at ADB workshop on Gender, Urban Development and Poverty, March 2012.

be used to ensure that gender equality issues are appropriately addressed.

As suggested in Box 9, the PPP approach may offer a constructive mix of experience and mandates for positive gender equality outcomes. One area for further consideration by ADB in project planning is the capacity needed by its government partners to manage PPP projects to achieve these gender equality outcomes. This would include attention to capacities to ensure that the policy or regulatory environment specifies appropriate minimum service standards, together with a monitoring and enforcement strategy. It would also include attention to partner capacities to develop PPP contracts and agreements that are clear on the obligations of all parties to the objective of equitable and inclusive service delivery.

▶ Potential ADB contribution through infrastructure to achieving "Safe cities for women."

The theme of "safe cities for women" provides useful insights into issues for attention to support gender equality and women's empowerment in ADB's infrastructure projects. This is a lens through which project analysts and designers can examine whether, for example, a water and sanitation project provides services that can be used by poor women without fear or harassment; whether a city planning process formulated with ADB support provides for better-lit streets and safer sidewalks for women on foot and other pedestrians; whether ADB contributions to urban public transport include enough attention to issues such as safe waiting places and avoidance of overcrowding; and whether consultation processes have taken adequate care to respond to the views of women on how the planned project or initiative can maximize opportunities to address the risks to the dignity and safety of women.

▶ Potential to incorporate awareness-raising on women's rights as citizens into community development activities.

Many projects have included initiatives that have strengthened rights awareness by women and men, either directly or indirectly, through, for example, ensuring that women are represented on community bodies, orienting contractors on core labor standards and equal pay for women, or ensuring that land titles are in women's names or are jointly held with their husbands. An ADB regional pilot program on legal empowerment concluded that expanded rights awareness approaches could enhance the effectiveness of the larger development projects that included them. 56 Areas to explore could include increased awareness of women's rights to property (and particularly rights recently established in the Hindu Succession Amendment Act, 2005) and rights related to matters such as access to government services, nondiscrimination in employment and wages, personal safety, protection against sexual harassment, and family violence.

Livelihood opportunities related to infrastructure services.

An option that could be further explored is whether selfhelp groups (SHGs) functioning in the project area could be engaged as franchisees in support of ongoing management

⁵⁶ ADB. 2009. Legal Empowerment for Women and Disadvantaged Groups; see also ADB. 2009. Good Practices Guide for Incorporating Legal Empowerment into Operations. Both are available at www2.adb.org/Documents/Reports/Legal-Empowerment/good-practices.asp

of the infrastructure installed (for example, reading water meters and collecting fees).⁵⁷ India has some experience in engaging women's SHGs in this way in the energy sector; this is done by the electrical utility in Uttarakhand for meter reading, bill distribution, and revenue collection. A similar approach has been taken in Odisha, where an assessment demonstrated good results for the utility in revenue collection and overall performance (see chapter on Energy). This may be an effective approach where there are functioning SHGs that can be assisted through some training and other support to advance to less conventional and more remunerative business strategies.

Livelihood opportunities related to tourism development.

ADB's collaboration with several states aims to support the development of tourism through improved infrastructure, accompanied by some measures to expand community participation in tourism-related economic and employment activities. The Government of India expects that tourism will result in economic opportunities for women. Further exploration by ADB of ways in which women could seize such opportunities would contribute to developing effective strategies related to the central government's objective of supporting inclusive growth through tourism development.

Some inspiration could be taken from an initiative pursued by the Ministry of Tourism for several years to involve more women in tourism through 3-month training courses in various tourism-related areas. This included training and certification of women as regional tourist guides for Chhattisgarh, Goa, Madhya Pradesh, Maharashtra, and several smaller states attracting tourists. Training for women to drive taxis included elements related to self-defense, languages, and tourist handling. Other courses covered the hotel sector, airlines, and small restaurants.⁵⁸

Project Design and Management Challenges

The paragraphs below suggest several key aspects of the project design process that would benefit from further attention. See also Box 10, which sets out conclusions from ADB experience about steps toward an effective gender action plan (an approach that was also found useful in planning a recent urban sector project in Bihar).

More details about these two examples can be found in the Energy chapter of this report (see Box 12 of that chapter).

⁵⁸ Domain-b.com. 2006. *India initiates women empowerment tourism.* www.domain-b.com/industry/tourism/20060508_women _empowerment.html. This program was launched in 2005, but is no longer mentioned in the Ministry of Tourism Annual Report, so appears to have come to an end.

• Strengthen gender analysis in project preparation.

Many project gender analyses are limited to general indicators of women's position, such as sex ratios, maternal mortality, and educational attainment. Such generic information is of limited help in understanding how a specific project could affect women or in identifying practical and feasible ways to ensure the project contributes to women's empowerment.

To be useful, a gender analysis should focus most of its attention on issues directly related to project impact and implementation strategies. For example, where the project's aims and investment are in infrastructure for poor and slum areas, the gender analysis should focus on women's interests and priorities with respect to the location and design of infrastructure; the ways in which women would be affected by decisions about matters such as household access to services, options for financing for connections and services, complexity of procedures, etc.; and gender differences in the ability to influence decisions about infrastructure plans and choices. Where a project aims to enable the poor to share in the benefits of increased tourism, it would be useful for the gender analysis to provide (i) an overview of women's engagement in the tourism industry at all levels (from creating handicrafts to tour guide operator or entrepreneur), (ii) the extent to which women are mobilized in SHGs or other community social structures that could provide a base for further engagement, and (iii) an assessment of possible ways to support women in equitable access to skills development for paid employment or entrepreneurial activities in tourism that could result from the investment.

While a project gender analysis could include some reference to general indicators of women's position, it should not be limited to this, and the relevance of all information provided should be made explicit. For example, where information about literacy rates is included in the gender analysis for an urban infrastructure project, it should be accompanied by an indication of the relevance of literacy rates to specific project elements (which could include, for example, the implications of literacy rates for the design of community outreach strategies or skill training options). National surveys provide considerable information with breakdowns by state or even by district. 59 These are good reference points but should be complemented by field observations and by secondary studies.

Box 10: Steps Toward an Effective Gender Action Plan

The experience of ADB in India and other countries has led to several conclusions about critical steps or elements in developing an effective gender action plan:

- During the first step, social analysis of the project area, achieving appropriate detail and accuracy requires clear instructions to the consultants doing the project preparation technical assistance (PPTA) about the gender equality issues to be addressed and the data collected (including genderspecific and sex-disaggregated data).
- · It is crucial to have a social and gender specialist on the PPTA team of consultants to ensure the level of detail and rigor in gathering sex-disaggregated data and in conducting sound gender analyses of the project areas.
- Community consultations are a must to ensure the feasibility of gender targets set for the project. Using a one-size-fits-all target, such as "30% women participants," could even be a disservice to would-be women beneficiaries as the target could be too low for a town that already has very active women's involvement, or too high to be met in towns where women's participation in community affairs is just starting.
- It is equally important to secure agreement for the gender action plan by the executing agency and the implementing agency; otherwise, questions on the plan could stall loan negotiations or render it unimplementable.
- Finally, it is important to ensure that the cost for implementing the gender action plan is incorporated in the project's cost estimates. (The lack of clear fund allocation for plan activities has been cited in some past projects as the cause of the failure to achieve gender targets.)

This approach was taken in planning the Bihar Urban Development Investment Program—accurate sex-disaggregated baseline data taken directly from the project towns has been used to set feasible social and gender targets with buy-in from the Government of Bihar.

Source: Summarized from a more detailed brief prepared by Mary Alice Rosero, ADB consultant, May 2012. Further details of the experience in planning this program are available from the ADB South Asia Department.

In short, gender analyses can be made more useful by being project specific—by focusing on the gender dimensions of the project aims, implementation strategies, and location—and by clearly showing how findings could inform design choices.

"Mainstream" the gender analysis into project documents.

Development agencies including ADB now require that a gender analysis be done during project planning because specialists doing the related sectoral, institutional, and strategic analyses are often uncertain of the questions to ask and how to analyze them, with the result that the gender equality questions were mostly overlooked. Ideally, the gender analysis and the social/gender

See the appendix of this report for data on a number of key indicators for India and states, using latest data available in August 2012 (with web references to facilitate updating).

consultant should assist planning teams to produce more comprehensive analyses. However, the continued omission of gender issues from sectoral analyses, institutional assessments, lessons learned, and identified risks suggests the need to ensure that all members of planning teams are briefed on ADB gender mainstreaming objectives. Further, it is important that the consultants engaged to undertake the social and gender analysis are sufficiently senior and experienced, and that they are provided with enough professional time to undertake the analysis and work with other members of the team to ensure that issues and strategies are integrated throughout the project design.

Clarify the strategic rationale for the gender action plan in the plan and in the main project document.

Gender action plans (GAPs) are generally set out in a table format that is organized by project outputs and specifies specific activities under each output. This has the advantage of aligning the proposed activities as closely as possible with the mainstream project plan implementation and thus facilitating implementation. While the GAP is based on a broader analysis and strategy, the summary table version is probably the one most familiar to key stakeholders (within ADB and its partner agency and among the consultants involved in supporting implementation), and it is what ADB makes available on its project website.

The presentation of the project approach to gender equality issues and results would be strengthened if the main project document spelled out more clearly the strategic underpinning for the GAP, and if this was also briefly summarized in the GAP itself. Doing this would enable ADB to communicate more effectively with partners and communities about its aims and strategy for outreach and benefits to women, which would help to ensure that intentions are translated into action.

Take a more strategic and evidence-based approach to target setting.

Finally, as in other sectors, target setting requires further attention. In most projects, where women are mentioned in relation to a project activity or benefit (e.g., consultations, training, microcredit recipients, project-related employment), the common practice is to specify a target of 30% without any explanation of how the target was established or why it is appropriate. The purpose of setting targets is to stimulate or reinforce change. A target should be based on an assessment of the current situation and should aim for a reasonable and achievable improvement on that, taking account of the challenges involved in achieving the change

envisaged and the strategies and resources to be invested in achieving it. If, for example, women are 30% of current participants in community consultation forums or groups, construction employees, management trainees, then a target of 30% merely maintains the status quo—it does not address the existing gap. A target somewhat greater than 30% in these circumstances provides a measure of positive action if it is backed up with measures and resources to achieve it. If women are already 50% of the target group, then a target below this has little meaning and could even disadvantage women if it is seen as a cap. Arbitrary targets that are not anchored in an analysis of the starting point and the desired result are of little if any value.

Ensure that monitoring approaches provide feedback to managers about the progress of implementation and to ADB about results achieved.

Every project has a design and monitoring framework that determines the main elements to be monitored and the basis for assessment of project progress. While this framework is required to be concise, it should provide a basis for elaborating indicators related to gender equality or women's empowerment in the more detailed operational monitoring strategy. The ideal situation would be to agree on such indicators as part of the standard monitoring template at the planning stage so that it becomes part of regular semiannual monitoring during loan review missions.

In addition to monitoring performance targets (e.g., targets related to participation in consultations or in economic activities), monitoring should also consider results, or whether achieving those performance targets made a difference (e.g., the extent to which the outcomes of community discussions reflected women's views, or whether the economic activities resulted in increased incomes of the women participants).

Tip Sheet on Questions and Design Features for Gender Mainstreaming

The tip sheet in Box 11 aims to aid with gender mainstreaming in projects in the sector. It suggests possible gender equality outcomes related to more general ADB project outcomes, provides examples of questions to consider in preparatory analyses to assist in formulating project strategies, and suggests possible gender-related design features that could be elaborated if applicable in the project context. Other assistance may be found in the resources listed in Box 12.

Box 11: Tip Sheet on Questions and Desig	n Features for Gender Mainstreaming in ADB	Projects: Urban Development
Illustrative outcomes of ADB projects and related possible gender equality outcomes*	Examples of questions to consider in analyses to formulate project strategies and gender-related design features	Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)
New or upgraded urban water supply, sanitation, and waste disposal Better reflection of women's priorities in selection of infrastructure investments More women-friendly design and placement of infrastructure and increased personal safety Decreased workloads for women to meet household water and sanitation needs	 What do women identify as their water and sanitation needs and priorities? How does this compare with men's? What are women's views on issues such as number and location of facilities (pumps, toilets); sharing vs. individual facilities; types of latrines; etc.? Are women's voices in community discussions and decision making about water supply and sanitation proportionate to their extensive household responsibilities for water and hygiene? 	 Ensure that consultations identify issues for women and men separately, to better identify and respond to needs. Give priority to women's views on priorities for type, design, and location of household or community water supply, toilet facilities, and waste collection.
Increased access by poor and slum households to water and sanitation services O More households with connections, decreasing demands on women's time and effort Better conditions for women's personal dignity and safety	 Has the approach to service delivery in poor and slum areas considered how to overcome obstacles that poor households could face, in particular, lack of formal title or tenure to their dwelling? What are the safety issues related to location of water points and design and location of latrines that could be addressed through project plans and designs? 	 Explore options to ensure that procedures for connection, billing, and payment do not exclude poor women and poor households. Consider the potential for policy reform to delink service provision to households from tenure arrangements. Consider options to enable households ineligible for connection to have services closer to dwellings. Where toilets are not private, design and locate them so that women can reach and use them safely.
New employment and income opportunities associated with new facilities and services o Equitable access to employment and income opportunities generated in management, delivery, or maintenance of new and upgraded services	What opportunities might arise for employment related to management of new facilities (e.g., monitoring of functioning, or metering and billing processes)? Or in maintenance of new facilities (e.g., cleaning, repair)?	 Encourage municipal authorities managing new facilities to target women for training and employment in community-based management and maintenance. Consider the potential to involve women's enterprises or self-help groups as franchisees for management tasks such as meter reading, billing, or consumer information, or for maintenance tasks.
Expanded livelihood options in slum areas o Improved opportunities, productivity, and incomes for women	 What types of work do women do in the project area (considering casual labor, domestic service, market trading, homebased production, etc.)? What are the specific constraints faced by women in slum areas in finding and keeping adequate jobs and incomes? Are these related to the context (e.g., transport options, time demands of inadequate water services, limited employment on offer, etc)? What are the constraints related to capacities (e.g., literacy, vocational or management skills, etc.)? If involvement of self-help groups is envisaged, what are their strengths and weaknesses? What are their livelihood activities? What is the potential to form viable affinity-based groups? 	 Work with municipal authorities to address constraints related to municipal services (transport, water, etc.) Partner with nongovernment organizations to develop programs for skills training, entrepreneurship training, and support. If self-help groups are part of the project livelihoods strategy, ensure that the project allocates the support necessary to form and/or sustain viable groups. Increase linkages of women and women's self-help groups to government programs supporting livelihoods (skill training, entrepreneurship support).

- Maintenance or rebuilding of social networks
- o Strengthened property rights of women
- How does displacement and resettlement affect women's livelihoods? Are there adequate and affordable transport services to reach places of employment? Can previous livelihoods in self-employment or trade be reestablished and be viable? What other services have been disrupted (e.g., child care, schooling)?

Examples of possible gender-related design features, measures, and activities that might be relevant (or adaptable)

- Work with municipal authorities to ensure that citizen participation plans respond to the identified constraints to women's participation (e.g., times and locations that allow women to attend, focus groups with women if there are difficulties in participating in mixed groups, supporting men to work constructively with women).
- Partner with women's advocacy organizations to provide training to elected officials (both women and men) about women's issues in the municipality.
- Facilitate linkages with government programs to train women councilors.
- Facilitate linkages and networking with elected women in other municipalities to exchange experience and strategies.
- Allocate resources and expertise to improving data systems so they generate sex-disaggregated data, and to improving analytic skills among planners for use of
- Assist partner state or municipal agencies to develop linkages with research and advocacy organizations concerned with urban women's issues (to provide training, feedback, research inputs, etc.).
- Set targets for women's participation at different skill levels that are meaningful and achievable (given labor supply, local
- Brief contractors on their responsibilities for equitable pay and working conditions.
- Develop a consultation strategy that addresses the barriers identified to ensure that women are reached (female-headed households, widows, married women,
- · Develop and fund a plan to facilitate reestablishment of livelihoods (responding to findings of needs analysis).
- Follow up government commitments to strengthen women's land rights in resettlement processes (equitable land allocations to women and direct transfers to women).

Related possible gender equality outcomes refer to changes that reduce gender gaps or otherwise benefit women.

Box 12: Useful Resources for Further Reading on Gender Equality in Urban Development

India-specific research and analyses on gender and urban development

- Baruah, Bipasha. 2010. Women and Landed Property in Urban India: Negotiating Closed Doors and Windows of Opportunity. UNU WIDER Working Paper No. 2010/56. www.wider.unu.edu/publications/working-papers/2010/en GB/wp2010-56
- Baruah, Bipasha. 2010. Women and Property in Urban India. Vancouver: UBC Press. Introductory chapter. www.ubcpress.ca/books/pdf/chapters/2010/WomenAndPropertyInUrbanIndia.pdf; order from www.ubcpress.ca/search/title book.asp?BookID=299173212
- Centre for Micro Finance. 2006. Reaching the Other 100 Million Poor in India: Case Studies in Urban Microfinance. ifmr.ac.in/cmf/casestudies.html
- ADB. 2007. India: Promoting Urban Social Development Through Self Help Groups is Karnataka. Evaluation Working Paper (Karnataka Urban Infrastructure Development Project). www.adb.org/publications/promoting-urban-social-development-through-self-help-groups-karnataka
- · Khosla, Renu. 2009. Addressing Gender Concerns in India's Urban Renewal Mission. UNDP India. www.undp.org/content/dam/india/docs/addressinggenderconcerns.pdf
- Patel, S. 2004. Tools and methods for empowerment developed by slum dwellers' federations in India. Participatory Learning and Action. Vol. 50. London, IIED. www.planotes.org/documents/plan 05013.pdf
- WIEGO. Women in India's Construction Industry. Brief analysis and lessons, with links to other resources: wiego.org/informal-economy/women-india%E2%80%99s-construction-industry
- Water and Sanitation Programme. 2009. Improving Water Supply and Sanitation Services for the Urban Poor in India. www.wsp.org/wsp/sites/wsp.org/files/publications/SA_GUIDANCENOTES.pdf

India-specific resources on safe cities for women

- Jagori and UN Women. 2011. Safe Cities Free of Violence Against Women and Girls Initiative. Report of the Baseline Survey Delhi 2010. http://jagori.org/wp-content/uploads/2011/03/Baseline-Survey_layout_for-Print_12_03_2011.pdf
- SAKHI Women's Resource Centre. Are Cities in Kerala Safe for Women? Research findings of the study conducted in Thiruvananthapuram and Kozhikode Cities, Kerala 2009–2011. With support of UN Women. www.unwomensouthasia.org/assets/safe_city_-detailed_report.pdf
- Tawa Lama-Rewal, Stéphanie. 2011. Women's Right to the City: from Safety to Citizenship. Urban Policies and the Right to the City in India. UNESCO. http://unesdoc.unesco.org/images/0021/002146/214602e.pdf
- Women in Cities International. Tackling Gender Exclusion: Experiences from the Gender Inclusive Cities Programme. Chapter on Delhi, pp. 21–34, plus lessons from experiences across four cities. http://jagori.org/gender-inclusive-cities-final-report/

Other research and analyses articles on gender and urban development

- Chant, Sylvia. 2007. Gender, cities and the millennium development goals in the global south. New Working Paper Series, 21. LSE, London, UK. eprints.lse.ac.uk/6367/
- Peters, Deike. 2011. Gender and Sustainable Urban Mobility. Prepared for the Global Report on Human Settlements 2013. www.toronto.ca/legdocs/mmis/2012/cc/bgrd/CC20 1 app3 24.pdf
- Equations. 2007. Women in Tourism: Realities, Dilemmas and Opportunities. www.equitabletourism.org/readfull.php?AID=419

Guides and case studies on gender and urban development

- World Bank. 2010. Making Urban Development Work for Women and Men: Tools for Task Teams. go.worldbank.org/UW1GDCX260
- Women Watch, 2009, Gender Equality and Sustainable Urbanisation: Fact Sheet, Brief overview, with links to further resources for each. www.un.org/womenwatch/feature/urban/factsheet.html#section1

ADB practical resources for project planning and management in the sector

- ADB. 2006. Gender, Law, and Policy in ADB Operations: A Tool Kit. www.adb.org/documents/gender-lawand-policy-adb-operations-tool-kit
- ADB. 2003. Gender Checklist: Resettlement. www.adb.org/themes/gender/checklists-toolkits
- Other ADB gender checklists and toolkits: currently available for a number of themes (including water supply and sanitation, urban development and housing) and others are planned (including one on public sector management); check at www.adb.org/themes/gender/checklists-toolkits
- ADB. 2009. Project Gender Action Plans: Lessons for Achieving Gender Equality and Poverty Reduction Results. www.adb.org/publications/project-gender-action-plans-lessons-achieving-gender-equality-andpoverty-reduction-res?ref=themes/gender/publications
- Further resources and guides on gender action plans: www.adb.org/themes/gender/project-action-plans

APPENDIX

Data Tables on Selected Indicators for India and States

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Table A1: Population Summary Data, Census 2011: Population by Sex, Sex Ratios, Population Density, Proportion Urban (India and Selected States)

		Total population			Density	Urban	
	Persons	Males	Females	(females per 1,000 males)	(per sq. km)	population (%)	
INDIA	1,210,193,422	623,724,248	586,469,174	940	382	31.2	
Assam	31,169,272	15,954,927	15,214,345	954	397	14.1	
Bihar	103,804,637	54,185,347	49,619,290	916	1,102	11.3	
Chhattisgarh	25,540,196	12,827,915	12,712,281	991	189	23.2	
Gujarat	60,383,628	31,482,282	28,901,346	918	308	42.6	
Haryana	25,353,081	13,505,130	11,847,951	877	573	34.8	
Himachal Pradesh	6,856,509	3,473,892	3,382,617	974	123	10.0	
Karnataka	61,130,704	31,057,742	30,072,962	968	319	38.6	
Kerala	33,387,677	16,021,290	17,366,387	1,084	859	47.7	
Madhya Pradesh	72,597,565	37,612,920	34,984,645	930	236	27.6	
Maharashtra	112,372,972	58,361,397	54,011,575	925	365	45.2	
Manipur	2,721,756	1,369,764	1,351,992	987	122	30.2	
Meghalaya	2,964,007	1,492,668	1,471,339	986	132	20.1	
Mizoram	1,091,014	552,339	538,675	975	52	51.5	
Nagaland	1,980,602	1,025,707	954,895	931	119	29.0	
NCT Delhi	16,753,235	8,976,410	7,776,825	866	11,297	97.5	
Odisha*	41,947,358	21,201,678	20,745,680	978	269	16.7	
Punjab	27,704,236	14,634,819	13,069,417	893	550	37.5	
Rajasthan	68,621,012	35,620,086	33,000,926	926	201	24.9	
Tamil Nadu	72,138,958	36,158,871	35,980,087	995	555	48.5	
Tripura	3,671,032	1,871,867	1,799,165	961	350	26.2	
Uttar Pradesh	199,581,477	104,596,415	94,985,062	908	828	22.3	
Uttarakhand	10,116,752	5,154,178	4,962,574	963	189	30.6	
West Bengal	91,347,736	46,927,389	44,420,347	947	1,029	31.9	

Source: Census of India 2011. Provisional Population Totals, Paper 1 of 2011 India Series 1, Table 1 (under "Data Products"): www.censusindia.gov.in/2011-prov-results/prov_results_paper1_india.html and Paper 2 of 2011 India Series 1, Statement 3: www.censusindia.gov.in/2011-prov-results/paper2/prov_results_paper2_india.html

^{*} In 2011, the Government of India approved the name change of the State of Orissa to Odisha. This document reflects this change. However, when reference is made to policies that predate the name change, the previous name Orissa is retained.

Table A2: Sex Ratios, Census 2001 and 2011: Total Population, Child Population Aged 0-6, Population Aged 7 and Above (India and Selected States)

		Sex ratio (females per 1,000 males)						
	Total po	pulation		lation in the oup 0–6	Population aged 7 and above			
	2001	2011	2001	2011	2001	2011		
INDIA	933	940	927	914	934	944		
Assam	935	954	965	957	929	953		
Bihar	919	916	942	933	914	912		
Chhattisgarh	989	991	975	964	992	995		
Gujarat	920	918	883	886	927	923		
Haryana	861	877	819	830	869	885		
Himachal Pradesh	968	974	896	906	980	983		
Jharkhand	941	947	965	943	935	948		
Karnataka	965	968	946	943	968	971		
Kerala	1058	1084	960	959	1,072	1,099		
Madhya Pradesh	919	930	932	912	916	933		
Maharashtra	922	925	913	883	924	931		
Manipur	974	987	957	934	977	995		
Meghalaya	972	986	973	970	971	989		
Mizoram	935	975	964	971	930	976		
Nagaland	900	931	964	944	890	929		
NCT Delhi	821	866	868	866	813	866		
Odisha	972	978	953	934	976	985		
Punjab	876	893	798	846	888	899		
Rajasthan	921	926	909	883	923	935		
Sikkim	875	889	963	944	861	883		
Uttar Pradesh	898	908	916	899	894	910		
Uttarakhand	962	963	908	886	973	975		
West Bengal	934	947	960	950	929	946		

Source: Census of India 2011. Provisional Population Totals, Paper 1 of 2011 India Series 1, Statement 13 under "Data $Products'' \ at: www.census india.gov.in/2011-prov-results/prov_results_paper1_india.html$

Table A3: Key Minorities: Scheduled Castes, Scheduled Tribes, Muslims: Proportion of Population, Sex Ratios, Census 2001 (India and Selected States)

	Schedul	ed castes		Schedu	led tribes		Muslims		
	Population	% of total	Sex ratio	Population	% of total	Sex ratio	Population	% of total	Sex ratio
INDIA	166,635,700	16.2		84,326,240	8.2		138,188,240	13.4	936
Andhra Pradesh	12,339,496	16.2	981	5,024,104	6.6	972	6,986,856	9.2	961
Assam	1,825,949	6.9	935	3,308,570	12.4	972	8,240,611	30.9	938
Bihar	13,048,608	15.7	923	758,351	0.9	929	13,722,048	16.5	943
Chhattisgarh	2,418,722	11.6	994	6,616,596	31.8	1013	409,615	2.0	943
Gujarat	3,592,715	7.1	925	7,481,160	14.8	974	4,592,854	9.1	937
Haryana	4,091,110	19.3	869	n.a.	n.a.	n.a.	1,222,916	5.8	870
Himachal Pradesh	1,502,170	24.7	968	244,587	4.0	996	119,512	2.0	806
Jharkhand	3,189,320	11.8	944	7,087,068	26.3	987	3,731,308	13.8	939
Karnataka	8,563,930	16.2	973	3,463,986	6.6	972	6,463,127	12.2	957
Kerala	3,123,941	9.8	1048	364,189	1.1	1021	7,863,842	24.7	1082
Madhya Pradesh	9,155,177	15.2	905	12,233,474	20.3	975	3,841,449	6.4	929
Maharashtra	9,881,656	10.2	952	8,577,276	8.9	973	10,270,485	10.6	889
Manipur	60,037	2.6	1006	741,141	32.3	980	190,939	8.8	973
Meghalaya	11,139	0.5	882	1,992,862	85.9	1000	99,169	4.3	891
Mizoram	272	0.0	283	839,310	94.5	984	10,099	1.1	271
Nagaland	n.a.	n.a.	n.a.	1,774,026	89.1	943	35,005	1.8	614
Odisha	6,082,063	16.5	979	8,145,081	22.1	1003	761,985	2.1	948
Rajasthan	9,694,462	17.2	913	7,097,706	12.6	944	4,788,227	8.5	929
Sikkim	27,165	5.0	967	111,405	20.6	957	7,693	1.4	439
Tamil Nadu	11,857,504	19.0	999	651,321	1.0	980	3,470,647	5.6	987
Tripura	555,724	17.4	962	993,426	31.1	970	254,442	8.0	945
Uttar Pradesh	35,148,377	21.1	900	107,963	0.1	934	3,740,158	18.5	918
Uttaranchal	1,517,186	17.9	943	256,129	3.0		1,012,141	11.9	875
West Bengal	18,452,555	23.0	949	4,406,794	5.5	982	20,240,543	25.2	933

n.a. = data not available, NCT = National Capital Territory.

Table uses census data from 2001 as 2011 data is not yet available on this subject (as of April 2012).

Source: Calculated from Census of India. 2001. Summary online tables. Series A, Scheduled Castes and Scheduled Tribes population, Total Population; and Series C, Population by religious communities. Available at $www.census india.gov.in/Census_Data_2001/Census_data_finder/Census_Data_Finder.aspx$

	2004–2005			2009–2010			Change from 2004–2005 to 2009–2010			Number in millions
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	2009– 2010
INDIA	41.8	25.7	37.2	33.8	20.9	29.8	-8.0	-4.8	-7.4	354.67
Assam	36.4	21.8	34.4	39.9	26.1	37.9	3.5	4.3	3.5	11.6
Bihar	55.7	43.7	54.4	55.3	39.4	53.5	-0.4	-4.3	-0.9	54.4
Chhattisgarh	55.1	28.4	49.4	56.1	23.8	48.7	1.0	-4.6	-0.7	12.2
Gujarat	39.1	20.1	31.6	26.7	17.9	23.0	-12.4	-2.2	-8.6	13.6
Himachal Pradesh	25	4.6	22.9	9.1	12.6	9.5	-15.9	8.0	-13.4	0.6
Jharkhand	51.6	23.8	45.3	41.6	31.1	39.1	-10.0	7.3	-6.2	12.6
Karnataka	37.5	25.9	33.3	26.1	19.6	23.6	-11.4	-6.3	- 9.7	14.2
Kerala	20.2	18.4	19.6	12	12.1	12	-8.2	-6.3	-7.6	3.9
Madhya Pradesh	53.6	35.1	48.6	42	22.9	36.7	-11.6	-12.2	-11.9	26.2
Maharashtra	47.9	25.6	38.2	29.5	18.3	24.5	-18.4	-7.3	-13.7	27.1
Manipur	39.3	34.5	37.9	47.4	46.4	47.1	8.1	11.9	9.2	1.3
Meghalaya	14	24.7	16.1	15.3	24.1	17.1	1.3	-0.6	1.0	0.5
Mizoram	23	7.9	15.4	31.1	11.5	21.1	8.1	3.6	5.7	0.2
Nagaland	10	4.3	8.8	19.3	25	20.9	9.3	20.7	12.1	0.4
NCT Delhi	15.6	12.9	13	7.7	14.4	14.2	-7.9	1.5	1.2	2.3
Odisha	60.8	37.6	57.2	39.2	25.9	37	-21.6	-11.7	-20.2	15.3
Punjab	22.1	18.7	20.9	14.6	18.1	15.9	-7.5	-0.6	-5.0	4.4
Rajasthan	35.8	29.7	34.4	26.4	19.9	24.8	-9.4	-9.8	-9.6	16.7
Tamil Nadu	37.5	19.7	29.4	21.2	12.8	17.1	-16.3	-6.9	-12.3	12.2
Tripura	44.5	22.5	40	19.8	10	17.4	-24.7	-12.5	-22.6	0.6
Uttar Pradesh	42.7	34.1	40.9	39.4	31.7	37.7	-3.3	-2.4	-3.2	73.8
Uttarakhand	35.1	26.2	32.7	14.9	25.2	18	-20.2	-1.0	-14.7	1.8
West Bengal	38.2	24.4	34.2	28.8	22	26.7	-9.4	-2.4	-7.5	24.0

Source: Government of India Planning Commission. 2012. *Press Note on Poverty Estimates, 2009–2010.* Tables 2 and 3. http://planningcommission.nic.in/news/press_pov1903.pdf

Table A5: Proportion of Households Headed by Women, 2005–2006 (India and Selected States)

	% households headed by women				
INDIA	14.4				
Andhra Pradesh	14.9				
Assam	13.4				
Bihar	25.0				
Chhattisgarh	11.6				
Gujarat	8.4				
Himachal Pradesh	18.6				
Karnataka	15.8				
Kerala	24.6				
Madhya Pradesh	7.5				
Maharashtra	12.4				
Manipur	17.3				
Meghalaya	22.1				
Mizoram	15.9				
NCT Delhi	9.5				
Odisha	13.0				
Punjab	10.9				
Rajasthan	8.7				
Sikkim	14.3				
Tamil Nadu	20.2				
Tripura	13.4				
Uttarakhand	15.7				
West Bengal	15.0				

Sources: Data for states: Kishor, S. and K. Gupta. 2009. Gender Equality and Women's Empowerment in India. National Family Health Survey (NFHS-3), India 2005–2006 (one of a series of subject reports). Appendix 6A, p. 59. www.rchiips.org/NFHS/sub_report.shtml or www.measuredhs.com/pubs/pub_details.cfm?ID=945

All-India figure: NFHS National Report. Vol. I., Table 2.2, p. 23: www.rchiips.org/NFHS/nfhs3_national_report.shtml (This also provides the following breakdown: 14.9% of rural households and 13.2% of urban households in India are headed by women.)

Table A6: Individual Landholdings Held by Women Compared with Men, 2005–2006 (India and Selected States)

	Women		М	en	То	tal	Women's holdings as:	
	Number	Area	Number	Area	Number	Area	% of all holdings	% of total area
INDIA	13,819,862	12,937,421	97,891,758	118,056,893	111,711,620	130994,314	12.4	9.9
Andhra Pradesh	2,644,920	2,608,792	9,384,050	11,803,799	120,28,970	14,412,591	22.0	18.1
Assam	49,312	64,412	2,687,036	2,701,236	2,736,348	2,765,648	1.8	2.3
Bihar	1,519,243	585,733	11,142,084	4,474,095	12,661,327	5,059,827	12.0	11.6
Chattisgarh	388,203	439,446	3,055,620	4,629,065	3,443,823	5,068,511	11.3	8.7
Gujarat	282,195	578,792	2,522,054	5,696,736	2,804,249	6,275,528	10.1	9.2
Himachal Pradesh	63,275	44,423	869,142	915,136	932,417	959,559	6.8	4.6
Karnataka	1,304,731	1,781,843	6,207,886	10,446,696	7,512,617	12,228,539	17.4	14.6
Kerala	1,326,049	218,945	5,507,399	1,217,449	6,833,448	1,436,394	19.4	15.2
Madhya Pradesh	536,028	831,550	6,936,550	14,125,653	7,472,578	14,957,203	7.2	5.6
Maharashtra	2,110,993	2,678,269	11,430,757	16,893,922	13,541,750	19,572,191	15.6	13.7
Manipur	4,605	3,835	145,845	168,055	150,450	171,890	3.1	2.2
Meghalaya	42,650	50,072	159,940	187,607	202,590	237,679	21.1	21.1
Mizoram	9,471	9,990	80,195	96,856	89,666	106,846	10.6	9.3
Nagaland	14,828	71,713	152,642	1,087,099	167,470	1,158,812	8.9	6.2
NCT Delhi	2,239	1,566	9,502	9,025	11,741	10,591	19.1	14.8
Odisha	118,771	123,990	4,223,394	4,840,146	4,342,165	4,964,136	2.7	2.5
Punjab	7,080	20,629	989,550	3,844,571	996,630	3,865,200	0.7	0.5
Rajasthan	274,504	802,363	4,269,630	13,227,420	4,544,134	14,029,783	6.0	5.7
Tripura	56,713	21,102	487,510	233,429	544,223	254,531	10.4	8.3
Uttar Pradesh	1,083,893	638,170	12,039,553	8,384,341	13,123,446	9,022,512	8.3	7.1
Uttaranchal	62,422	44,966	638,072	490,801	700,494	535,768	8.9	8.4
West Bengal	237,672	109,193	6,749,254	5,190,349	6,986,926	5,299,542	3.4	2.1

Note: Data is for cultivated holdings.

Source: Agricultural Census Database. All-India, 2005–2006. Number and area of operational holdings by size class/size group. http://agcensus.dacnet.nic.in/nationalT1sizeclass.aspx

Table A7: Women's Share of Wage Employment in the Nonagricultural Sector, 2004-2005 and 2009-2010 (India and Selected States)

	% of wage employment in the nonagricultural sector held by women							
		2004–2005		2009–2010				
	Rural	Urban	Total	Rural	Urban	Total		
INDIA	17.9	19.2	18.6	19.6	17.6	18.6		
Andhra Pradesh	24.3	22.7	23.5	27.0	19.3	23.1		
Assam	14.9	20.1	16.4	12.8	13.7	13.0		
Bihar	9.3	8.4	9.0	3.4	7.1	4.2		
Chhattisgarh	20.2	21.1	20.6	25.2	21.7	23.4		
Gujarat	18.6	17.0	17.7	13.4	19.7	17.6		
Haryana	7.9	13.8	10.3	11.5	15.3	13.4		
Himachal Pradesh	14.1	19.8	15.3	17.0	20.3	17.4		
Jharkhand	15.4	19.8	16.8	11.6	14.6	12.5		
Karnataka	22.3	20.1	20.9	25.2	21.2	22.6		
Kerala	27.4	27.7	27.5	29.1	29.7	29.3		
Madhya Pradesh	25.9	19.7	22.6	19.8	18.1	18.9		
Maharashtra	17.5	21.9	20.7	11.5	18.2	16.4		
Manipur	16.1	26.0	20.2	34.5	15.9	29.3		
Meghalaya	19.5	47.2	33.7	27.3	31.9	29.0		
Nagaland	15.1	22.8	19.1	24.3	8.7	17.5		
Odisha	20.6	21.7	21.0	18.6	14.0	17.2		
Rajasthan	16.7	14.5	15.9	37.0	14.0	30.0		
Sikkim	21.2	22.6	21.5	26.7	19.7	25.6		
Tamil Nadu	25.5	24.6	25.0	31.4	19.9	24.6		
Tripura	12	23.2	14.0	34.7	24.3	32.9		
Uttarakhand	10.6	19.6	14.8	11.9	14.9	13.1		
Uttar Pradesh	8.2	10.3	9.1	7.3	9.8	8.2		
West Bengal	18.7	16.9	17.7	22.8	17.0	20.2		

Based on National Sample Survey reports on employment and unemployment, 61st round for 2004–2005 and 66th Note: round for 2009–2010. Wage employment includes regular wage/salaried and casual labors in the nonagriculture sector according to usual status (usual principal activity and usual subsidiary economic activity considered together).

Source: Central Statistics Organization, Ministry of Statistics and Programme Implementation. 2011. Millennium Development Goals: India Country Report 2011. Appendix 3, Table 6A. www.undp.org/content/india/en/home/library/mdg/mdg _india_country_report_2011.html.

Table A8: Women's Average Wages Compared with Men's, 2009–2010 (India and Selected States)

	Regular	wage employ	ee age 15–59	(Rs/day)	Cası	ual laborers a	ge 15-59 (Rs/	day)
	Ru	ıral	Ur	ban	Ru	ral	Url	oan
	Female	F as % M	Female	F as % M	Female	F as% M	Female	F as % M
INDIA	155.87	62.6	308.79	81.9	68.94	67.9	76.73	58.2
Andhra Pradesh	93.84	47.3	248.05	72.6	75.71	65.6	92.85	59.8
Assam	95.00	38.3	380.92	77.6	74.87	79.3	82.01	70.9
Bihar	271.76	107.6	500.75	148.0	65.81	81.2	59.63	63.4
Chhattisgarh	139.68	47.0	266.09	53.2	65.49	92.5	71.65	56.3
Gujarat	178.08	95.2	221.35	72.2	70.99	81.3	66.32	55.7
Haryana	202.04	67.5	330.10	104.2	99.12	67.9	70.58	45.8
Himachal Pradesh	224.78	62.4	435.70	89.4	110.23	77.9	157.57	105.6
Jharkhand	163.57	60.0	215.50	43.8	82.17	79.3	74.41	68.6
Karnataka	112.60	57.7	293.37	70.7	62.77	64.8	67.88	55.2
Kerala	213.29	73.3	320.61	71.1	119.31	52.7	120.9	50.9
Madhya Pradesh	138.15	89.7	230.33	70.8	58.13	78.1	75.48	84.9
Maharashtra	164.51	56.0	391.71	89.2	58.22	67.7	57.64	47.4
Manipur	393.49	116.2	339.65	89.3	137.53	130.7	111.55	87.9
Meghalaya	253.43	79.4	319.43	91.3	78.8	65.0	86.88	58.8
Mizoram	344.73	96.6	416.84	109.0	96.87	63.1	122.37	75.2
Nagaland	284.22	79.0	386.09	80.8	59.68	38.1	n.a.	n.a.
Odisha	151.72	51.6	238.48	66.4	59.06	72.9	72.8	72.6
Punjab	136.72	52.0	374.49	109.4	91.8	68.8	85.68	60.1
Rajasthan	112.99	43.2	317.85	84.9	94.31	71.3	100.04	68.5
Sikkim	313.19	85.6	205.19	60.3	84.24	67.2		-
Uttar Pradesh	148.11	62.9	285.54	79.3	69.21	71.3	72.37	66.2
Uttarakhand	364.55	113.3	386.34	100.3	96.7	79.2	99.27	70.6
West Bengal	97.29	54.0	277.08	70.7	65.94	75.1	78.46	79.3

n.a. = data not available, F = female, M = male, MGNREGS = Mahatma Gandhi National Rural Employment Guarantee Scheme, NCT = National Capital Territory, Rs = Indian rupees.

Notes:

- 1. Added calculation of females as percentage of males and female earnings as a percentage of male earnings
- 2. Wage rates are provided for Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and other public works in statement 5.13.3, but sample sizes were small for several states. India-wide figures show that wage rates were much higher and more equitable for women in MGNREGS and other public works:

MGNREGS: average wage for rural females = Rs87.2, which was 95.9% of the male rate

Other public works: average wage for rural females = Rs86.11, which was 87.6% of the male rate

Source: National Sample Survey Organization (NSSO). 2011. Employment and Unemployment Situation in India 2009–2010.

NSSO Report No. 537 (NSS 66th round), Statements 5.11.1 (regular wage employees) and 5.13.3 (casual laborers).

Access through http://mospi.nic.in/mospi_new/admin/Login.aspx (log-in required, but only requires registration).

Table A9: Women's Access to Money and Credit, Freedom of Movement, 2005-2006 (India and Selected States)

	Women's acc	cess to money		ledge and use of t programs	% of women allowed to go to three specified
	% who have money they can decide how to use	% who have bank account that they themselves use	% who know of a microcredit program	% who have a loan from a microcredit program	places alone (to the market, to the health facility, and to places outside the village/ community)
INDIA	44.6	15.0	38.6	4.0	33.4
Assam	26.9	11.7	41.7	1.4	35.3
Bihar	58.6	8.2	27.0	1.0	25.2
Chhattisgarh	34.3	8.1	29.1	1.3	17.8
Gujarat	57.8	19.9	45.0	1.7	47.3
Himachal Prad	28.8	22.2	20.2	2.2	64.0
Jharkhand	60.2	14.4	25.5	1.9	36.6
Karnataka	60.3	22.1	55.0	9.2	30.6
Kerala	20.7	27.0	82.6	8.0	34.7
Madhya Pradesh	36.8	8.9	30.6	1.0	25.7
Maharashtra	40.8	20.3	35.5	2.1	40.2
Manipur	32.0	8.0	65.1	4.2	53.5
Meghalaya	35.3	16.9	22.8	1.5	28.1
Mizoram	19.5	8.1	7.8	0.7	75.4
Nagaland	36.5	7.4	23.8	1.3	25.4
NCT Delhi	43.2	30.3	29.0	1.0	36.6
Odisha	36.2	9.8	69.4	6.9	18.7
Punjab	26.5	14.6	40.8	0.9	39.0
Rajasthan	32.7	7.5	12.3	0.6	31.6
Tamil Nadu	25.4	15.8	79.0	13.4	54.2
Tripura	26.9	18.7	38.7	2.3	36.8
Uttar Pradesh	59.9	13.2	14.1	0.4	23.4
Uttaranchal	36.1	20.1	13.7	1.6	42.8
West Bengal	37.4	14.1	41.4	2.7	32.3

Note: Survey covers women 15–49 years of age.

Source: National Family Health Survey, 2005–2006 (NFHS-3). Chapter 14, Tables 14.4 and 14.14. www.rchiips.org/NFHS/chapters.shtml

Table A10: Women's Participation in Decision Making, 2005–2006 (India and Selected States)

	% wc	omen involved i	n decision making	on:	% wom particip	en who pate in:	% men who sa should have fir or jointly with	nal say alone
	Own health care	Making major household purchases	Making purchases for daily household needs	Visits to family or relatives	All four decisions	None of the four decisions	All of five major decisions*	None of five major decisions*
INDIA	62.2	52.9	60.1	60.5	36.7	20.5	49.7	3.6
Andhra Pradesh	61.8	52.7	60.4	65.5	40.4	24.3	39.8	7.8
Assam	80.0	72.0	70.0	80.9	60.9	11.6	61.1	3.0
Bihar	53.4	50.6	58.4	54.4	32.7	27.2	41.6	8.1
Chhattisgarh	47.9	50.9	63.4	61.2	26.8	18.4	59.3	0.2
Gujarat	63.2	53.3	66.2	70.4	36.6	13.1	55.5	3.0
Haryana	71.7	54.7	60.8	69.2	41.7	13.2	81.0	1.0
Himachal Pradesh	66.5	56.5	61.5	58.3	39.2	17.4	73.6	1.4
Karnataka	53.3	50.5	56.4	55.9	35.2	26.9	54.0	2.9
Kerala	75.3	61.8	65.9	78.4	47.2	10.8	37.4	1.6
Madhya Pradesh	51.7	48.3	54.9	50.2	29.4	27.1	41.8	3.8
Maharashtra	67.8	61.2	70.6	74.2	45.4	12.7	55.2	6.0
Manipur	87.4	81.4	85.2	86.0	69.4	3.4	41.6	1.1
Meghalaya	87.5	82.5	84.1	87.3	77.3	9.3	69.8	10.5
Mizoram	91.9	79.6	86.0	89.5	70.4	2.3	44.9	4.6
Nagaland	90.7	82.1	87.2	93.7	73.1	1.4	56.7	0.4
NCT Delhi	74.2	67.3	75.7	74.9	52.0	10.4	74.4	1.2
Odisha	64.7	57.8	61.3	63.6	41.8	17.1	42.9	2.2
Rajasthan	51.9	40.5	49.2	44.0	22.8	31.4	42.8	0.4
Sikkim	79.5	76.6	78.3	83.7	58.7	5.5	75.7	0.4
Tamil Nadu	73.2	63.3	77.8	76.7	48.8	8.2	44.7	1.5
Uttar Pradesh	64.2	52.9	55.6	50.3	33.7	22.0	54.2	1.1
Uttaranchal	60.8	49.4	56.4	56.0	36.0	24.6	67.3	2.1
West Bengal	59.6	37.5	46.9	48.4	23.9	25.7	31.1	7.0

Note: Survey covers currently married women ages 15–49, currently married men 15–49.

Source: National Family Health Survey, 2005-2006 (NFHS-3). Chapter 14, Tables 14.10. www.rchiips.org/NFHS/chapters.shtml

^{*} The five major decisions referred to in the last two columns are decisions about (i) major household purchases, (ii) purchases for daily household needs, (iii) visits to the wife's family or relatives, (iv) what to do with the money the wife earns, and (v) how many children to have.

Table A11: Women's Access to Media, 2005–2006 (India and Selected States)

		% w	omen aged 15–4	19		% men 15-49
	Reads a newspaper or magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a month	Visits the cinema/ theater at least once a month	Women who are not regularly exposed to any media	Men who are not regularly exposed to any media
INDIA	22.9	55.0	28.8	5.6	34.6	18.3
Assam	19.8	44.4	35.4	2.2	38.6	22.1
Bihar	10.8	23.1	27.7	2.5	58.2	27.3
Chhattisgarh	11.7	44.8	18.4	2.2	47.4	30.2
Gujarat	31.2	62.0	23.4	6.4	28.4	15.3
Himachal Pradesh	32.5	72.4	34.5	2.4	21.3	7.0
Jharkhand	9.9	31.8	12.6	3.5	60.0	40.2
Karnataka	27.2	69.5	32.4	10.4	22.1	7.8
Kerala	59.6	73.0	41.5	8.1	9.5	1.7
Madhya Pradesh	17.7	43.0	24.5	2.8	46.9	30.8
Maharashtra	39.2	69.4	33.7	7.0	23.6	10.5
Meghalaya	30.3	49.3	19.2	1.8	40.1	32.2
Mizoram	66.7	79.1	36.7	1.8	12.6	8.2
Nagaland	27.0	53.3	21.9	1.1	37.3	24.4
NCT Delhi	47.0	89.5	47.8	13.8	7.6	4.8
Odisha	11.5	52.1	22.3	2.8	38.8	24.8
Punjab	31.9	80.4	19.0	4.8	15.7	9.5
Rajasthan	18.2	40.4	13.9	2.2	53.1	26.4
Sikkim	18.1	67.0	13.7	13.0	26.0	21.0
Tamil Nadu	27.5	81.4	46.8	7.9	11.2	5.1
Tripura	18.8	67.2	23.8	1.8	25.7	18.5
Uttar Pradesh	14.3	40.1	29.7	1.6	47.5	23.1
Uttaranchal	26.1	66.3	20.8	3.7	26.8	16.6
West Bengal	18.5	51.6	33.7	5.7	36.0	22.3

Source: National Family Health Survey, 2005–2006 (NFHS-3). Chapter 3, Tables 3.6.1 and 3.6.2. www.rchiips.org/NFHS/chapters.shtml

Table A12: Adult Literacy by Sex, 2005–2006 (India and Selected States)

	% women 15-49	% men 15–49	Gap men- women
INDIA	55.1	78.1	23.0
Andhra Pradesh	49.6	71.7	22.1
Assam	63.0	76.4	13.4
Bihar	37.0	70.4	33.4
Chhattisgarh	44.9	74.1	29.2
Gujarat	63.8	83.0	19.2
Haryana	60.4	83.4	23.0
Himachal Pradesh	79.5	94.0	14.5
Jharkhand	37.1	68.5	31.4
Karnataka	59.7	75.3	15.6
Kerala	93.0	95.5	2.5
Madhya Pradesh	44.4	73.5	29.1
Maharashtra	70.3	88.3	18.0
Manipur	72.6	91.5	18.9
Mizoram	94.0	93.2	-0.8
Nagaland	75.2	83.1	7.9
Odisha	52.2	74.1	21.9
Punjab	68.7	82.9	14.2
Rajasthan	36.2	73.9	37.7
Sikkim	72.3	83.1	10.8
Tripura	68.5	77.1	8.6
Uttar Pradesh	44.8	76.2	31.4
Uttarakhand	64.6	86.3	21.7
West Bengal	58.8	73.9	15.1
Key minorities, all India			
Scheduled Castes	43.8	72.4	28.6
Scheduled Tribes	33.4	59.9	26.5
Muslim	49.5	70.2	20.7

Notes:

- 1. Literacy data from the National Family Health Survey (NFHS-3) was used rather than more recent information from the 2011 census for these reasons: (i) NFHS figures are for adult literacy age 15+, while census is for age 7+, so NFHS information is more relevant to the beneficiary group of ADB; (ii) NFHS information includes some comparable information about scheduled castes, scheduled tribes, and Muslims, even if only at the all-India level.
- 2. "Literate" refers to persons age 15–49 who can read a whole sentence or part of a sentence, who have completed standard 6 or higher, or who are assumed to be literate.

Source: National Family Health Survey, 2005–2006 (NFHS-3). Chapter 3, Tables 3.4.1 and 3.4.2 for state level, 3.3.1 and 3.3.2 for scheduled castes/scheduled tribes/Muslims. www.rchiips.org/NFHS/chapters.shtml

Table A13: Gross Enrollment Ratio by Sex, Late Primary, Secondary, and Higher Secondary, 2009–2010 (India and Selected States)

	Classes	VI-VIII	Classe	s IX–X	Classes	XI–XII
	Boys	Girls	Boys	Girls	Boys	Girls
INDIA—all students	84.5	78.3	66.7	58.5	38.3	33.3
Scheduled castes — all India	90.5	86.6	71.2	63.5	37.4	33.5
Scheduled tribes —all India	87.8	78.8	54.2	44.2	31.4	22.3
Assam	67.3	70.3	51.9	46.8	13.6	12.6
Bihar	60.8	49.7	39.9	30.0	17.4	13.3
Chhattisgarh	87.2	81.1	55.6	47.3	32.9	25.5
Gujarat	90.5	82.0	67.5	52.3	38.4	32.6
Haryana	77.3	80.6	60.4	71.3	59.7	59.8
Himachal Pradesh	114.6	112.1	85.7	93.0	68.6	70.1
Jharkhand	71.2	49.7	33.1	24.0	7.4	5.6
Karnataka	90.9	87.7	73.0	71.0	41.6	43.4
Kerala	107.1	102.4	98.2	96.8	45.6	55.3
Madhya Pradesh	106.1	97.4	75.9	50.6	47.2	31.1
Maharashtra	91.5	86.9	75.9	69.6	59.6	50.6
Manipur	107.2	99.2	78.0	79.1	36.2	27.0
Meghalaya	80.5	91.4	46.4	52.8	10.1	12.5
Mizoram	100.8	95.0	73.3	75.3	38.4	37.7
Nagaland	59.1	60.7	27.3	29.6	18.3	16.7
NCT Delhi	110.8	107.0	82.0	79.7	59.1	58.3
Odisha	85.4	82.0	58.0	53.2	25.0	20.4
Punjab	93.6	89.7	54.0	56.2	42.0	44.6
Rajasthan	95.1	72.8	69.4	45.4	43.1	26.4
Sikkim	70.9	86.6	44.8	50.4	27.6	29.6
Tamil	114.3	112.1	80.6	83.8	44.8	54.7
Uttar	74.3	65.9	79.4	64.7	36.5	30.9
Uttarakhand	101.0	107.9	87.3	80.1	57.5	54.1
West Bengal	80.3	87.0	52.9	57.1	30.4	25.0

Notes:

^{1.} Gross enrollment ratio = the number of pupils enrolled in a given level of education, regardless of age, as a percentage of the population in the expected age group for the same level of education.

^{2.} Table D-II provides the level of detail for scheduled castes and tribes, even though only the all-India figures are provided here. Source: Ministry of Human Resource Development. 2011. Statistics of School Education 2009–2010 (as of 30 September 2009, Provisional). Tables D-I and D-II. http://mhrd.gov.in/statistics_data?tid_2=156

	Girls married	below age 18	Boys married l	pelow age 21
	Rural	Urban	Rural	Urban
INDIA	26.9	11.0	28.4	12.6
Andhra Pradesh	33.1	13.8	23.4	7.9
Assam	22.3	7.7	11.8	6.5
Bihar	48.2	26.7	45.2	19.1
Chhattisgarh	23.0	12.3	32.3	14.0
Gujarat	22.4	8.5	40.8	17.3
Haryana	18.5	8.2	30.7	17.3
Himachal Pradesh	1.7	0.0	6.2	4.8
Jharkhand	39.6	14.6	35.3	13.3
Karnataka	25.7	14.3	12.5	8.0
Kerala	7.5	4.3	1.4	0.7
Madhya Pradesh	34.3	13.1	46.9	19.3
Maharashtra	20.0	11.4	14.4	17.2
Meghalaya	16.7	4.7	30.6	12.3
Mizoram	11.9	6.3	23.7	16.4
NCT Delhi	14.0	5.4	22.7	11.3
Odisha	20.8	8.8	14.6	4.1
Punjab	6.4	4.6	17.7	10.4
Rajasthan	47.0	18.6	53.7	27.6
Sikkim	16.4	5.0	21.4	14.6
Tamil Nadu	11.0	6.2	5.8	3.4
Tripura	23.0	9.6	18.9	1.1
Uttarakhand	6.4	2.3	9.8	5.3
West Bengal	45.7	20.7	23.9	12.7

Source: District Level Household and Facility Survey, 2007–2008, generally known as DLHS-3. www.rchiips.org/PRCH-3.html. The data for this table was from publication Key Indicators, India, States and Union Territories, from the section on marriage on the first page of the section on each state (rural–urban breakdown not available by state in the national report). Data was based on marriages that occurred in the reference period 1 January 2004 to the survey date.

Table A15: Attitudes Toward Wife-Beating, 2005–2006 (India and Selected States)

				% of w	omen and	men, age 15	-49		
					Women				Men
	% wome	en who agre	e that a h	usband is j if:	ustified in h	itting or beat	ing his wife	% women	% men
	She goes out without telling him	She neglects the house or children	She argues with him	She refuses to have sex with him	She doesn't cook properly	He suspects she is unfaithful	She shows disrespect for inlaws	who agree with at least one specified reason	who agree with at least one specified reason
INDIA	29.0	34.7	30.3	14.1	20.4	25.1	40.6	54.4	51.0
Andhra Pradesh	53.9	61.6	46.0	28.5	33.1	47.2	60.8	75.3	72.9
Assam	23.4	31.4	24.9	11.5	11.0	16.4	32.4	44.6	25.4
Bihar	22.9	21.4	32.2	12.2	17.9	26.6	32.0	56.9	57.4
Chhattisgarh	11.2	14.7	15.9	5.8	8.5	12.0	23.2	33.0	37.0
Gujarat	31.0	38.1	37.1	18.9	26.8	30.3	40.5	57.2	74.1
Himachal Pradesh	11.2	16.5	13.3	3.5	9.3	11.6	19.7	28.3	28.3
Jharkhand	23.8	30.0	29.5	13.5	18.4	27.6	31.6	50.4	33.0
Karnataka	40.9	49.3	34.9	25.1	27.2	34.0	52.2	65.7	62.7
Kerala	35.7	44.2	25.7	14.0	20.3	22.6	44.5	65.7	54.2
Madhya Pradesh	21.0	23.8	26.2	11.2	18.2	27.2	40.3	51.4	59.1
Maharashtra	19.6	34.3	25.4	12.7	18.7	15.6	40.7	50.9	48.4
Manipur	57.4	71.7	32.6	15.6	23.6	36.2	75.5	89.7	85.0
Meghalaya	31.0	42.0	26.6	12.7	24.9	32.1	37.5	53.2	63.5
Mizoram	21.9	64.1	36.5	13.6	1.7	61.7	66.6	83.0	82.6
Nagaland	41.8	64.1	42.4	18.4	21.0	52.9	55.1	78.9	71.2
NCT Delhi	12.9	13.5	14.4	4.2	7.8	11.0	24.8	32.3	27.7
Odisha	38.1	40.4	39.8	13.7	22.6	35.9	50.4	61.2	41.6
Rajasthan	32.5	31.3	34.2	13.1	24.3	24.8	44.2	57.6	63.9
Sikkim	39.2	54.0	40.3	10.4	16.8	37.2	58.2	75.7	76.2
Tamil Nadu	43.0	54.2	38.0	12.5	24.9	12.1	42.7	65.5	52.0
Uttar Pradesh	24.8	27.7	26.0	8.5	17.6	22.7	36.0	47.0	44.2
Uttaranchal	26.7	33.0	28.3	13.0	22.4	30.6	38.6	49.8	23.4
West Bengal	18.6	24.8	21.9	10.9	13.1	14.6	33.6	42.2	38.8

Source: National Family Health Survey, 2005–2006 (NFHS-3). Chapter 3, Table 14.16. www.rchiips.org/NFHS/chapters.shtml

Table A16: Maternal Mortality Ratios 1997–1998 to 2007–2009 (India and Major States)

	MMR 1997–1998	MMR 1999–2001	MMR 2001–2003	MMR 2004–2006	MMR 2007–2009	% Reduction 1997–1998 to 2007– 2009
India*	398	327	301	254	212	46.7%
Assam	568	398	490	480	390	31.3%
Bihar/Jharkhand	531	400	371	312	261	50.8%
Madhya Pradesh/Chhattisgarh	441	407	379	335	269	39.0
Odisha	346	424	358	303	258	25.4
Rajasthan	508	501	445	388	318	37.4
Uttar Pradesh/Uttaranchal	606	539	517	440	359	40.8
Andhra Pradesh	197	220	195	154	134	32.0
Karnataka	245	266	228	213	178	27.3
Kerala	150	149	110	95	81	46.0
Tamil Nadu	131	167	134	111	97	26.0
Gujarat	**	202	172	160	148	**
Haryana	136	176	162	186	153	**
Maharashtra	166	169	149	130	104	37.3
Punjab	280	177	178	192	172	38.6
West Bengal	303	218	194	141	145	52.1
Others	**	276	235	206	160	**

Also includes states other than major states for which separate data is provided below.

- 1. MMR = maternal mortality ratio, which is defined as the number of maternal deaths per 100,000 live births (women age 15-49) (vs. maternal mortality <u>rate</u> = number of maternal deaths to women age 15-49 per 100,000 women in this age category). For further information on the technical difference between MM ratio and MM rate, see explanation by WHO (Maternal Mortality in 2005. www.who.int/whosis/mme_2005.pdf) In short, MM ratio reflects the risk of maternal death relative to the number of live births, while MM rate reflects not only the risk of maternal death per pregnancy or per birth (live birth or stillbirth) but also the level of fertility in the population.
- 2. India's Millennium Development Goal target is to reduce maternal mortality to 109 by 2015. Three states had achieved this target in the most recent time period for which data is available (2007-2009): Kerala, Tamil Nadu, and Maharashtra. (Millennium Development Goal Target 5: Reduce MMR by three-fourths from 1990 to 2015.)

Sources: Data for 2004/06 and 2007/09: Sample Registration System (SRS), Office of the Registrar General, India. 2011. A Presentation on Maternal & Child Mortality and Total Fertility Rates (07-07-2011). www.censusindia.gov.in/2011common/vitalstatistics.html. See also on the same webpage: SRS, Office of the Registrar General. 2011. Special Bulletin on Maternal Mortality in India 2007-09. www.censusindia.gov.in/2011-common/vitalstatistics.html

Data for earlier years: Central Statistical Organization, Ministry of Statistics and Programme Implementation. Millennium Development Goals—India Country Report 2009, Mid Term Statistical Appraisal. www.searo.who.int/LinkFiles/MDG Reports India MDG 2009 Part1.pdf provides maternal mortality ratios for major states (not available for all states, as sample size not sufficient in smaller states to give robust state-level estimates).

Data not provided or not calculated because of doubts about figures.

Table A17: Infant Mortality Rates by Sex, 2009 (India and Selected States)

	Total			Rural			Urban	
Total	Male	Female	Total	Male	Female	Total	Male	Female
50	49	52	55	54	56	34	32	35
49	48	50	54	53	55	35	34	34
61	58	64	64	61	67	37	35	38
52	52	52	53	53	53	40	39	41
54	50	57	55	51	58	47	43	50
48	47	48	55	55	56	33	32	34
44	42	46	46	44	48	30	27	33
41	41	42	47	46	47	31	30	32
12	10	13	12	10	14	11	10	11
67	66	68	72	71	72	45	44	47
31	28	33	37	35	39	22	19	25
65	65	66	68	67	68	46	44	48
38	37	39	42	41	43	31	29	33
59	58	61	65	64	67	35	31	39
28	27	29	30	29	30	26	24	27
33	33	33	34	34	35	27	26	28
Total	Male	Female						
45	44	45						
59	59	59						
36	33	38						
26	23	28						
	50 49 61 52 54 48 44 41 12 67 31 65 38 59 28 33 Total 45 59 36	Total Male 50 49 49 48 61 58 52 52 54 50 48 47 44 42 41 41 12 10 67 66 31 28 65 65 38 37 59 58 28 27 33 33 Total Male 45 44 59 59 36 33	Total Male Female 50 49 52 49 48 50 61 58 64 52 52 52 54 50 57 48 47 48 44 42 46 41 41 42 12 10 13 67 66 68 31 28 33 65 65 66 38 37 39 59 58 61 28 27 29 33 33 33 Total Male Female 45 44 45 59 59 59 36 33 38	Total Male Female Total 50 49 52 55 49 48 50 54 61 58 64 64 52 52 52 53 54 50 57 55 48 47 48 55 44 42 46 46 41 41 42 47 12 10 13 12 67 66 68 72 31 28 33 37 65 65 66 68 38 37 39 42 59 58 61 65 28 27 29 30 33 33 33 34 Total Male Female 45 44 45 59 59 59 36 33 38	Total Male Female Total Male 50 49 52 55 54 49 48 50 54 53 61 58 64 64 61 52 52 52 53 53 54 50 57 55 51 48 47 48 55 55 44 42 46 46 44 41 41 42 47 46 12 10 13 12 10 67 66 68 72 71 31 28 33 37 35 65 65 66 68 67 38 37 39 42 41 59 58 61 65 64 28 27 29 30 29 33 33 34 34 Total<	Total Male Female Total Male Female 50 49 52 55 54 56 49 48 50 54 53 55 61 58 64 64 61 67 52 52 52 53 53 53 54 50 57 55 51 58 48 47 48 55 55 56 44 42 46 46 44 48 41 41 42 47 46 47 12 10 13 12 10 14 67 66 68 72 71 72 31 28 33 37 35 39 65 65 66 68 67 68 38 37 39 42 41 43 59 58 61 <td< td=""><td>Total Male Female Total Male Female Total 50 49 52 55 54 56 34 49 48 50 54 53 55 35 61 58 64 64 61 67 37 52 52 52 53 53 53 40 54 50 57 55 51 58 47 48 47 48 55 55 56 33 44 42 46 46 44 48 30 41 41 42 47 46 47 31 12 10 13 12 10 14 11 67 66 68 72 71 72 45 31 28 33 37 35 39 22 65 65 66 68 67</td><td>Total Male Female Total Male Female Total Male 50 49 52 55 54 56 34 32 49 48 50 54 53 55 35 34 61 58 64 64 61 67 37 35 52 52 52 53 53 53 40 39 54 50 57 55 51 58 47 43 48 47 48 55 55 56 33 32 44 42 46 46 44 48 30 27 41 41 42 47 46 47 31 30 12 10 13 12 10 14 11 10 67 66 68 72 71 72 45 44 38 37</td></td<>	Total Male Female Total Male Female Total 50 49 52 55 54 56 34 49 48 50 54 53 55 35 61 58 64 64 61 67 37 52 52 52 53 53 53 40 54 50 57 55 51 58 47 48 47 48 55 55 56 33 44 42 46 46 44 48 30 41 41 42 47 46 47 31 12 10 13 12 10 14 11 67 66 68 72 71 72 45 31 28 33 37 35 39 22 65 65 66 68 67	Total Male Female Total Male Female Total Male 50 49 52 55 54 56 34 32 49 48 50 54 53 55 35 34 61 58 64 64 61 67 37 35 52 52 52 53 53 53 40 39 54 50 57 55 51 58 47 43 48 47 48 55 55 56 33 32 44 42 46 46 44 48 30 27 41 41 42 47 46 47 31 30 12 10 13 12 10 14 11 10 67 66 68 72 71 72 45 44 38 37

Notes:

Tripura

Uttarakhand

1. Infant mortality rate measures number of infants (< 1 year) deaths per 1,000 live births.

30

42

33

41

41

2. Infant mortality rates for smaller states and union territories are based on the 3-year period 2007–2009. On account of wide year-to-year fluctuations due to inadequate sample size, the infant mortality rate by sex is not given separately for rural and urban areas.

Source: Sample Registration System (SRS), Office of the Registrar General. SRS Bulletin. 45 (1). (January 2011), Table 4. $www.census india.gov.in/vital_statistics/SRS_Bulletins/Bulletins.html$

	Human Dev Index (•	Gender and D	•	Gender Empowerment Measure (GEM)		
	Value	Rank	Value	Rank	Value	Rank	
INDIA	.605		.590		.497		
Andhra Pradesh	.585	28	.574	27	.547	5	
Assam	.595	26	.585	26	.417	28	
Bihar	.507	35	.479	35	.379	31	
Chhattisgarh	.549	30	.542	30	.464	19	
Gujarat	.634	23	.624	22	.485	15	
Himachal Pradesh	.667	15	.664	13	.540	6	
Jharkhand	.574	29	.558	29	.435	26	
Karnataka	.622	25	.611	25	.526	8	
Kerala	.764	2	.745	3	.525	9	
Madhya Pradesh	.529	33	.516	33	.463	21	
Maharashtra	.689	11	.677	10	.516	10	
Manipur	.702	7	.699	6	.418	27	
Meghalaya	.629	24	.624	23	.346	34	
Mizoram	.688	12	.687	9	.374	32	
NCT Delhi	.740	4	.701	5	.564	1	
Odisha	.537	32	.524	32	.393	29	
Rajasthan	.541	31	.526	31	.422	24	
Sikkim	.665	17	.659	15	.447	23	
Tamil Nadu	.666	16	.655	16	.498	14	
Tripura	.663	18	.626	21	.382	30	
Uttar Pradesh	.528	34	.509	34	.452	22	
Uttarakhand	.652	19	.647	17	.466	18	
West Bengal	.642	22	.622	24	.435	25	

Notes: Components of the indexes are as follows:

Human Development Index, three component elements:

- long and healthy life (infant mortality rate, life expectancy at age 1)
- knowledge (7+ literacy, mean years of education for 15+age group)
- decent standard of living (earned income)

Gender and Development Index, based on same ingredients, but adjusted to reflect gender inequality

Gender Empowerment Measure, based on three component elements:

- political participation and decision-making power
- economic participation and decision-making power
- power over economic resources

Source: Ministry of Women and Child Development. 2009. Gendering Human Development Indices: Recasting the Gender Development Index and Gender Empowerment Measure for India. Summary Report. (See also full report, parts I–IV). http://wcd.nic.in (under Publications/Reports).

India: Gender Equality Diagnostic of Selected Sectors

Concerns about persisting gender-based exclusion from the benefits of development have encouraged the Government of India and its partner institutions and donor agencies to mainstream gender in its policies, programs, and projects. This publication provides a gender analysis of six priority sectors—agriculture, energy, education, finance and public sector management, transport, and urban development—and suggests possible further actions to strengthen ADB approaches in these sectors. It is expected to provide the basis for increased attention to gender issues and opportunities in developing the India partnership strategy for 2013–2017.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.7 billion people who live on less than \$2 a day, with 828 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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