INNOVATIONS AND GOOD PRACTICES

IN POVERTY AND SOCIAL IMPACT ANALYSIS

2010-16

Experiences from the Poverty and Social Impact Analysis Multi-Donor Trust-Fund

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ABBREVIATIONS

ALMP	active labor market program
BDH	Human Development Voucher (Ecuador)
CCT	conditional cash transfer
CGE	computable generalized equilibrium
CEQ	Commitment to Equity (project)
CPI	consumer price index
CRA	Water Regulatory Council (Mozambique)
CWS	coffee washing stations (Burundi)
DCE	discrete choice experiment
DH	district heating
DPF	Development Policy Financing (World Bank)
DPL	Development Policy Loan (World Bank)
DPO	development policy operation
DRC	Democratic Republic of Congo
DSW	Department of Social Welfare (Fiji)
EMIS	education management information system
EMS	upper-secondary education (Mexico)
ESW	economic and sector work (World Bank)
FAP	Family Assistance Program (Fiji)
FBoS	Fiji Bureau of Statistics
FUNPI	Fund to Promote the Industrialization of Agricultural Products (Guinea-Bissau)
GDP	gross domestic product
GHG	greenhouse gas
GMI	Guaranteed Minimum Income (Romania)
GNH	Gross National Happiness (Bhutan)
HBS	Household Budget Survey (Romania)
HIES	Household Income and Expenditure Survey (Fiji)
KEMSA	Kenya Essential Medical Supplies Agency
LCA	Latent Class Analysis
LPG	liquefied petroleum gas
MAS	Modernization of the Water and Sanitation [Sector Program] (Mexico)
MCA	Movement against Dropout (Mexico)
MCDS	Coordinating Ministry for Social Development (Ecuador)
MDTF	Multi-Donor Trust Fund
MERP	Moldova Education Reform Project
MoE	Ministry of Education (Moldova)
MSIY	Minimum Social Insertion Income (Romania)
NEEDT	neither in employment, education, disability, nor training
NGO	nongovernmental organization
NRRDA	National Rural Roads Development Agency (India)
PD	positive deviance
PMGSY	Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Road Scheme) (India)
PSIA	Poverty and Social Impact Analysis
RCT	randomized controlled trial
RGoB	Royal Government of Bhutan
SEA	strategic environmental assessment
SEMS	Subsecretariat of Upper Secondary Education (Mexico)
SES	socioemotional skills
SGBV	sexual and gender-based violence
SNB	National Secondary Education System (Mexico)
SPL	social protection and labor
TTL	task team leader
UHC	universal health coverage
VAT	value added tax

Chapter 1: Overview

Poverty and Social Impact Analysis (PSIA) is an analytical approach used to assess the distributional and social impacts of policy reforms on various stakeholder groups. PSIA can ensure that decision makers have a strong analytical and evidence-based foundation as they make a policy choice, especially if conducted before or during the reform process.[1] The PSIA approach was formally launched in 2002 to fill and identify gaps in the analysis of policy reforms supported by the World Bank and the International Monetary Fund. Originating in support of Development Policy Financing (DPF),[2] currently PSIAs are conducted in a number of contexts, ranging from the design of Bank operations to the design of country policies or programs not financed by the Bank.

Specifically, PSIAs aim to support and improve the design of policies and programs. They (a) provide empirical evidence on the poverty, social, and distributional effects of reforms; (b) suggest changes to the proposed policy, including ways to mitigate any adverse impacts; and (c) identify alternative policy options to improve poverty reduction and distributional outcomes. In doing so, PSIAs enhance aid and policy effectiveness and contribute to national dialogue and increased transparency surrounding policy reforms.

The PSIA MDTF has funded more than 200 grants in over 80 countries across the globe.

The PSIA Multi-Donor Trust Fund (MDTF) was established in 2010 with contributions from Norway, Germany, the United Kingdom, the Netherlands, and Switzerland, and it is coming to a close in September 2016.[3] In the six years of its existence, the PSIA MDTF has funded more than 200 grants in over 80 countries across the globe.[4] PSIA outputs have taken different forms such as technical assistance, policy notes, inputs into larger pieces of analytical work, or standalone products. The analytical work is usually closely linked to the ongoing policy dialogue and complemented by a range of activities that aim to build partnerships, enhance national capacity, and raise awareness.

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1 The term "policy reform" is used broadly to describe changes of policies, programs and/or government interventions. These changes may or may not be included in laws or regulations. PSIA considers both the design and the implementation of these reforms.

2 "The World Bank's policy for Development Policy Financing [DPF] was updated in July 2014 to provide a unified framework for all development policy operations, leaving room for customizing content and design to country circumstances. DPF is delivered in the form of loans, credits, or guarantees to support a government's medium-term program of policy reforms" (World Bank 2016b, 33).

3 Contributions were made by the Ministry of Foreign Affairs of Norway, the German Agency for International Cooperation (GIZ), the U.K. Department for International Development (DFID), the Dutch Ministry for Foreign Trade and Development Cooperation, and the Swiss Agency for Development and Cooperation (SDC).

4 Given the versatility of PSIA, it is difficult to assess the entire universe of PSIA-type analysis that has been conducted at the World Bank. It is worth noting that a large number of PSIAs not funded by the MDTF have been conducted both before 2010 and during the MDTF period (2010–16).

As part of the MDTF's commitment to share knowledge in this area, the MDTF Secretariat embarked on a systematic review of PSIA outputs to learn from the diverse experiences of operational teams and counterparts that received support under the MDTF. Experiences from the ground show that PSIA products can contribute to shifting the policy dialogue in support of more evidence-based, inclusive reforms. Yet, the complexity and multifaceted nature of these engagements make it sometimes difficult to capture their tangible contributions to the policy process. The publication at hand consolidates the wealth of information gathered during this exercise, encompassing the many learning and dissemination activities undertaken to get a better sense of the value of this type of work for policy making.

The goal was to identify innovative and successful practices and to share their insights and lessons with PSIA practitioners and the broader policy community. For the purposes of this report, we define "innovative" PSIAs as those that fill critical knowledge gaps and whose approaches address shortcomings of existing tools and methods in their respective thematic areas. Further, we consider an innovative PSIA to have been "successful" if the engagement (a) improved local stakeholders' institutional or technical capacity to generate and use evidence for policy reforms; or (b) informed the policy dialogue, either through uptake of recommendations by client country counterparts or by influencing Bank operations in a given field.

This publication is based on a systematic desk review, followed by interviews with task team leaders (TTLs) of short-listed PSIA.[5] The team reviewed output and monitoring documents for a total of 113 PSIAs that have been completed between 2010 and 2015 (and were supported under the MDTF).[6] For a selection of 45 PSIAs, additional inputs from TTLs were requested, either through interviews or via email. The overarching question guiding this exercise was, what lessons can be learned from PSIAs with good-practices PSIAs that have informed the policy dialogue in their respective thematic areas?

To account for the complexity of PSIA, the review covered both (a) the scope and depth of analysis, and (b) its policy relevance and engagement. We looked in depth at the policy and programmatic context; the distributional impacts (who is affected, why, and how); and the PSIA recommendations.[7] The case studies also explore actions to follow up on PSIA recommendations, thus increasing understanding of how these PSIAs have, or are expected to, contribute to policies and Bank operational lending as well as capacity building.[8]

The report provides a substantive overview of PSIA activities and links with existing resources and toolkits that provide guidance for practitioners and policy makers. It provides an overview on innovations and good practices in the following 10 thematic areas: fiscal policy, subsidy reform, social protection, labor markets, education, health, water, energy, transport, and agriculture.[9] Each of those chapters consists of (a) an overview section that presents broader issues and sector- or theme-specific trends; (b) a summary of salient tools and methods used in conducting PSIAs in the respective areas; and (c) a selection of case studies that showcase good practices from different regions. The report concludes with a "Final Remarks" chapter that summarizes the main lessons and identifies areas of interest and emerging approaches that should be strengthened in the future.

The PSIAs featured here cover only a subset of the broad range of sectors and topics represented among all MDTF-funded PSIAs.[10] Notably, many PSIAs are cross-sectoral and touch upon issues that are connected to more than one chapter. They also represent substantial diversity in terms of "product types"

[5] Policy makers and other country-level stakeholders were not interviewed for this report. Policy makers' assessments will be included in the final evaluation of the MDTF (World Bank 2016a).

[6] See appendix II, "Methodology," for detailed information on the selection process.

[7] Appendix II, Table A.2, presents a detailed matrix that was used to extract and analyze information on each of the selected PSIAs.

[8] Questions related to the effectiveness of the MDTF and of general World Bank support to PSIA are not covered here. For the external evaluation of the PSIA MDTF, see World Bank (2016a).

[9] These sectors had the largest numbers of PSIAs with high levels of innovation and policy impact.

[10] For a list of MDTF grants that have been considered for this review, see appendix III, "List of PSIAs."

and the way PSIAs are embedded in Bank operations. For instance, some PSIA fed into Economic and Sector Work (ESW),[11] improving their pro-poor focus and incorporating specific policy recommendations. (Examples include PSIAs on freight transportation reforms in Pakistan [chapter 10] and on investment prioritization in agricultural development in Nicaragua [chapter 11, Box 11.2]). Others have, at different design stages, informed one or more DPF components. The PSIAs presented here have also helped to address poverty and social exclusion in the context of technical assistance (TA) projects or have contributed to global and regional knowledge products.[12]

Complementing existing literature on the subject, the report is expected to increase awareness on the value of PSIA in policy-making processes and to be a key resource for TTLs and other interested stakeholders in conducting PSIAs.[13] Specifically, its objective is to showcase how successful PSIAs have supported the identification of policy impacts and mitigation measures in varying contexts, sectors, and thematic areas. The report examines how, where, when, and why PSIAs have been used; what their outcomes have been; and the lessons learned.

METHODOLOGY

PSIAs use a diverse and wide range of methods and integrate cutting-edge poverty analysis with various forms of social analysis. Innovations in PSIA have taken various forms, such as new tools for data collection and analysis, the integration of existing methods and frameworks to address a policy issue, and the application of well-established approaches to new fields and policy instruments. Although many innovations presented in this report are driven by new technologies and the availability of more and better data (for example, geospatial data in health and agriculture), there are also examples where innovative approaches are developed as a response to poor data.

Many innovative studies have supported and have benefited from the transfer of technical knowledge, both within and across regions. Moreover, standardization and harmonization of certain research instruments have become an important part of the PSIA agenda. This applies to multicountry studies (such as the Commitment to Equity [CEQ] assessments and the Subsidy Simulation Stata Package [SUBSIM] applications in the Middle East and North Africa region)[14] that allow for international and intertemporal comparison, as well as to national efforts to standardize and integrate monitoring and evaluations systems (such as the PSIA of the fisheries sector in Mozambique, discussed in chapter 11, Box 11.1).

The choice of methods in PSIA is driven by (a) the question being studied; (b) data availability; and (c) time, capacity, and resources. Whether a (primarily) quantitative or a (primarily) qualitative research design is adequate depends on these factors.[15] The use of certain methodologies varies across sectors, given different research angles. For instance, PSIA of fiscal policies is overwhelmingly quantitative because it focuses on *vertical inequalities* (that is, welfare implications along the income distribution). In other areas, such as social protection and health, the emphasis on *horizontal inequalities* is more common (that is, group- or identity-based disadvantages), often requiring qualitative data to identify vulnerable groups and understand the underlying dynamics of exclusion. Another aspect is the nature of outcomes the PSIA is trying to assess. Qualitative data on *subjective outcomes* (such as "life satisfaction" or "feeling treated with respect") contrast with quantitative data on *objective outcomes* (such as income or literacy scores).

[11] The World Bank's analytical and advisory assistance to client countries includes economic and sector work (ESW) and nonlending technical assistance (TA). ESW products "include core diagnostic reports such as country economic memorandums, poverty assessments, public expenditure reviews, and other diagnostic reports such as sector reviews and investment climate assessments, advisory reports, and policy notes" (World Bank 2016b).

[12] For specific instrument types, see appendix III, "List of PSIAs."

[13] For more information about PSIA resources, see the MDTF PSIA website: https://povertyandsocialimpact.org/

[14] For more information about SUBSIM, see chapter 3, Box 3.1. For more about the CEQ assessments, see chapter 2, Box 2.1.

[15] For guidance for practitioners on choosing the right methodology, see Coudouel and Paternostro (2005, 2006); Holland (2007); and World Bank (2003).

Additionally, ownership and in-country capacity to generate and use PSIA are important considerations in the choice of tools and methods. There is a potential trade-off between (a) the level of sophistication of certain methods, and (b) the methods' accessibility and feasibility given existing capacity, resource, and time constraints. PSIA teams have addressed this trade-off in different ways, depending on the client's needs and local circumstances. Innovative models such as SUBSIM helped Bank teams in various countries in the Middle East and North Africa region to produce robust simulations of subsidy reforms under tight budgets and timelines. On the other hand, to ensure local ownership in Cameroon and Sierra Leone, the PSIA teams developed a subsidy simulation model that took into account the client's existing technical capacity.

Mixed-methods studies have been common among MDTF-funded PSIAs. The methods highlighted throughout this report are diverse—including both experimental designs (such as the discrete choice experiment in Senegal, discussed in chapter 7) and quasi-experimental designs (such as the assessment of rural roads development in India, discussed in chapter 10). Good practices have successfully integrated different methodologies (either sequentially or concurrently), including the following design strategies:

- *Exploratory design,* which uses qualitative data to explore relevant issues to design a survey or a new instrument.
- *Explanatory design,* in which qualitative results help to explain and interpret the findings of a quantitative study.
- *Triangulation,* which uses qualitative and quantitative data in a complementary manner to confirm or cross-validate findings.
- *Nested design,* in which a study is guided by either a qualitative or a quantitative research design but embeds the other method to address a particular aspect.

A PSIA in Bhutan that explored a new research area (culture in sustainable development) had to refine multiple quantitative and qualitative methods on a trial-and-error basis. Given the lack of referential studies and the scope of the Bhutan study, the team used both exploratory and explanatory strategies and put together a comprehensive upstream assessment of a proposed bill on cultural heritage (chapter 5, Box 5.1).

A recurring theme in the spectrum of qualitative methods has been to solicit perceptions of beneficiaries and other stakeholders. Researchers acknowledge their importance for the analysis of processes of exclusion and inclusion. Additionally, many methods to inquire about subjective views (such as focus group discussions or stakeholder workshops) play an important role in raising awareness about policy issues and thereby propel the national dialogue around reforms. Given that awareness of existing policies or reform proposals is often strikingly low, such methods are particularly important. For example, in the water and energy sectors, information asymmetries can contribute to increased cost for consumers. In Ukraine, engaging with stakeholders through interviews, focus groups, and workshops was crucial to identify demand-side constraints in the water sector. Understanding consumer attitudes helped to design an effective awareness campaign as well as to improve accountability of service providers (chapter 8).

PROVIDING POLICY MAKERS WITH EVIDENCE

The featured PSIAs helped policy makers to be more informed about the trade-offs they face when designing and implementing policy reforms. The value of PSIA precisely consists in providing evidence to quantify and rationalize these trade-offs, which are otherwise difficult to grasp. For instance, short- and long-term effects need to be balanced in a sensible way. An example is the adoption of renewable technologies, whose overall positive impact in the long run (especially by reducing climate-change-related costs) may cause energy prices to rise in the short to medium term.

Analyses of fiscal policies, presented in this report, offer insights into the relative importance of different revenue and spending categories regarding their distributional and budget impacts. For instance, in Indonesia, a striking 23 percent of public spending goes toward energy subsidies. These are important for the poor, but it is the affluent population groups who benefit the most in absolute terms.[16] A broader look at the fiscal system suggests an enormous potential to raise, reallocate, and spend fiscal resources more effectively from an equity point of view. PSIA strengthens the narrative in favor of such complex reforms that help to free fiscal resources for more pro-poor policies.

While PSIAs are usually conducted ex ante to inform policy design or implementation, it is worth noting that it is state of the art to incorporate lessons from previous interventions. It is fairly common that PSIAs have elements of both ex ante and ex post evaluation, given that they are conducted in the midst of a larger reform process. In some countries, the MDTF supported more than one PSIA to follow up on previous work and accompany long-term sectoral reforms. (See, for instance, the discussions of PSIAs in chapter 3 on Cameroon and in chapter 4 on Fiji.)

Findings from numerous PSIAs suggest that designing policies that reach the poorest and most vulnerable groups is particularly challenging, given that they often face multiple deprivations that are perpetuated by social norms and a general lack of voice and empowerment. Although PSIA is usually portrayed as an approach primarily intended to identify and mitigate adverse impacts, the experiences presented here suggest that, in fact, PSIAs commonly help to identify opportunities that either leverage the positive impacts or improve the efficiency of a given policy. For instance, a PSIA in India found that the public investments in rural roads had limited benefits for rural women (chapter 10). Although men were more likely to travel to other areas, women benefited indirectly through the auxiliary demand created for local goods and services. This has implications for small-business or agribusiness policies and labor market opportunities. Breaking the vicious cycle of poverty and social exclusion often requires integrated policy interventions in various sectors and on different levels. A good example in this regard is the PSIA on youth inclusion in Tunisia that, instead of using a narrow "job lens," opted for a holistic approach that spans the areas of (a) participation and active citizenship, (b) access to economic opportunities, and (c) youth-friendly services at the local level (chapter 5).

Even pro-poor reforms that are targeted toward underserved communities tend to have potential for increasing effectiveness and efficiency through complementary policy measures. A discrete choice experiment (DCE) in Senegal estimated the impact of various factors on women's probability of delivering their babies in a health facility (chapter 7). Given that indirect costs associated with maternal health services pose a significant barrier, the government started piloting a maternal health conditional cash transfer (CCT) program as a result of this PSIA. In Albania, a PSIA demonstrates that good poverty targeting requires in-depth knowledge about the use of public services and the realities on the ground (chapter 4). The study assesses the allocation mechanisms of disability benefits and suggests policy changes to address existing inconsistencies and improve targeting accuracy.

[16] In Indonesia, the richest decile receives eight times more in subsidies than the poorest decile in absolute terms (chapter 3).

INFORMING OPERATIONS AND POLICY REFORMS

There are good examples of PSIA that have substantially influenced the policy dialogue and thereby changed the course of reforms. Yet, it is generally difficult to attribute follow-up actions to the PSIA work itself because numerous factors influence the policy-making process. Moreover, in many cases the successful implementation of PSIA recommendations can only be verified in the medium or long term. The nature of the relationship between research and policy making has been a long-standing topic of investigation for social scientists. While there is a rich literature on this topic, no single explanatory model can possibly do justice to the complex policy environments, institutional structures, and political arrangements that influence decision-making processes.[17] Although some generic lists of success factors are certainly useful,[18] it is important to bear in mind that PSIA is a realist approach that assumes that context really does make a difference to program outcomes.

Despite the difficulty of establishing causative correlations between PSIA and policy reform, a few lessons can be learned from the successful engagements included in this report:

- *Increasing public awareness* has in many cases ensured the government's buy-in or shifted the national policy dialogue by amplifying the voices of stakeholders outside government. It goes almost without saying that the effective communication of PSIA results is crucial in this process. As has been emphasized elsewhere (see appendix I), this review reaffirms that a communication strategy with dissemination and learning activities should be considered an integral part of the PSIA process.

- *Close cooperation and partnerships with key stakeholders* may prove instrumental in the success of the Bank's engagement. Support for more inclusive, evidence-based policies requires both tapping into local expertise and enabling local champions—within or outside government—to participate more effectively in the policy-making process.

- *Uptake of PSIA recommendations and continuation of policy discussions* by World Bank country teams is very important, given that reform processes tend to be slow and require assistance over extended periods. Thus, linking policy recommendations to follow-up operations—including technical assistance, lending, and investment activities—may be necessary to advance the dialogue on difficult issues.

The PSIA on cashew policies in Guinea-Bissau illustrates how these various dimensions come together and ultimately succeeded in influencing government policy. First, extended policy discussions with various stakeholders generated a debate within government. Second, wide news coverage and public awareness were crucial in building the momentum to move forward with the reforms. Third, PSIA findings were incorporated in the Bank's country program, and several operations from the Bank and other donors followed up on issues raised by the PSIA (chapter 11).

In Fiji, two consecutive PSIA assessed — ex ante and ex post — the country's social protection policies. The scope and depth of this analysis and the close collaboration with counterparts ensured the government's endorsement of the recommendations made by the PSIA teams, with the suggested policy changes to be implemented with follow-up assistance from the Bank (chapter 4).

The success of specific PSIA is, to a certain degree, influenced by factors that are beyond the control of research or government teams. For instance, political instability has been an issue for PSIAs conduct-

[17] In the field of international development—where research is driven by the aim to influence policy—it has been claimed that cutting-edge knowledge is underused by decision makers or that research neglects the concerns of the poor in a top-down fashion. Several development organizations have programs that aim to understand the factors that determine the use of evidence in policy making: see, for instance, Jones (2011) and the website of the Research and Policy in Development (RAPID) program at the Overseas Development Institute(https://www.odi.org/programmes/rapid/).

[18] A World Bank report that reviews the link between PSIA and policy and planning processes in partner countries finds that the more-influential PSIAs are associated with the following factors: alignment with the national policy calendar, operational relevance and usability, high-level champions on the government side, and local advocates in Bank or development partner offices at the country level (World Bank 2009).

ed in Guinea-Bissau and Sierra Leone. In the Democratic Republic of the Congo, a PSIA was conducted in a fragile and conflict-affected environment and had to deal with political sensitivities, insecurity, and the high mobility of survey participants (chapter 11). Yet, as these experiences reveal, it is critical to find adequate responses to address these risks and help policy makers to navigate through often difficult reform processes.

This report has placed special emphasis on the context in which the analytical work was conducted. This includes the local political landscape, ongoing policy discussions, and existing engagements with the World Bank and other development partners. Several cases illustrate and underline that the choice of methods, the scope of analysis, and the definition of complementary and follow-up activities all require careful consideration of contextual factors. A critical aspect in this regard is the configuration of stakeholder interests, often referred to as the "political economy" of reforms.

Ultimately, all reforms have winners and losers, and policy makers have to balance competing interests, notwithstanding the reform's technical plausibility and expected results. It is not unusual that reform efforts result in protests, social unrest, or even governments stepping down. For instance, phasing out consumer subsidies is a particularly delicate issue. There are plenty of examples where subsidy reforms have been stalled or reversed because of political pressures. Therefore, systematic assessments of political economy risks and consultations with stakeholders are indispensable elements of PSIA. For instance, in Cameroon the World Bank team commissioned a series of interviews and focus groups to identify key stakeholders and assess the population's level of awareness of price subsidies as well as potential reactions to policy reform (chapter 3). One of the findings was that the population in anglophone areas was more sensitive to the subject—with a higher potential for social unrest. This was related to their strong sense of ethnic and regional exclusion due to historical grievances toward francophone areas.

STREGTHENING PARTNERSHIPS AND LOCAL CAPACITY

The PSIA agenda is ultimately about strengthening and disseminating tools, processes, and institutions that promote evidence-based and inclusive policies. For instance, improved data collection and better monitoring and evaluation systems support policy makers, development partners, and stakeholders from civil society in their efforts to work toward greater equity and more inclusive and sustainable development. In the context of the MDTF, efforts to foster PSIA capacity have covered formal and informal technical training, standardization of data collection, and support of organizational development and participatory decision making. An example is the multicountry engagement to implement the CEQ approach, a diagnostic tool for distributional analysis of fiscal policies (chapter 2, Box 2.1).

The country studies had a special emphasis on capacity building. With the support of the MDTF, technical workshops were conducted in Armenia, Ethiopia, Indonesia, Jordan, and South Africa between January and June 2014. In addition to technical training, in-country workshops were used to present preliminary findings of the analysis and to solicit government and stakeholder feedback on the results. Moreover, in all cases the teams undertaking the analysis included local counterparts who work in think tanks, universities, or on country office staffs previously unfamiliar with incidence analysis.[19]

Improved capacity to incorporate evidence into policy making can also result from better collaboration and information flows among stakeholders. Effective collaboration makes new partnerships (both nationally and with international actors) an integral part of capacity building. PSIA teams have highlighted the fact that local knowledge and experience is not adequately used by policy makers. For instance, in Bhutan, the PSIA brought together key government agencies that used to work in isolation. This resulted in improved coordination and facilitated the design and subsequent implementation of an integrated approach to cultural assets management (chapter 5, Box 5.1). This of course, underscores the importance of

[19] The final independent evaluation of the PSIA MDTF found that in-country stakeholders considered informal on-the-job training to be the most valuable and effective way to build local technical capacity (World Bank 2016a).

careful attention to the local political economy in effective capacity building and collaboration. Technical trainings and workshops frequently conducted as part of PSIAs tend to be an entry point for new partnerships and improved communication between various stakeholders.

Part of the challenge in supporting capacity development is that it is a slow process that requires a long-term vision and continuous engagement. This raises questions about the expectation that PSIA engenders institutional change through one-shot interventions. There also may be a potential trade-off between impactful analysis that informs policy makers in a timely manner and capacity building, which generally takes more time to build. Some of the experiences presented here suggest that working with strong local advocates for PSIA who can engage in decision making is critical. An approach that is narrowly focused on technical aspects often fails to achieve local ownership and sustainability regarding the use of evidence and analytical tools in the national policy process.

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Chapter 2: Fiscal Policy

SECTOR OVERVIEW

Fiscal policy is one of the main policy options available to governments to tackle poverty and reduce high levels of income inequality. Yet, any such effort to redistribute incomes through taxes and social spending needs to be balanced with the goals of fiscal sustainability and macroeconomic stability.[1] Although in-kind benefits (such as education and health care) indirectly affect the distribution of *market incomes* in the medium and long term, other fiscal instruments (such as taxes and transfers) directly reduce or increase the inequality of *disposable incomes*.[2] For policy makers to make informed decisions on fiscal reform, prior knowledge about both the potential distributional impact and the efficiency and sustainability of specific interventions is indispensable.

With the formulation of its twin goals of ending extreme poverty and boosting shared prosperity, the World Bank Group has renewed its commitment to making growth more equitable and inclusive. The shared prosperity goal—of boosting the income growth of the bottom 40 percent—increased attention to the distribution of the costs and benefits of public policies, including nonincome dimensions (World Bank 2016). Through objective assessments, Poverty and Social Impact Analysis (PSIA) promotes an evidence-based dialogue and therefore challenges entrenched institutions to live up to their mandates. As such, distributional analysis of fiscal policy not only helps to inform policy design but also contributes to enhanced accountability and transparency.

The World Bank Group has renewed its commitment to making growth more equitable and inclusive.

For policy makers, a key challenge of fiscal reforms is to balance the competing objectives of greater equity and economic efficiency. The notion of a fundamental trade-off between redistribution and growth neglects the fact that the complex relationship between both goals is not a linear one and depends on a variety of factors. In fact, growing evidence suggests that, under certain circumstances, high income inequality can be detrimental to growth and macroeconomic stability (Brueckner and Lederman 2015; Ostry, Berg, and Tsangarides 2014). Similarly, environmental and social sustainability require particular attention to the costs that accrue to the poorest groups of the population. Values and perception surveys in developing countries show a clear trend of increasing popular support for redistribution, which is often driven by rising levels of economic inequality (IMF 2014; Indonesia MoF and World Bank 2015). Certainly, the identification of the appropriate level of redistribution and the mix of policies will evidently depend on a country's context and preferences.

[1] The three main goals of fiscal policy (on both the revenue and the expenditure side) can be defined as (a) supporting macroeconomic stability, (b) providing public goods and correcting market failures, and (c) redistributing income (IMF 2014).

[2] "Market income," as defined by the Commitment to Equity (CEQ) assessments (see Box 2.1 and Figure 2.1), basically refers to income before taxes and transfers. "Disposable income" refers to income after direct taxes and direct (cash or near-cash) transfers (Lustig and Higgins 2013).

Although redistribution can be achieved through both taxes and public spending, the respective efficiency costs will usually differ. Poorly targeted public spending programs incur an unnecessarily high fiscal burden and leave room for increasing redistribution without raising more revenue. For instance, PSIAs on subsidy reforms in many countries have shown that cash transfers for the poor are usually superior to indirect methods, such as price subsidies. Fiscal policy in low- and middle-income countries tends to achieve lower redistribution than in most high-income countries. For instance, in the developing world, indirect taxes play a more prominent role in revenue collection.[3] Careful analysis can help to identify policy options that enhance the effectiveness of redistributive measures without compromising fiscal prudence. Yet, in most countries, knowledge is still sparse about how the choices on the composition of revenue and expenditure affect trade-offs between equity and efficiency. Although a great number of studies have examined specific policies or programs (say, the effects of a water tariff increase), governments generally lack a good understanding of the cumulative effects of these individual policies in terms of efficiency and equity (Estache and Leipziger 2009; Ostry, Berg, and Tsangarides 2014).

Overall, PSIAs on fiscal policies have proven to be strategically relevant, for both the World Bank and its clients. The work funded by the PSIA Multi-Donor Trust Fund (MDTF) has addressed fundamental knowledge gaps and provided policy makers with a road map to align their efforts in different sectors with the overarching goals of equity and poverty reduction.

This chapter presents highlights and insights from PSIAs on tax reforms as well as from broader fiscal reforms that span various sectors or categories of public spending. The PSIA MDTF has supported distributional and political economy analysis in this area, covering a large number of countries, including Colombia, the Democratic Republic of Congo, Jamaica, Jordan, the former Yugoslav Republic of Macedonia, Mexico, Niger, Paraguay, Tanzania, Thailand, the Russian Federation, and Turkey as well as regional PSIAs in the East Asia and Pacific and the Europe and Central Asia regions. Salient topics have been value added tax (VAT), income tax, and "sin" tax[4] reforms as well as the labor market impacts of fiscal restructuring (including public retrenchment). Good practices presented in this chapter include a comprehensive fiscal incidence analysis from South Africa and in-depth analysis of a tax reform in Colombia. The extensive experience from subsidy reforms will be presented in chapter 3. Likewise, public spending programs that specifically address a particular sector are not considered here and will be covered in the respective chapters.

TOOLS AND METHODS

Fiscal policy PSIAs vary in their scope and methodology. Studies funded by the MDTF take into account both the revenue and the expenditure side of fiscal reform, and in some cases also include spillover effects on labor markets. Accordingly, they use a wide range of methods and tools, ranging from standard benefit incidence analysis to computable general equilibrium (CGE) models and behavioral microsimulation exercises. While the choice of methods evidently depends on the purpose of the analysis (for example, ex ante versus ex post assessment), it is further constrained by data availability as well as time, resource, and capacity requirements. For instance, serious problems of misreporting incomes and expenditures, as well as difficulties in obtaining data on top incomes, are well-known challenges in most countries.

In principle, evaluating the impact of fiscal policies on income inequality requires an assessment of the actual incidence of tax and transfer policies, which will generally differ from their statutory incidence. In practice, however, most research estimates the statutory incidence, given that detailed data on the structure of the economy and on consumers' and producers' behavioral responses (such as tax evasion, changes in consumption and work patterns, and so on) are often unavailable. Moreover, PSIA work in this area

[3] The Commitment to Equity (CEQ) project has generated a wealth of evidence to this effect. A study comparing the fiscal incidence of Brazil and the United States finds that fiscal policy in the United States is more effective in redistributing income, primarily because of Brazil's underutilization of the personal income tax and the small size of Brazil's direct, progressive social transfers (Higgins et al. 2013).

[4] A "sin" tax is a specific type of excise tax that applies to goods that are regarded as harmful to society, such as alcohol and tobacco. In addition to raising revenue, the purpose of these taxes is generally to reduce consumption of the respective goods by increasing their prices.

has underlined the importance of carefully considering the implications of different assumptions and concepts for the analysis. For instance, whether a tax reform can be judged as progressive or regressive depends critically on the underlying concepts of incidence (relative or absolute) and welfare (for example, income versus consumption). Different angles may lead to different conclusions and therefore require informed judgment.

Fiscal policy assessments may relate to specific problems or questions (say, the distributional implications of a particular tax), or they may be more general in nature and involve an extensive analysis of the cost and redistributive impact of a large number of taxes and transfers. The literature offers a wide array of analyses that use sophisticated models to address a particular policy issue. However, considerable knowledge gaps remain when it comes to assessing the incidence of fiscal systems at the aggregate level, including the interaction between different policy interventions. Having an integrated view on the overall impact of fiscal policy is instrumental, yet such an assessment may compromise the level of sophistication of the analysis. This is partly because of difficulties in obtaining detailed, micro-level data that cover the whole fiscal policy spectrum and are comparable across sectors.[5]

To fill this knowledge gap, the MDTF supported a global work program that aims to implement the CEQ assessments in multiple countries across the globe (Box 2.1).[6] Although the CEQ assessment relies on standard incidence analysis, that is not new by itself. However, it is the first global effort to comprehensively assess the tax-benefit system in developing countries, including indirect subsidies and taxes as well as in-kind benefits in the form of free education and health care. Research in this area has predominantly focused on specific policies or components rather than examining the net effect of a country's mix of policies and programs. Moreover, comparability has been an issue given the variety of approaches used.

The advantages of using an integrated analysis of the fiscal system that is homogeneously applied across countries are evident: The CEQ assessment offers a better understanding of how effective tax and transfer policies are at redistributing income and reducing poverty, given the fiscal resources used. Further, the framework allows for international and intertemporal comparison and thereby will enhance the understanding of the relationship between fiscal policy and inequality in varying contexts. In contrast to many existing benefit incidence studies, great care is placed in defining income concepts, and reliance on secondary sources is kept to a minimum. (For definitions of the basic CEQ income concepts, see Figure 2.1.)

Indonesia provides a good example of the value of this type of analysis. Inequality has been rising faster than in other countries in the region, and fiscal policy only has a modest impact on reducing income inequality (chapter 3). Although Indonesia has successfully halved poverty within a decade,[7] there are growing concerns about the uneven distribution of incomes and the slowdown of the pace of poverty reduction. The findings of the CEQ study clearly indicate ways to improve the effectiveness of fiscal policy, with subsidies playing a key role in implementing pro-poor reforms. In the case of South Africa (as further discussed below in the "Highlights and Good Practices" section), the CEQ assessment shows that redistribution through fiscal policy is particularly challenging when facing extreme levels of inequality. The South African situation calls for concerted efforts to implement rigorous pro-poor reforms in a variety of sectors.

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[5] Some of the methodological choices include standard incidence analysis versus modeling with behavioral and general equilibrium effects; static versus dynamic analysis; and average versus marginal effects.

[6] The CEQ project is an initiative of the Center for Inter-American Policy and Research (CIPR) and the Department of Economics, Tulane University; the Center for Global Development; and the Inter-American Dialogue. Since its inception in 2008, the CEQ project has received financial support from Tulane University's CIPR, the School of Liberal Arts, and the Stone Center for Latin American Studies as well as from the Bill & Melinda Gates Foundation, the Inter-American Development Bank (IADB), the World Bank, the United Nations Development Program's Regional Bureau for Latin America and the Caribbean (UNDP/RBLAC), the Development Bank of Latin America (CAF), the African Development Bank, the International Fund for Agricultural Development (IFAD), the Canadian International Development Agency (CIDA), the Norwegian Ministry of Foreign Affairs, and the General Electric Foundation. For further information, see http://commitmenttoequity.org. For the PSIA MDTF grant information, see appendix III (grant number: TF014445).

[7] Indonesia's poverty rate fell from 24 percent in 2000 to 11 percent in 2014 (Indonesia MoF and World Bank 2015).

BOX 2.1: THE CEQ FRAMEWORK FOR FISCAL INCIDENCE ANALYSIS

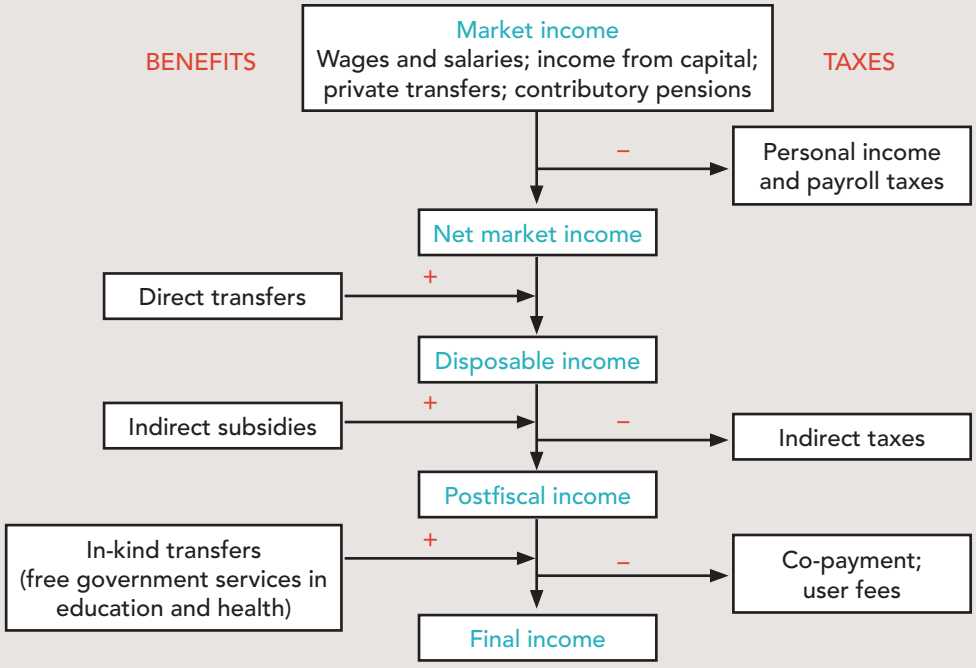
To identify the main constraints that prevent effective poverty and inequality reduction via tax and benefit policies, the World Bank Poverty Network has partnered with the Economics Department at Tulane University to implement a diagnostic tool—the Commitment to Equity (CEQ) assessment—in a set of countries across the world. While being initially focused on Latin America, the CEQ project and its partners, in close coordination with the World Bank's Latin American Poverty and Gender Group, have successfully expanded the research program to an increasing number of countries in other regions. The MDTF helped to fund the first set of pilot studies in Armenia, Ethiopia, Indonesia, Jordan, South Africa, and Sri Lanka, as well as several trainings and workshops on the use of the CEQ assessment (both in-country and in headquarters).

The CEQ assessment provides a framework for estimating the incidence of social spending, subsidies, and taxes, and offers specific recommendations on how governments can improve efficiency and effectiveness in achieving their equity goals through fiscal reform. Specifically, it relies on standard incidence analysis and a diagnostic questionnaire to address three questions:

- What is the overall contribution of social spending, subsidies, and taxes to the reduction of inequality and poverty?
- What are the distributional and poverty impacts of specific taxes and transfers?
- Which changes in taxation and spending could increase redistribution and poverty reduction while maintaining fiscal prudence?

Source: "What Is CEQ?" from the Commitment to Equity (CEQ) website, accessed Oct. 6, 2016, http://www.commitmentoequity.org/whatisceq.php.

FIGURE 2.1: INCOME CONCEPTS IN THE CEQ FRAMEWORK



Source: Lustig and Higgins 2013. Reproduced with permission under Creative Commons BY-NC-ND License 4.0.
Note: CEQ = Commitment to Equity.

In contrast to the general lessons provided by the CEQ assessment, some policy questions that relate to specific tax and spending instruments require methods that better accommodate the heterogeneity and interactions of economic agents. Both consumers and producers generally respond to policy-induced changes in prices or disposable incomes by adjusting their consumption and production decisions. In fact, some policies are specifically designed to change the behavior of individuals (such as providing incentives for labor market participation). But behavioral responses, whether intended or unintended, can affect the welfare and revenue implications of any given tax and social spending program.

To account for these indirect effects of supply- or demand-side changes, different types of microsimulations are employed. Although many tax microsimulation models can be considered nonbehavioral, a number of innovative approaches have been developed to incorporate behavioral assumptions. A useful tool in this regard is the LATAX microsimulation model, which has been developed to simulate tax reforms in Mexico and was adopted for analyses in countries throughout the Latin American region (Box 2.2). It is a flexible and easy-to-use modeling tool that allows users to integrate a number of behavioral response parameters (including for labor supply, VAT pass-through, and consumer demand). This feature makes it a useful complement to other approaches such as the CEQ assessment, which does not account for behavioral effects.

BOX 2.2: THE LATAX MICROSIMULATION MODEL

The MDTF supported the adoption and implementation of the LATAX microsimulation model, which is based on a similar model for Mexico (MEXTAX) and has been developed by researchers from the London-based Institute for Fiscal Studies (IFS). LATAX is a flexible, static microsimulation model for ex ante analyses of future or counterfactual tax reforms. Developed in STATA software, it is designed to be a user-friendly public program for simulating VAT, excise duties, income taxes, and social security contributions as well as (non-means-tested) price subsidies (Abramovsky and Phillips 2015). The model has been applied to MDTF-funded PSIAs of tax reforms in Colombia and Mexico, and it can be easily adjusted for use in other countries.

LATAX estimates revenues and the distributional impact of tax reforms by modeling the tax system at the individual or household level.[a] Therefore, it requires survey or micro-level administrative data with detailed information on demographics, income, and expenditure. The LATAX interface is easy to use and does not require sophisticated knowledge of the underlying theory or program code. Different modules allow for customization of the type of analysis to be performed, reform parameters, and certain additional assumptions. For instance, optional behavioral response modules make it possible to integrate assumptions on changes in behavior along previously specified margins.[b]

Sources: Abramovsky and Phillips 2015; World Bank 2014c, 2014d.
a. Based on the available data and parameters defined by the user, the program quantifies indirect tax payments, the direct tax base, direct tax payments, revenue effects, and the distributional impact of tax changes across income or expenditure distributions and by household types.
b. The following behavioral response parameters can be included in the simulation: (a) labor supply (elasticities of participation and hours of work are available); (b) VAT pass-through (the degree to which indirect taxes are passed on to consumers by producers); and (c) consumer demand (consumers' responses to changes in prices induced by changes in taxes).

HIGHLIGHTS AND GOOD PRACTICES

Colombia: Leveraging PSIA to Promote Equitable Fiscal Policy

In Colombia, a PSIA of the 2012 tax reform illustrates how several different methodologies can be combined to inform the policy dialogue on various levels (World Bank 2014b; World Bank 2014c). The debate around the tax reform was inherently linked to the government's overall strategy to foster equity and inclusive growth in the country. Hence, the PSIA was conducted at a critical moment and managed to take advantage of ongoing discussions and initiatives, both in academic and policy circles. The scope and depth of this PSIA was possible because the team successfully built on existing research and created partnerships with institutions already involved in similar work.

The analytical work had three main elements:[8]

- *An incidence analysis* that used the CEQ framework determined how changes in the tax system affect government revenues and income inequality. To ensure that the wealthiest segment of society was accurately captured in the assessment, the PSIA team extended the initial analysis by integrating tax record data with household survey data. Obtaining confidential data from the Tax Administration Department was crucial for undertaking a robust and more comprehensive analysis.
- *LATAX microsimulations* were used to account for likely behavioral impacts of the tax reform as well as potential effects on government revenues.
- *Modeling of worker preferences,* utilizing a general equilibrium framework, captured some of the likely spillover effects on the labor market. While changes in Colombia's taxation system will have a direct bearing on government revenues and the distribution of incomes and wealth, this third component was important to understand the relevance of indirect effects on the labor market.

The collaboration with researchers from the CEQ project and the use of the LATAX model enabled the Bank team to produce a PSIA that combines the distributional profile of the overall fiscal system with an in-depth analysis of the proposed tax reform (taking into account behavioral and general equilibrium effects). Given relatively low tax revenues (as a share of gross domestic product [GDP]) compared with other countries in the region, Colombia could potentially afford to eliminate extreme poverty through progressive taxes and transfers. With perfectly targeted transfers, Colombia would require less than 1 percent of GDP to eradicate extreme poverty, lifting the poor up to the poverty line of US$2.50 per capita per day (using 2012 numbers).[9] Although the 2012 reform was expected to increase total and formal employment, its anticipated impact on inequality was only moderate.[10] Additional reductions in inequality would require deeper fiscal reform that encompasses higher, more progressive taxes as well as more generous, more effectively targeted social transfers (World Bank 2014b).

The findings of this study helped the incoming government of Colombia to identify national priorities for poverty reduction (particularly through the new National Development Plan). Moreover, it increased awareness of economic inequality in Colombia and provided critical inputs into the policy discussion. Broad dissemination of the results was accompanied by an "Equity Day"—a high-level, closed-door workshop

[8] Specifically, three main components of the 2012 Colombian tax reform were analyzed: (a) a new alternative minimum tax (IMAN) for personal income tax payers; (b) a new corporate tax (CREE) to offset a decrease in payroll taxes; and (c) a streamlined VAT system, reducing the number of tax rates from seven to three while also creating a new luxury tax (World Bank 2014c).

[9] That adds up to US$2,926.5 million per year or US$61 per capita per year at 2005 international prices (Lustig, Meléndez, and Rodriguez-Castelán 2014).

[10] These findings were confirmed by a successive ex post assessment conducted by the World Bank.

that focused solely on the main equity challenges in the country.[11] The World Bank has continued the engagement surrounding the distributional and employment impacts of the tax reform, and these follow-up engagements have benefited from the analysis and partnerships built through this grant.[12]

In addition to the high analytical value of this PSIA, it is important to note that its success was certainly related to its close link to the ongoing policy dialogue around the Bank's technical and financial assistance.[13] As such, it directly responded to the client's needs while leveraging existing initiatives in the sector.

South Africa: Commitment to Equity under Conditions of High Inequality

In South Africa, a MDTF-cofunded study that applies the CEQ assessment became an important part of the third South Africa Economic Update ("Focus on Inequality of Opportunity"), which focuses on fiscal policy and redistribution (World Bank 2012). By applying state-of-the-art fiscal incidence analysis, the assessment quantifies the distributional impact of the main tax and social spending programs (as discussed earlier in Box 2.1).

South Africa is a unique example, given its high levels of inequality and the pivotal role of redistributive fiscal policy. The comparison with other CEQ studies of middle-income countries provided useful benchmarks for policy effectiveness. The PSIA emphasized the importance of substantial improvements in basic public services—such as education, water and sanitation, and health care—which are essential to breaking through the vicious, self-perpetuating cycle of inequality. Yet, given slowing economic growth and a high fiscal deficit, higher and more-inclusive economic growth will be crucial factors in addressing the challenges of high inequality and poverty in South Africa.

The results show that the tax and social spending system in South Africa is progressive overall.[14] More than 3.5 million people have been lifted out of poverty through redistributive fiscal policy.[15] In fact, the reductions of poverty and income inequality are the largest achieved among the emerging economies included in the CEQ project. Nonetheless, in spite of this sizable redistribution, levels of inequality remain exceptionally high relative to other middle-income countries (Table 2.12.1). Strikingly, South Africa's Gini coefficient *after* fiscal policy is still higher than Brazil's Gini coefficient *before* fiscal policy. Although the market incomes (before taxes and social spending) of the richest 10 percent are more than 1,000 times bigger than those of the poorest 10 percent, inequality of disposable incomes (after taxes and social spending) shrinks to a 66-fold disparity between the top and bottom 10 percent.

The insights of this PSIA were substantial and provided critical inputs to the policy dialogue around key strategic areas, including South Africa's National Development Plan (NPC 2011). The value added of this PSIA was further reflected in substantial efforts for capacity development. A two-day training (held April 20–21, 2015) provided applied knowledge to South African policy makers and technical staff on how to implement CEQ assessments, including hands-on simulations using recent household survey data and fiscal administrative accounts. Such capacity-building components were an integral part of the global CEQ work program.

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[11] The Equity Day workshop was held on March 12, 2013, with participants from the Colombian government (including the ministers of finance and labor, four vice ministers, and other senior government officials); managers and experts from the World Bank; experts from other international organizations (Organisation for Economic Co-operation and Development, Inter-American Development Bank, and United Nations Development Programme); and academics.

[12] Interview with PSIA Task Team Leader Carlos Rodriguez-Castelán, senior economist, April 1, 2016.

[13] The poorest 50 percent of the population receive approximately 70 percent of outlays on social grants and 54 percent of spending on education and health. The share of the population living in extreme poverty in 2010 (measured as less than US$1.25 per day) was 39.2 percent based on their market income but much lower (25.9 percent) based on their postfiscal income. The policies with the largest impact on poverty are the child support grant and the old-age pension (Inchauste and Lustig, forthcoming).

[14] The following taxes were assessed: the personal income tax, VAT, excises on alcohol and tobacco, and the fuel levy (Inchauste et al. 2015).

[15] The poorest 50 percent of the population receive approximately 70 percent of outlays on social grants and 54 percent of spending on education and health. The share of the population living in extreme poverty in 2010 (measured as less than US$1.25 per day) was 39.2 percent based on their market income but much lower (25.9 percent) based on their postfiscal income. The policies with the largest impact on poverty are the child support grant and the old-age pension (Inchauste and Lustig, forthcoming).

TABLE 2.1: GINI COEFFICIENT BY INCOME CONCEPT, ACROSS CEQ COUNTRIES

	Market income (1)	Net market income (2) *Column 1 – direct taxes*	Disposable income (3) *Column 2 + cash transfers*	Postfiscal income (4) *Column 3 – indirect taxes*	Final income (5) *Column 4 + in-kind transfers*
Armenia (2011)	0.403	0.393	0.373	0.374	0.357
Bolivia (2009)	0.503	0.503	0.493	0.503	0.446
Brazil (2009)	0.579	0.565	0.544	0.546	0.439
Costa Rica (2010)	0.508	0.500	0.489	0.486	0.393
El Salvador (2011)	0.440	0.436	0.430	0.429	0.404
Ethiopia (2011)	0.322	0.315	0.305	0.302	0.299
Gautemala (2010)	0.551	0.550	0.546	0.551	0.523
Indonesia (2012)	0.394	0.394	0.390	0.391	0.369
Mexico (2010)	0.511	0.497	0.488	0.481	0.429
Peru (2009)	0.504	0.498	0.494	0.492	0.466
South Africa (2010)	0.771	0.750	0.694	0.695	0.596
Uruguay (2009)	0.492	0.478	0.457	0.459	0.393

Source: World Bank 2014e, 44.
Note: CEQ = Commitment to Equity. The year of the data from each country's household survey appears within parentheses.

The insights of this PSIA were substantial and provided critical inputs to the policy dialogue around key strategic areas, including South Africa's National Development Plan (NPC 2011). The value added of this PSIA was further reflected in substantial efforts for capacity development. A two-day training (held April 20–21, 2015) provided applied knowledge to South African policy makers and technical staff on how to implement CEQ assessments, including hands-on simulations using recent household survey data and fiscal administrative accounts. Such capacity-building components were an integral part of the global CEQ work program.

In all CEQ pilot countries, the teams undertaking the analysis included counterparts who work in local think tanks or universities or who are country office staff previously unfamiliar with incidence analysis. Moreover, once finalized, the analysis and its findings will be made available for Bank staff and other practitioners online to enable practitioners to compare results across countries and over time. The CEQ assessments that have been conducted in all six regions have contributed to greater transparency and will enable civil society organizations and other stakeholders to monitor the governments' efforts to reduce inequality (Inchauste and Lustig, forthcoming). The growing body of research will also prove valuable for international donors, particularly, given its advantage of international and intertemporal comparability (also see World Bank 2014a).

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Chapter 3: Subsidy Reform

SECTOR OVERVIEW

In the past decade, the World Bank has been engaged with many governments on the discussion of consumer subsidies, particularly in the Middle East and North Africa and Sub-Saharan Africa regions. These subsidies regulate consumer prices of essential energy and food products and are widespread in developing countries. The analysis presented in this chapter focuses solely on consumer prices and does not take into account supply-side factors. Thus, sector-specific issues related to the production of subsidized goods are not covered here. Further, because subsidy reforms are prominent fiscal measures that tend to have many similarities across countries, the Poverty and Social Impact Analyses (PSIAs) of subsidy reforms are dealt with separately in this chapter, continuing the debate on fiscal policy reforms in chapter 2.

Generally, price controls through subsidies are introduced as responses to economic crises or international price shocks and are intended as short-term mitigation measures. Yet, if left in place as long-term programs, governments are often faced with the untenable burden of increasing and uncontrollable fiscal costs. Subsidy schemes that control prices force governments to (fully or partially) absorb increases in international prices or in domestic consumption. For instance, many countries that had introduced fuel subsidies before the global rise in oil prices went through fiscal crises when oil prices climbed to unprecedented levels. The price distortions created by subsidies may lead to significant economic inefficiencies and further increase the total amount of subsidies paid by the government, especially when the subsidized products are imported. Artificially low prices incentivize the excessive consumption of subsidized goods relative to local or potentially cheaper (in terms of presubsidy price) alternatives (Coady 2006).

Governments are often faced with the untenable burden of increasing and uncontrollable fiscal costs.

Despite being generally introduced to protect poorer households from rising consumption prices, the benefits of subsidy programs are often skewed toward the richer and urban parts of the population, as is the case for most petroleum products (Verme and Araar 2016). Thus, they tend to be ineffective and inefficient instruments for poverty reduction. Moreover, as costs for subsidies rise, budget constraints may negatively affect other social services as well. Historically, the World Bank has had limited success in influencing governments to push for reforms in this area despite the evident risks and inefficiencies.

Many governments in Sub-Saharan Africa implemented or increased price subsidies in response to price shocks, economic crises, and social tensions in 2007 and 2008. As a result, pass-through of international prices was further constrained. In the following years, rising food and commodity prices[1]—accompanied by exceptionally high oil prices —led to rapidly increasing fiscal costs, reinforcing the need

[1] After drastic price increases in 2007–08, international oil prices fell in the second half of 2008 but rebounded strongly thereafter.

for reforms. In Sub-Saharan Africa, the median increase in the fiscal cost of energy subsidies was 1.6 percent of gross domestic product (GDP) between the end of 2008 and the end of 2011.[2] In the case of energy subsidies, it is important to note that this trend was much more pronounced for oil exporters, which tend to have more difficulties in passing through international price changes.

In the Middle East and North Africa, global price shocks coincided with profound political transformations that led to social upheavals and regime changes in 2010–12. While the fiscal crises were worsening in the face of political instability and economic recession, it was extremely difficult for the new governments to implement unpopular reforms. Yet, in some countries, the policy dialogue around subsidies finally gained traction and led to subsequent reforms (see, for instance, the Moroccan example in the "Highlights and Good Practices" section below). The World Bank played an active role in this process, which involved discussions and negotiations over long periods of time.

The turnaround in global oil prices to presently low levels (followed by declines in prices of major commodities) can be seen as both an opportunity and a barrier to continued progress in the area of subsidy reform. On the one hand, it diminishes the immediate impact on consumer prices of a removal of subsidies and therefore reduces the social costs (in the short term). On the other hand, it also alleviates fiscal pressure and weakens the political incentive to act and push for reforms.

The PSIA Multi-Donor Trust Fund (MDTF) has extensively funded analytical work in the area of subsidies, particularly for food and fuel products. Between 2010 and 2014, several governments in the Middle East and North Africa and Sub-Saharan Africa regions have requested the World Bank's assistance to assess policy options and the viability of reform proposals. This offered a unique opportunity for the World Bank to support these efforts and improve the fiscal sustainability and targeting of public spending. PSIA grants have supported work in many countries, including Cameroon, the Arab Republic of Egypt, Mauritania, Sierra Leone, and Sudan. Additionally, as part of a regional approach, studies have been conducted in Djibouti, Jordan, Libya, Morocco, Tunisia, and the Republic of Yemen. Moreover, a PSIA conducted in Indonesia has informed the policy dialogue on subsidy reforms, as part of the Commitment to Equity (CEQ) work program (see chapter 2, Box 2.1). The resulting body of research has provided valuable insights into differences and similarities between countries as well as into the main challenges and success factors. Moreover, the World Bank used the opportunity to exploit synergies through cross-country collaboration.

TOOLS AND METHODS

The distributional analysis of subsidies is very similar to analyses of other fiscal policies such as taxes. The diverse methods available for PSIA in this area have been predominantly quantitative. One of the fundamental challenges of developing the right PSIA methodology is the trade-off between complexity and accuracy on the one hand, and ownership and accessibility for policy makers on the other hand. Lessons from the MDTF indicate that a more sophisticated approach—one that enhances the precision of results—is not always justified when considering the benefits of simpler tools that local authorities and a greater number of stakeholders can use and comprehend. Tools that are accessible to a broader audience enhance in-country capacity to conduct PSIA and increase transparency about underlying assumptions.

In addition to numerous country studies in this area, the MDTF has also funded the development of toolkits and work that explores the theoretical and methodological underpinnings of subsidy reform PSIAs. For instance, one of the outputs was a paper that identifies essential differences across different welfare measures and computational methods to assess the impact of price changes (Araar and Verme 2016). By testing how certain methodological differences affect empirical results, this research provides guidelines on

[2] Only in the Middle East and Central Asia was the fiscal cost of energy subsidies higher—and substantially higher than in the rest of the developing world (Alleyne 2013).

BOX 3.1: SUBSIM—A STANDARDIZED APPROACH TO SUBSIDY SIMULATION

The subsidy simulation model SUBSIM was developed in 2011, with subsequent updates in the following years, and it has been used in eight countries in the Middle East and North Africa[a] as well as in other regions. SUBSIM is programmed in Stata and has an accessible Windows interface.

Using household budget survey data and input-output (IO) matrixes, it estimates distributional, poverty-related, and budgetary impacts of energy and food subsidies. Provided that sufficient data is available, the model can estimate both the direct and indirect effects.[b] SUBSIM uses an econometric IO model that is "lighter" than most computable general equilibrium (CGE) models because it does not require the same amount of preparation and detailed specifications of behavioral responses. Nevertheless, the IO model is expected to capture the bulk of indirect effects, generating results similar to those of CGE models.

Different modules allow for customization—including the optional integration of compensation measures (cash transfers)—and a rudimentary module that only estimates direct effects and therefore has lower data requirements. In contrast to most other models in use, SUBSIM allows users to present direct and indirect effects separately. Moreover, it enables users to choose between linear and nonlinear pricing, first-order or higher-order effects, and short- or long-term estimations as well as between different welfare measures (given that requirements may be different based on data availability and the magnitude of price variations). This extraordinary versatility makes this model unique and applicable to various country contexts.[c]

Sources: Araar, Abdelkrim, and Paolo Verme, "SUBSIM: **SUB**sidy **SIM**ulation Stata Package" (Washington, DC: World Bank, 2012), www.subsim.org; World Bank 2014c.

a. The eight Middle Eastern and North African countries include Djibouti, the Arab Republic of Egypt, Jordan, Libya, Morocco, Tunisia, and the Republic of Yemen.

b. Direct effects on household welfare arise from the price changes of subsidized products that are being studied. The indirect effects result from price changes of other, nonsubsidized products that may be affected by demand- and supply-side responses (for example, a change in fuel subsidies indirectly affects the price of transport services).

c. The model has a user guide that is publicly available on the SUBSIM website: "SUBSIM: A User Guide, Version 1," accessed Oct. 7, 2016, http://subsim.org/refs/SUBSIM%20Guide_v_8.pdf. The SUBSIM model itself is available in English or French.

the choice of critical assumptions, which will depend on the context and available information.[3] The paper is a useful reference for practitioners who design PSIA in the context of subsidy reforms.

Another initiative that stands out in this regard is the development of SUBSIM, a subsidy simulation model resulting from a regional effort to develop a versatile toolkit applicable to different countries in the Middle East and North Africa (Box 3.1). The MDTF supported the development of SUBSIM to enable country teams and governments to rapidly assess the impact of consumer subsidies on poverty, inequality, and the fiscal budget. The initiative was a direct response to the increasing demand by governments in the Middle East and North Africa for the Bank's technical assistance on subsidy reforms.

Although the Bank was already using a variety of different tools and approaches, no model existed that could provide impact assessments that were both accurate and could be conducted quickly under time constraints. Given that the SUBSIM team was involved in the policy discussions in most Middle Eastern and North African countries that were going through subsidy reforms since 2011, there was a unique opportunity for effective cross-country collaboration. The value of this regional approach has gone beyond the SUBSIM model itself. Thanks to efforts to standardize data and results, a large number of reforms and

[3] The discussed assumptions include monotonic and strictly convex utility functions; single-valued and continuously differentiable demand functions; complete, reflexive, and transitive preferences; constant marginal utility of income; utility-maximizing consumers; and normal goods. The theoretical part offers definitions, geometrical illustrations, and various computation options. The empirical part provides sensitivity analyses of the welfare measure regarding price shocks, changes in demand functions, consumption bundles, and elasticities (Araar and Verme 2016).

products assessed through SUBSIM are comparable across countries, providing lessons and insights for future reforms within and outside the region (Verme and Araar 2016).

In response to client demand, another modeling tool was developed for PSIAs in Cameroon and Sierra Leone (as further discussed in the "Highlights and Good Practices" section below). It was specifically designed to be easy to use and accessible to a wide range of stakeholders without specialized computer training or software requirements (in contrast to previous tools that were Stata-based). It is worth noting that there is a potential trade-off here—between ease of use on the one hand and analytical precision on the other. However, while having a high level of sophistication, the model struck a good balance between both. An intensive hands-on training was crucial to ensure that the ministries' staffs could understand and master the tool as well as to ultimately promote the government's ownership.

The Excel-based model is based on experiences from several successful reforms in Asia (particularly benefiting from work in Indonesia) and calculates the impact of fuel-price changes on revenue, inflation, and poverty (accounting for direct and indirect effects).[4] Further, the team constructed a "poverty basket inflation" index for the analysis to accommodate consumption patterns of the poor, hence increasing accuracy compared with a standard consumer price index. The model generated robust results and proved to be useful for a range of highly detailed analyses that have followed this PSIA.[5]

Despite recent successes, international experiences show that reforming subsidy programs is challenging and delicate. In some cases, attempts to move to market-based pricing have resulted in protests that succeeded in stalling or reversing the reform process. This underlines the importance of taking into account the political economy and public perceptions when conducting PSIA on subsidy reform. Hence, qualitative analysis of stakeholder configurations and political economy risks has become an integral part of most engagements in this area.

For instance, in Cameroon the World Bank commissioned a series of interviews and focus groups to identify key stakeholders and assess the population's level of awareness of price subsidies as well as potential reactions to policy reform (World Bank 2013). The results show that awareness of price subsidies is low among the poor, particularly the rural poor who benefit the least from subsidies. The urban rich have much better knowledge of subsidy programs and are also the main beneficiaries. However, the poor are highly sensitive to even small changes in prices. Taxi drivers and taxi-moto drivers are among the key stakeholders, because they rely heavily on fuel and have a high capacity for organization. They are a particularly vocal group in the urban centers and believed to be responsible for initiating riots in the past. Moreover, there are regional disparities worth taking into account. In anglophone areas (where there is a strong sense of ethnic and regional exclusion) awareness of fuel subsidies tends to be higher because of historical grievances toward francophone areas (which are considered to have captured the profits of local oil production). It is critical to consider these configurations when devising reform options, information campaigns, and mitigation measures. Subsidy reforms cannot be isolated from the political landscape with its existing conflicts and struggles.

HIGHLIGHTS AND GOOD PRACTICES

Morocco: Impacts of the 2014 Subsidy Reforms and the Way Forward

An ex post PSIA of subsidy reforms in Morocco reaffirmed the government's reform course and underlined the effectiveness of evidence-based, gradual approaches to phase out regressive subsidy programs (Verme and El-Massnaoui 2015). The analysis uses the SUBSIM model (discussed earlier in Box 3.1) and was part of a regional work program on consumer subsidy simulation, supported by the MDTF (World Bank

[4] The model also includes options to assess mitigation measures by estimating the effects of public transfers.

[5] Among other countries, the model has been applied in Morocco and Tunisia.

2014c). The distributional, poverty-related, and budgetary impacts of the 2014 reforms were assessed by simulating the effects of induced price changes, both directly through subsidized products and indirectly through changes in the price of nonsubsidized products.[6]

The practice of consumer subsidies has a long history in Morocco. First introduced during World War II, price subsidy schemes have been in place for more than 70 years, although their objectives changed over time—ranging from export incentives to price stabilization and social policy. Driven by the global dynamic of rising oil and commodity prices, food and fuel subsidies in Morocco became an increasingly unsustainable burden for the fiscal balance. Because Morocco relies entirely on oil imports, it was particularly the rapidly increasing costs of fuel subsidies that contributed to worsening the country's fiscal crisis. (Fuel subsidies amounted to 90 percent of the free market price in 2012.) The government responded to the increasing pressure with successive reforms starting in 2012 and 2013 with reductions in fuel subsidies.[7] A more comprehensive reform in 2014 included the removal of subsidies for gasoline and fuel oil, changes in electricity tariffs, and a gradual elimination of diesel subsidies. The only subsidized consumer products that remained in place (as of January 2015) were flour, sugar, liquefied petroleum gas (LPG), and electricity.

Results from the simulations show that the reforms significantly reduced the fiscal deficit, thus were highly effective from a budget perspective.[8] Further, welfare losses caused by the price adjustments primarily affected high-income groups and had only a moderate impact on the poor (Table 3.1). This is because gasoline and diesel are largely consumed by the rich, and the changes in the tariff structure of water and electricity did not affect the lower consumption blocks. Additionally, there were significant indirect effects, particularly for petroleum, but the impact on the lowest quintile was still relatively low. Although 50 percent of the fiscal savings came from the richest quintile, the overall impact on poverty was negligible. The prioritization of certain elements of the subsidy programs allowed the government to eliminate costly and regressive components while maintaining some of the more progressive subsidies. Experiences from other countries confirm that this practice can prove effective to minimize resistance and move forward with the much-needed reforms.

TABLE 3.1: WELFARE EFFECTS OF THE 2014 SUBSIDY REFORMS IN MOROCCO, BY INCOME QUINTILE
Direct annual effects, DH, millions

	Electricity	Water	Gasoline	Diesel	Total	Total (% of expend)
Quintile 1	-118.0	-94.5	-0.3	-1.1	-213.9	-0.61
Quintile 2	-241.4	-263.7	-1.4	-4.5	-511.1	-0.87
Quintile 3	-366.5	-462.5	-6.3	-20.6	-855.9	-1.04
Quintile 4	-490.8	-677.8	-17.6	-57.1	-1,243.2	-1.05
Quintile 5	-1,182.0	-1,221.2	-154.1	-502.7	-3,060.0	-1.07
Total	**-2,398.7**	**-2,719.8**	**-179.7**	**-586.0**	**-5,884.1**	**-1.01**

Source: Verme and El-Massnaoui 2015, 14.
Note: DH = Moroccan dirhams. Quintile 1 = poorest 20 percent, by household income. Quintile 5 = richest 20 percent.

[6] Input data relied on a household consumption survey and input-output tables (Verme and El-Massnaoui 2015).

[7] In 2012, the government removed fuel subsidies for high-sea fishing. In 2013, it instituted a new pricing system for gasoline, diesel, and fuel oil (allowing a better transmission of international price changes)

[8] In addition to the abovementioned products, the simulations also included price changes in water tariffs accompanying the 2014 reforms. These tariff changes had distributional implications for household welfare, but, overall, water is not subsidized by the government (some tariff blocks are cross-subsidized). The study only considers consumer subsidies and impacts on private households, excluding the commercial sector and impacts on production.

The elimination of the remaining subsidies will prove more challenging from a poverty perspective. Simulations of a counterfactual scenario, where all consumer subsidies are removed, predict a substantial increase in poverty given that the remaining subsidies (such as LPG) are pro-poor in nature (Verme and El-Massnaoui 2015). Thus, further reforms will require careful consideration of compensation mechanisms to address the associated social and political costs. Clearly, a targeted, progressive reform package that includes mitigation measures could contribute to significant additional budget savings. LPG subsidies have the biggest potential in this regard because the benefits (in absolute terms) are larger for the upper quintiles. Currently, the low oil prices can be an opportunity to push for further subsidy reductions, given that smaller price differentials would reduce welfare losses in the short term. However, low oil prices also expand the fiscal space of the government and give little incentive for tough measures of fiscal consolidation.

Cameroon: Making Strides in Subsidy Reform through Capacity Building

Given limited take-up of previous technical assistance in the area of subsidies, a PSIA activity in Cameroon sought to provide policy makers with tools and training that would enable them to conduct impact assessments internally, as well as by engaging with key stakeholders to advance the dialogue surrounding the analytical work **(Error! Reference source not found.Box 3.2).** Subsidies on fuel and imported food products were put in place as reactions to price shocks in 2007 and 2008 to prevent drastic price increases and protect consumers from fluctuations on international markets. Yet, with rising global commodity prices, the cost of these subsidies grew to extremely high levels, increasing by an average of 11 percent per year between 2010 and 2013 (del Ninno 2015). In 2012, Cameroon was spending an estimated 20 percent of government expenditure on price subsidies. The World Bank's engagement with the government of Cameroon on subsidy reform started in 2009, yet reforms to cut subsidies had not taken place until 2014. An MDTF-funded PSIA conducted in 2012/13 indicated that subsidies overwhelmingly favored the rich and therefore provided an opportunity to shift public spending to programs with a better potential for poverty reduction (World Bank 2014c). Moreover, qualitative work pointed to a lack of public awareness and limited technical capacity of the administration.

In 2014, reforms were finally implemented leading to price increases in several petroleum products, including gasoline (by 14 percent), diesel (by 15 percent), and domestic gas (by 8 percent). With the exception of LPG, these subsidies were largely regressive and benefited the affluent urban population. For instance, at the time of the reform, gasoline represented 1.2 percent of total expenditure for the richest quintile compared with 0.1 percent for the poorest quintile. The subsidy reform was coupled with social policy measures that consisted of a 5 percent salary increase for public workers, a 50 percent tax reduction in the transport sector, and a 27 percent minimum-wage increase. Starting in 2014, the World Bank and the government of Cameroon conducted an ex post analysis to evaluate the impact of the reform package (World Bank 2016). The MDTF provided funding for the analytical work (qualitative and quantitative assessments) as well as for complementary training that would allow the government to improve its monitoring and evaluation capacity (Box 3.2).

To address capacity constraints and in response to government demand, the World Bank conducted a technical training for members of the government's Technical Committee for Monitoring Economic Programs and researchers from a local think tank that was supporting the fieldwork and analysis of the PSIA.[9] The training provided basic knowledge on the design of ex ante and ex post impact assessments, as well as detailed guidance on the use of an Excel-based modeling tool for subsidy simulation (as previously discussed in the "Tools and Methods" section). Additionally, a dissemination workshop attended by a wide range of stakeholders proved particularly valuable in bringing key stakeholders together and facilitating

[9] The training (on June 25, 2015) was attended by 21 technical experts from the Ministry of Finance, the Ministry of Trade, the Ministry of Planning, the National Institute of Statistics, and the Fuel Price Stabilization Agency. Moreover, some training participants were able to participate in the international PSIA conference and the subsequent technical workshop in Cape Town in July 2015 (funded by the PSIA MDTF).

BOX 3.2: CAMEROON AND SIERRA LEONE—A REGIONAL APPROACH TO CAPACITY DEVELOPMENT

PSIAs in Cameroon and Sierra Leone focused on enhancing government capacity to develop and use modeling tools that estimate the poverty and distributional impacts of changes in food and fuel prices. While the PSIA in Sierra Leone was the beginning of a dialogue on fuel subsidy reform, Cameroon had already started the reform process with a reduction of subsidies in 2014—several years after the World Bank began engaging with the government in this area. Preceding discussions and previous engagements have shown that, in both countries, externally commissioned analyses on the risks and opportunities of subsidy reform had not generated enough traction in the policy dialogue. This was partly related to a lack of trust and limited understanding of the analyses among authorities and stakeholders. The PSIA work sought to address these barriers by providing policy makers with tools and training that would enable them to conduct impact assessments internally as well as by engaging with key stakeholders to advance the dialogue surrounding the analytical work.

The PSIA team developed a modeling tool that has relatively low technical and capacity requirements and is therefore accessible to a wide range of stakeholders. The goal was to empower stakeholders who have a good knowledge of the issue but whose analytical skills are not necessarily strong enough to develop a quantitative narrative. The tool could also be used to explain changes to other members of the government in a way that was both specific (in terms of dollar-amount costs and benefits) and understandable to a nontechnical audience. This would provide an opportunity to support local champions and shift the policy dialogue from donor-driven advocacy to an internal government discussion. Trainings on the use of the model, which were conducted in both countries, demonstrated the effectiveness of intensive capacity-building programs that are hands-on and tailored to the counterpart's needs.[a] While considered instrumental, there was no guarantee that improved ownership would lead to stronger political will for reforms. Evidently, exogenous factors, such as the development of global commodity prices, would play a crucial role in this process.

In the case of Sierra Leone, the originally proposed project could not be fully completed. The outbreak of the Ebola crisis in mid-2014 interrupted the policy discussion on subsidy reform and resulted in a partial restructuring of the project. Given the severity and unpredictability of the situation, the PSIA team in Sierra Leone decided to shift remaining resources to support the Cameroon PSIA, which was in the preparation stage at the time. Fortunately, as part of the post-Ebola revenue-raising strategies, fuel subsidies have been eliminated in Sierra Leone.[b]

Sources: World Bank 2014b, 2015a, 2016.
a. Trainings took place in April 2014 (Sierra Leone) and in June 2015 (Cameroon).
b. However, no actual changes have taken place because global oil prices are currently below the price cap (as of March 2016).

fruitful exchanges between policy makers, technicians, civil society groups, and unions.[10] The discussions revealed that taking into account concerns from the transport sector is instrumental when moving forward with the reforms. For instance, involving union representatives in a transparent process is important to maintain a constructive dialogue around the reforms as well as for complementary mitigation measures.

Despite the magnitude and relevance of consumer subsidy programs in Cameroon, results from a perceptions survey show that general knowledge about the reform and existing subsidy schemes was strikingly low (with the exception of urban, high-income households, who are also among the primary consumers of most subsidized products). The findings suggested a lack of trust in the reforms that is largely attributed to a lack of accurate information among the population. The PSIA concluded that *transparency* and a sensible communications strategy to promote public debate will be key requirements for the success of future

[10] The workshop (on June 24, 2015) was attended by approximately 80 representatives from the government (Technical Committee for Monitoring Economic Programs), civil society, trade unions from the transport sector, and think tanks.

reforms. Moreover, follow-up analysis is planned to better understand the distributional and social policy implications of the reform process, particularly in the context of external shocks.

Despite evident challenges, the World Bank's engagement in the debates over the past six years has shown clear signs of success. Considering the authorities' initial reluctance and the fact that subsidy reform is a sensitive policy issue in the country, a gradual removal of subsidies—with particular attention to protecting vulnerable groups—is certainly the most sensible and effective strategy for Cameroon.

Indonesia: Subsidy Reform as a Cornerstone for More Effective Fiscal Policy

In Indonesia, analysis based on the CEQ methodology[11] revealed a considerable potential to increase the effectiveness of several fiscal policies in reducing poverty and inequality. In the presence of rising inequality, the combination of low direct taxes, low public spending, and poor targeting results in only modest redistribution. Here, subsidies play a major role in the fiscal policy debate, given their large share in government spending. Taken together, the largest two spending items—education and energy subsidies—have almost no effect on income inequality in the country (Indonesia MoF and World Bank 2015; World Bank 2014a).

Since recovering from the 1997–98 Asian Financial Crisis, Indonesia has enjoyed robust growth,[12] but income inequality has also risen sharply over the same period. The gains of economic growth have been distributed unevenly, mainly benefiting an emerging consumer class and leaving large sections of the poor and vulnerable behind. Although poverty decreased significantly in the past 15 years,[13] inequality (as measured by the Gini coefficient) has been climbing faster than in most East Asian countries, achieving record levels in 2014. Conservative estimates suggest that per capita consumption grew by more than 6 percent per year for the richest 10 percent of the population but by less than 2 percent per year for the bottom 40 percent of the income distribution.

The uneven economic development has slowed down the pace of poverty reduction and raised concerns about potential negative repercussions. Public perceptions reaffirm the need to address this issue: 88 percent of Indonesians surveyed in 2014 believed that government action was urgently required to address inequality (Indonesia MoF and World Bank 2015). Inequality is partly driven by unequal access to educational opportunities coupled with an increasing income gap between high-skilled jobs and jobs in the informal and low-productivity sectors of the rapidly transforming economy. Further, inequalities of wealth and the poor's vulnerability to shocks tend to reinforce and accelerate this dynamic.

Against this backdrop, the CEQ country study explores the role and impact of Indonesia's fiscal policy as well as the reform options available (Indonesia MoF and World Bank 2015). The way the government raises revenue and allocates its spending has direct and indirect effects on economic growth and the distribution of incomes. The findings of the CEQ assessment suggest that fiscal policy has a very limited redistributive impact in Indonesia.[14] The Gini coefficient falls only modestly (by 2.5 points) when comparing the distribution of market incomes (before fiscal policy) with disposable incomes (after fiscal policy).[15]

Figure 3.1 illustrates the role of fiscal policy in a set of countries that were included in the CEQ work program, with Indonesia at the lower end. In contrast, Brazil and South Africa achieve substantially higher reductions in inequality through fiscal policy (with Gini reductions of 14 and 17.5 points, respectively).

On the revenue side, taxes are the main instrument, raising 73 percent of total government revenue. The relatively low personal income taxes only amount to 10 percent of tax revenues. Here, international bench-

[11] For a more detailed discussion of the Commitment to Equity (CEQ) assessment, see chapter 2, Box 2.1.

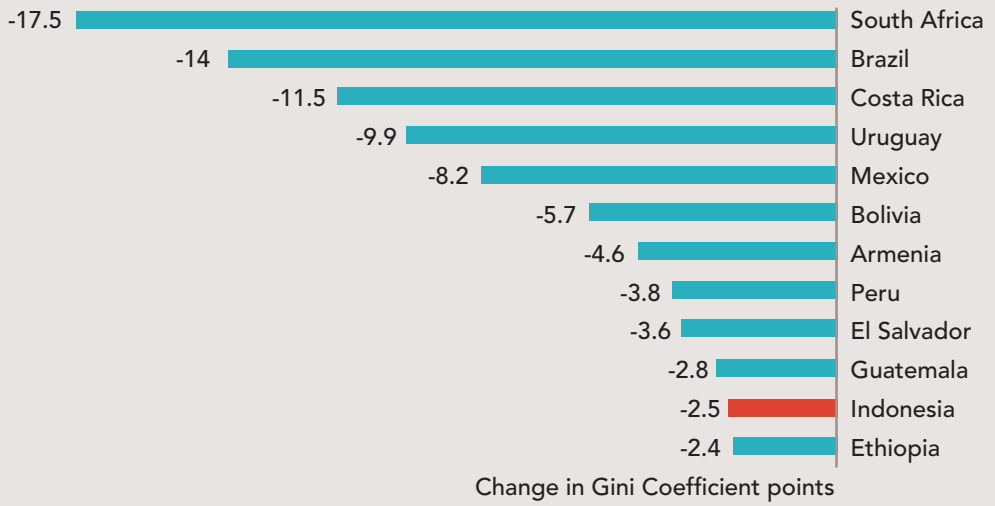
[12] Between 2000 and 2014, Indonesia's real GDP per capita grew at an annual average of 5.4 percent (Indonesia MoF and World Bank 2015).

[13] The poverty rate fell from 24 percent in 2000 to 11 percent in 2014 (Indonesia MoF and World Bank 2015).

[14] The analysis is based on 2012 data.

[15] For an illustration of income concepts used in the CEQ assessment, see chapter 2, Figure 2.1 2.1.

FIGURE 3.1: REDUCTION IN INCOME INEQUALITY THROUGH FISCAL POLICY, SELECTED CEQ COUNTRIES, 2012



Source: Indonesia MoF and World Bank 2015.
Note: CEQ = Commitment to Equity project. The figure shows the reduction of the Gini coefficient based on the distribution of "disposable incomes" (after fiscal policy) compared with the distribution of "market incomes" (before fiscal policy).

marks suggest a notable potential for both raising more revenue and lowering inequality (for instance, through a broader tax base and improved compliance). The value added tax (VAT) and the tobacco excise, which make up about half of Indonesia's tax revenue, are neutral regarding their overall redistributive impact. Although taxes can contribute to the redistribution of incomes from the top to the bottom, experiences from other countries indicate that public spending generally has the greatest impact on reducing inequality.

On the spending side, those programs that have been estimated to be the most effective in redistributing incomes receive the lowest spending. For instance, social assistance is strongly pro-poor, but it only achieves small reductions in inequality because overall spending is too low, and the most effective cash transfer programs—direct, targeted cash transfers—make up the smallest share of this category. Strikingly, the largest spending category consists of energy subsidies, amounting to 23 percent of primary spending. These expenditures are important for the poor in relation to their incomes, but they benefit largely the affluent in absolute terms (the richest decile receiving eight times more than the poorest decile). Education is the second-largest spending item and has the largest impact on redistribution among all spending categories. Yet, with a reduction of the Gini coefficient by 1.9 points, its impact is still relatively small.

From an equity point of view, the findings suggest an enormous potential to raise, reallocate, and spend fiscal resources more effectively. As recommended by the PSIA team, phasing out energy subsidies to free fiscal resources is a cornerstone in the fiscal reform process. Recent trends in economic growth and public concerns about rising inequality have called the plausibility of subsidies into question. However, it is important to note that energy and food subsidies tend to receive great support among the poor. Ultimately, it is the broader picture and the systematic assessment of the fiscal system that strengthen the narrative in favor of much-needed reforms.

The CEQ assessment was a critical input for the policy dialogue between the World Bank and the government of Indonesia. Specifically, it helped the Bank team to convince the authorities to replace fuel subsidies with a targeted cash transfer program, and, more recently, to rethink the rice subsidy program. The Government of Indonesia and the World Bank have agreed to extend the analysis in a joint program that

will cover the 2013 and 2015 budgets to reflect changes in fuel subsidies and cash transfers, incorporate additional analyses of taxes to accurately capture high-income earners, and pilot new methodologies that capture the incidence of infrastructure spending.

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Chapter 4: Social Protection

SECTOR OVERVIEW

Effective social protection policies occupy a center stage in governments' poverty and social exclusion agendas. Few countries are spared from having to wrestle with unanticipated systemic shocks such as economic crises or natural disasters. The consequences of unemployment, illness, and disability can by devastating if no safety nets are in place. The poor are particularly vulnerable and most affected by these shocks, given that they are typically more exposed to risk, have only limited access to social protection services and other risk management instruments, and face a number of obstacles in the labor market. Therefore, risk management strategies and ways to build resilience to shocks have important distributional implications.

Designing systems that effectively target the poor and most vulnerable is essential to achieving the World Bank's twin goals of reduced poverty and shared prosperity. However, it is well acknowledged that effective, well-functioning social protection programs need to be complemented by consistent labor market policies (as further discussed in chapter 5). Moreover, pursuing cost-effective approaches and ensuring fiscal sustainability is a fundamental pillar of best practices in this sector.

The composition of the Bank's lending portfolio has been moving toward supporting social protection system-oriented operations. The Bank has been working with partners to coordinate efforts and resources to help poorer countries build social protection systems that are fiscally sustainable in the long term, using resources cost-effectively to meet country goals. Building social protection systems also requires long-term engagement, and thus it can be harder to measure how such systems are practically implemented. It also depends on countries' abilities to develop their institutional capacities, especially across sometimes weak social protection agencies. Therefore, capacity building is a key component, especially in low-income and fragile contexts. This capacity building includes the generation of accurate, useful, and timely data to improve results.

By looking at the effectiveness and distributional impacts of social transfers, Poverty and Social Impact Analysis (PSIA) has been informing the social protection policy agenda worldwide. The PSIA Multi-Donor Trust Fund (MDTF) has supported distributional and political economy analysis of social protection reforms in Afghanistan, Albania, Armenia, Bolivia, Brazil, China, Colombia, Djibouti, the Dominican Republic, Ecuador, Fiji, Georgia, Lesotho, the former Yugoslav Republic of Macedonia, Mauritania, Mexico, Mongolia, Panama, Papua New Guinea, Peru, Romania, Senegal, Sri Lanka, Sudan, and Swaziland. In addition, regional PSIAs have been conducted in the Europe and Central Asia, Latin America and the Caribbean, and Africa regions.

Designing systems that effectively target the poor and most vulnerable is essential to achieving the World Bank's twin goals.

These PSIAs explore the implications of social protection systems (including conditional cash transfers [CCTs]) on access to basic services such as education, health, social insurance, employment, pensions, nutrition, land, housing, and public works. Social protection PSIAs are increasingly focusing on targeting mechanisms[1] and coverage levels. This chapter presents the main lessons from good-practice PSIAs that not only inform policy design but also promote program and policy implementation directly. By assessing the continued viability and reform of the social protection programs in these countries, these PSIAs provide a solid basis for policy makers to make informed policy choices.

The "Highlights and Good Practices" section below presents insights from some successful PSIAs of social protection reforms:

- *In Ecuador,* a PSIA raised awareness on the importance of cooperation between different government levels in the development of safety nets (compared with a CCT graduation strategy).
- *In Romania,* a PSIA informed the consolidation of three means-tested programs into a flagship program for low-income households, thereby strengthening work requirements, active labor market policies, and school conditionality.
- *In Fiji,* the PSIA led to the government's endorsement of key changes to the social protection system, hence improving targeting accuracy and poverty reduction.
- *In Albania,* the PSIA assessed the disability criteria of social assistance and helped prioritize beneficiaries who report functional and medical disability.

These PSIAs have successfully recognized the importance of appropriate policy, legal, and institutional frameworks as well as collaboration between different stakeholders—both across economic sectors and between the national and local levels.

TOOLS AND METHODS

PSIAs in the area of social protection have successfully combined quantitative and qualitative methods as part of a multidisciplinary approach that addresses the complex nature of social protection policy reform. Data collection methods have ranged from surveys and national censuses to interviews, focus groups, questionnaires, and mobile data collection.

The use of mixed methods often helped to integrate the views of stakeholders at different levels. For example, in Albania, while quantitative survey results identified the challenges in the design and performance of the disability program, the qualitative results provided the beneficiaries' firsthand experience with the implementation of the program (World Bank 2012b). An institutional stakeholder analysis was also conducted to understand the interests of institutions and organizations (including government policy makers, associations, civil society, donors, large firms, and so on) that can potentially influence disability reforms.

In Romania, a PSIA (World Bank 2011d) was used to separate the bottom-quintile NEEDT (neither in employment, education, disability, nor training) population into eight groups using Latent Class Analysis (LCA). LCA allows for multidimensional statistical profiling of the inactive population and identifies clusters or groups of out-of-work individuals that are (a) as homogeneous as possible within each cluster, according to a set of observable characteristics; and (b) as distant as possible between clusters (Box 4.1). In the case of Romania, the latent variable was defined as barriers in accessing the labor market. Using observed characteristics (such as gender, location, education, number of children, and minority status), the LCA algorithm generated eight clusters. This categorization highlights the heterogeneity in situations and constraints in accessing the labor market.

[1] Social, economic, and demographic characteristics that are relevant to targeting policies include age, gender, family situation, location, barriers to work, and so on.

BOX 4.1: LATENT CLASS ANALYSIS

LCA is a nonparametric method that is used to identify similar "latent classes" of the population through a number of "indicator" variables that signal underlying class. It is a form of cluster analysis. Observations in each cluster share similar values of a latent (unobserved) variable, which is inferred from observed characteristics. LCA estimates the likelihood that an observation with specific characteristics (observed variables) belongs to one of the defined clusters and estimates parameters for class profiles and class size. The advantage of LCA over other clustering techniques is that cases are not absolutely assigned to classes but have a *probability* of membership for each class. It can also deal with both continuous and categorical data.

To understand the employment barriers of the poor NEEDT population, the Romanian PSIA used LCA to separate them into eight groups: (a) educated, urban, unemployed men; (b) married, middle-aged, rural women; (c) uneducated, idle youth; (d) young, rural family women; (e) single Roma youth; (f) educated, rural unemployed; (g) urban Roma family women; and (h) young urban couples.

LCA generated a rich picture of different barriers to labor market integration in this context, considerably augmenting the limited amount of information contained in traditional descriptive statistics. The PSIA uses this profiling analysis to suggest tailored activation policies and support services to respond to the challenges faced by each of the identified groups.

Source: Bachas 2013a.

The Fiji PSIA (World Bank 2014b) used a relatively new computational package for economic and poverty analysis: the ADePT software. ADePT was developed by the World Bank and uses micro-level data from various types of surveys (such as household budget surveys, household income and expenditure surveys, demographic and health surveys, and labor force surveys) to produce rich sets of tables and graphs for a particular area of economic research. This software platform facilitates the use of new techniques and methods for a wide audience of policy practitioners and enables users to draw policy implications from empirical evidence. In Fiji, this tool, in combination with the poverty mapping software, allowed for automated survey data and economic analysis to generate highly disaggregated, small-area estimates of poverty—which was unique for the Asia and Pacific region. This poverty mapping methodology helped to create the first-ever poverty maps in the country (World Bank 2011c).[2]

HIGHLIGHTS AND GOOD PRACTICES

Ecuador: Assessing the Impact of the CCT Graduation Strategy

By drawing recommendations from a pilot program in the province of Chimborazo, Ecuador, this PSIA provides evidence to ensure successful implementation of the graduation strategy of the Human Development Voucher (Bono de Desarrollo Humano, or BDH) CCT program (World Bank 2015a). In Ecuador, CCTs cover 34 percent of the total population, which is close to 100 percent of the families living in poverty and extreme poverty—the biggest population coverage in Latin America and the Caribbean. However, this extensive coverage has created fiscal pressures with no measurable human capital impact for poor beneficiaries.

The objective of the strategy was to refine the program's targeting criteria to prioritize the extreme poor and progressively reduce coverage for the poor to encourage families that become financially stable to leave the program. In this context, the PSIA helped the provincial government to design the "Family Pro-

[2] The analysis was supplemented with quantitative and qualitative data and was nominated for best economic analysis by the Bank's former Human Development Network. For an introduction into the use of the ADePT simulation module, see Olivieri et al. 2014, 39–42. More information is also available at the ADePT website (accessed Oct. 7, 2016): http://go.worldbank.org/UDTL02A390.

motion Plan," a program meant to support families in accessing other existing programs.[3] As a result, a year and a half later, more than 700,000 households stopped receiving the BDH, losing a monthly income of US$50.

The PSIA data analysis on supply and demand identified existing services supporting skills development, labor insertion, and entrepreneurship (supply) as well as the needs profile of eligible families (demand). In addition to identifying supply gaps, the initial assessment generated baseline information to feed the evaluation of the pilot.[4] Considering the positive results of the pilot, the Bank's team is recommending an expansion of this intervention, which is designed to improve the families' abilities to react and maintain a certain income level.

The project results were presented to the technical secretary of the Coordinating Ministry for Social Development (MCDS). The MCDS then established "economic inclusion" as a cornerstone of the Family Promotion Plan for households receiving the BDH.[5] The PSIA has produced documents for its replicability, such as an operations manual (OM) and applications in Excel for the preparation of family plans. The OM, together with the technical instruments for implementation (software, databases, and tools to gather information), allow for its standard application in other processes accompanying BDH households. The interim results of the OM (for example, outlining the criteria for families' participation and the implementation process of the graduation strategy) were presented to high-level representatives of the Ministry of Economics and Social Inclusion (MIES) in a workshop (MIES 2013).

Even though the project has faced delays and implementation challenges (for example, administrative barriers), Bank involvement and follow-up have been key for the pilot completion and the preparation of key documents that would feed the design of the graduation strategy. Activities have been aligned with the Bank's current Interim Strategy Note for the country as well as with operations supporting the BDH CCT such as three nonlending technical assistance (TA) products on safety nets, skills and employability, and monitoring and evaluation. This PSIA has been successful given that it has fostered a close partnership with the national and local governments and has helped build local capacity. The program design can be replicated or adapted to other subnational governments within the country (Box 4.2).

Romania: Simulation of the Cost and Outcomes of Safety Nets and Activation Policies

This PSIA supported an ambitious reform of Romania's social protection system that would merge three means-tested social assistance programs into a single flagship anti-poverty program targeting the poorest quintile of the population: the Minimum Social Insertion Income (MSIY) program.[6] The PSIA simulates the poverty and social distributional impacts of the reform of the three programs: the Guaranteed Minimum Income (GMI) program, the Family Benefit (FB) program, and the seasonal Heating Benefit (HB) program paid during the cold season (World Bank 2013a). Besides consolidating the three programs, the envisaged reform will increase the adequacy of the benefits, expand the coverage of the poor, and modify the MSII

[3] The current relationship between the population and the provincial government through the promoters has helped to fulfill this objective. The promoters have served as counselors for the families and have been the link between the households and the services offered by the different programs.

[4] Supply information was gathered by interviewing key district informants about the location, estimated distance, and travel time from the district to the service center. Demand information was gathered by interviewing eligible families; the questionnaire applied to these families included relevant modules from the survey of the Registro Social of 2008 and 2013, the survey on social inclusion designed by the Ministry of Economic and Social Inclusion (MIES), and the national survey on employment and underemployment. The sixth stage involved a final evaluation of processes and results and included another round of data collection (by phone) on the conditions of eligible families after the intervention (that is, treated and control families).

[5] The Chimborazo project ended once the results were transferred to the MCDS.

[6] The PSIA was an important element that contributed to the success of this reform. The other funding sources were (a) the supervision budget of the World Bank's Social Assistance System Modernization Project loan (World Bank 2011d); (b) the technical assistance financed from the loan; and (c) counterpart resources. All of these sources blended to support the progress of the reform (PSIA TTL Emil D. Tesliuc, senior social protection economist, pers. comm., May 10, 2016.

BOX 4.2: ECUADOR'S CCT GRADUATION STRATEGY

The main value added of the PSIA of Ecuador's CCT graduation strategy is that it has raised awareness among key decision makers at the national and local levels, highlighting the importance of consolidating safety nets for households that graduate from the CCT program but remain vulnerable (potential risks being the loss of productive assets, physical disability, death of a household's breadwinner, disease, and so on). Safety nets and other joint strategies can improve households' income-generating opportunities and capabilities and can help avoid loss of capital.

Stakeholder engagement, as a key component of policy reform, has been integral to this analysis. The PSIA work has showcased the importance of clarifying and coordinating stakeholder responsibilities at various institutional levels. The Bank team coordinated the work with the national government (by including features of the counseling program under discussion) and at the local level (by agreeing to the terms and implementation plan with the provincial government).

The pilot program was implemented by the local government of Chimborazo Province, in close collaboration with local consultants hired by the Bank; managing capacities at Chimborazo were also strengthened. The provincial government's involvement here was essential to informing the program's design and to leading coordination with services implemented by the central government. In addition, the team strongly believes that the Chimborazo pilot contributed to raising awareness about the need to work on self-generating income activities among the households receiving the BDH. Knowledge acquired through the pilot program has been shared with the governments of Dominican Republic and Peru.

Sources: World Bank 2015a; PSIA Task Team Leader (TTL) Nelson Gutiérrez, senior social protection specialist, pers. comm., April 7, 2016.

program benefit to one that stimulates work.[7] The PSIA also assessed the practice of school conditionality in Romania against the international benchmarks and made recommendations for improving its effectiveness. The findings of the PSIA described the notable effects that the simulated reform would have on employment, human capital development, poverty and inequality reduction, policy improvement, and the political economy for the reform in Romania (World Bank 2014c).

Employment effects. In 2012, a quarter of the adults in the poorest quintile were neither in employment, education, disability, nor training (NEEDT) (Bachas 2013b). The PSIA used Household Budget Survey (HBS) data and LCA (discussed earlier in Box 4.1)[8] to separate the bottom quintile of NEEDT individuals into eight homogeneous groups, ranked by their distance from the labor market (probability of being employed).[9] The analysis quantified the size of these groups and described their characteristics, employment barriers, and the type of active labor market programs (ALMPs) that could increase their probability of employment.

Among the poor NEEDT population, about one-third were found to be easily employable, and another third would require significant assistance (such as ALMPs), while the last third had low employment pros-

[7] The reform will also deliver the targets of the approved Romania Poverty Reduction Strategy (European Union ex ante conditionality) and ensure that the EU 2020 poverty reduction indicator is met (SPC 2015).

[8] The statistical cluster analysis was based on the 2011 and 2012 rounds of the Romanian HBS. The PSIA helped develop a supplementary module to be added to the national HBS, to obtain the necessary data for the proposed estimation strategy and better capture the eligibility criteria for means-tested programs and the labor market response of beneficiaries. The LCA for the Minimum Social Integration Income (MSIY) program beneficiaries also allowed for an estimate of what proportions of the NEEDTs are easily employable, moderately employable, or hard to employ. This was a small input that fills in the knowledge gap on how the current means-tested programs work, and how the consolidated program may work, according to TTL consultations.

[9] These individuals have the capacity to work but are not in employment, education, disability, or training. The bottom quintile has a high rate of inactivity. The employment gap by income increases for women (Bachas 2013a).

TABLE 4.1: BOTTOM-QUINTILE NEEDT SUBGROUPS AND SUGGESTED ACTIVATION POLICIES

Group	Size (Romanian population)	Employment (percentage)	Activation policy
Educated, urban, unemployed men	151,000	63	Retraining, job counseling
Married, middle-aged, rural women	114,000	68	Childcare, retraining, part-time work
Uneducated idle youth	110,000	67	Human capital
Young rural family women	70,000	60	Childcare, part-time work
Single Roma youth	63,000	51	Integration, human capital
Educated rural unemployed	50,000	76	Job search assistance, entrepreneurship
Urban Roma family women	44,000	33	Integration, childcare
Young urban couples	32,000	48	Job services, human capital

Source: Bachas 2013a.
Note: NEEDT = neither in employment, education, disability, nor training

pects. Table 4.1 suggests specific activation policies for each NEEDT group of poor who were identified in the study. For example, the largest two groups—educated, urban, unemployed men and married, middle-aged, rural women—possess good education and previous work experience and are relatively close to the labor market. Job search assistance, short training or retraining courses, and childcare policies and tax incentives could be particularly effective for them. The groups of inactive youth have less access to the labor market and possess low human capital.

Another barrier faced by the poor NEEDT population in resuming employment was that their earnings would be fully accounted for in reducing their social assistance receipts, up to a threshold. Often, beneficiaries would lose entitlements to health insurance as well. This type of poverty or benefit trap was incorporated into the design of the GMI program. The PSIA simulated the labor market impact of MSIY if the GMI benefit formula would be changed to one with an income disregard. The draft MSIY law adopted by the government has introduced a 50 percent income disregard in the benefit formula, to encourage the combination of social assistance incomes with other earnings.

The PSIA recommended an impact evaluation to estimate the magnitude of the employment effects triggered by the new benefit formula (Gerard 2013a). The actual impacts of a given reform are unknown ex ante and can involve unintended consequences. Thus, it is very important to pilot reforms by enabling the government of Romania to make informed decisions and readjust program parameters.

Human capital effects. The reform simulated under the PSIA is also directed at encouraging human capital accumulation. The PSIA suggests that the existing school conditionality attached to the social assistance programs in Romania could be improved by (a) targeting school enrollment and attendance conditionality toward older students from the poorest families; and (b) rewarding achievement and learning

(instead of enrollment or attendance). As in the case of financial work incentives, it is important to pilot new policies first to learn about their impacts, and an impact evaluation may help the government of Romania to choose new schooling conditions adequately (Gerard 2013b).

Distributional effects. Overall, the introduction of the MSIY program will bring substantial efficiency and equity gains for the Romanian low-income population. Its implementation will reduce poverty and inequality in Romania, reduce the administrative and private costs of means-tested programs, and improve work and human capital accumulation incentives and requirements (World Bank 2014c).

Policy improvement effects. The PSIA exercise has successfully informed the policy dialogue on poverty reduction and social protection in Romania. The adoption of the legislation and the implementation of the program are key targets of the Government of Romania. They are supported by a results-based Social Assistance System Modernization project tied to a number of disbursement-linked indicators (World Bank 2011d) and by a trigger in the country's Development Policy Financing (DPF) provisions.

Many of the program features analyzed in the PSIA have been included in the draft MSIY law, such as the full consolidation of means-tested programs, the introduction of the earning disregards, and the simplification of the eligibility and recertification requirements. Under the MSIY, the budget for means-tested programs will be further increased and will be maintained at this level in real terms thereafter. Given the increase in funds, the coverage of households in the poorest quintile can be expected to increase from the current level of 60 percent (based on HBS data from the National Institute of Statistics as well as administrative data) to about 80 percent, with progressive coverage and larger benefit levels for the poorest. This measure alone would ensure that 580,000 fewer persons would live in poverty by 2020 than in 2008, assuming that after the approval of the MSIY legislation in October 2016, necessary actions related to the upgrade of its management information system (known as SAFIR) are also launched soon after.

Political economy effects. Despite the frequent change in senior counterparts, the PSIA analysis has been instrumental in maintaining the momentum for the reform, because it has enabled the Bank team to support the policy engagement with different ministers of Labor, Family, and Social Protection and their teams.[10] After the PSIA ended, the Bank team continued to support this agenda by helping the client draft the MSIY law and then disseminate it. In May 2016, the law was adopted by the government of Romania and sent to the Parliament, and was adopted by the Parliament in October 2016. Its implementation arrangements are expected to be ready in two years, with implementation expected to begin in April 2018.

The PSIA has helped to provide Romania's government with a good understanding of the advantages of the reform as well as its likely outcomes on reducing poverty and inequality and activating nonworking MSIY beneficiaries. Because the PSIA captures the effects of the parametric reform on a number of vulnerable groups (for example, Roma), this reform could be a model for other countries in the Europe and Central Asia region that have operated several fragmented means-tested programs for such groups.

Fiji: Measuring Targeting Accuracy and Poverty Impact of Social Protection Policies

Two PSIAs on the assessment of the social protection system in Fiji have helped to create the first-ever poverty maps in the country, which provide a powerful visual depiction of poverty pockets and can help to ensure that anti-poverty programs reach the poor. Beyond its support of targeting, this work is informative for the planning process at a subnational level and for analyzing resource allocation and existing programs (World Bank 2011b). Moreover, in discussing the geographic variation of poverty, another related report on Fiji's poverty trends, profiles, and poverty maps has been the first of its kind in the Pacific region to present highly disaggregated estimates of poverty nationally (World Bank 2011c). Both reports have been nominated for best economic analysis by the World Bank's former Human Development Network, particu-

[10] The PSIA team has worked closely with the leadership of the Ministry of Labor, Family, and Social Protection (MoLFSP); the General Directorate for Social Assistance Policy; the National Agency for Social Benefits and Inspection; staff from the frontline units; and academia and research think tanks.

larly for their use of the Bank's ADePT tool, an innovative software platform for automated economic and poverty analysis (as discussed earlier in the "Tools and Methods" section).

In collaboration with the Fiji Bureau of Statistics (FBoS) and Department of Social Welfare (DSW), the Bank team undertook an extensive analysis of poverty and existing social safety nets in the country to obtain data on key social protection programs and to measure the programs' impact on poverty status. The initial PSIA (World Bank 2014d) evaluated the impact of changes in social protection policies on the welfare status of beneficiaries (poverty and inequality).

As part of a follow-up PSIA, the government of Fiji then asked the Bank to provide technical support in implementing new social protection programs, as well as analytical support in measuring the targeting accuracy (for poverty benefit) and distributional impact of the new programs to inform the government concerning whether the programs were meeting the original objectives and whether any adjustments (to coverage, benefit size, and so on) would be needed in the future to meet the government's goals (World Bank 2014b). The analysis of the design and operational side of the social protection system encompassed quantitative and qualitative analysis of the Family Assistance Program (FAP), Fiji's main social protection program.[11]

The analysis of poverty and social protection in Fiji identified vulnerable groups and established the key performance indicators (targeting accuracy, coverage, benefit size, and poverty impact) of the existing social protection system (mostly FAP). The government of Fiji has implemented changes to the social protection programs, including more clearly defined program eligibility and improved poverty targeting, following the extensive technical advice received from the Bank over recent years. Following the engagement and discussions of the Bank team with DSW and the Ministry of Finance, a Cabinet resolution endorsed two key changes to the social protection system in the country: (a) introduction of the Poverty Benefit Scheme (PBS) at a household level (targeting the poorest 10 percent of population); and (b) introduction of the old-age social pension for people aged 70 years and older. (Few elderly are covered by social insurance from the Fiji National Provident Fund, and as a result, the poverty risk for this group is high.)

One of the key challenges was working with the government's counterparts on how the proposed policy changes could be implemented with no substantial additional budget demand. Following the government's endorsement of the new social welfare programs, the Bank's team has been engaged with DSW to provide further assistance with implementation (including information technology [IT] support) of the endorsed policy changes.

The initial PSIA grant (World Bank 2014d) funded an ex ante evaluation of various policy scenarios, which helped inform the subsequent policy reform. The current PSIA exercise (World Bank 2014b) is focused on ex post assessment of the approved policy changes and will help the government of Fiji to adjust and fine-tune poverty-targeted benefits. With the second PSIA, the Bank and FBoS have been involved in the preparatory work to evaluate the new social protection programs by designing the new social protection module of the 2013/14 HIES—which captures new social transfers introduced by the government early in 2013. The actual evaluation will still need to be undertaken after the HIES data become available. It is important to keep investing in the design of survey instruments that would support monitoring and evaluation efforts.

These activities have been implemented smoothly because there has been a strong genuine interest from the client. The Bank team shared experiences with FBoS and DSW regarding the design and implementation of social welfare programs and assisted the counterparts in in the preparations for a new survey instru-

[11] The main source of expenditure data was the Household Income and Expenditure Survey (HIES) from two rounds: 2002/03 and 2008/09. The report also used ADePT to apply the poverty mapping methodology mentioned before and generate highly disaggregated, small-area estimates of poverty using the national census of 2007. The analysis was supplemented with quantitative and qualitative data obtained from the survey of FAP beneficiaries using ADePT. The Bank team will need to follow up with FBoS on HIES data collection and analysis to ensure that data are in place to measure the programs' impact. HIES data are expected to be of high quality.

ment that captures new programs. The capacity of DSW and FBoS improved as a result of this project. On one hand, the collaboration between FBoS and the World Bank led to building capacity for poverty measurement. The capacity-building exercise included dedicated training for household surveys under FBoS using ADePT. On the other hand, DSW has further advanced its capacity to implement targeted social assistance programs using this software as well.

Overall, findings suggest that the government of Fiji should consider increasing fiscal allocations to accommodate a gradual increase in the coverage of social assistance. Pensions are often found to be the largest transfer as a share of total per capita expenditure and are a key driver of poverty reduction (as illustrated in the next case, concerning disability benefits in Albania).

Albania: Improving the Effectiveness of Disability Benefits

Disability expenditures in Albania have grown drastically over the past 10 years, increasing by 53 percent because of increases in both the number of beneficiaries and the level of benefits—at the expense of other, more poverty-focused programs.[12] An MDTF-funded PSIA assessed the profile of recipients of disability allowances or pensions and examined the impact of proposed disability reforms on current beneficiaries (World Bank 2014a).

This PSIA is innovative in that its results have filled a considerable knowledge gap and have significantly contributed to the design of disability reforms in Albania. It has improved understanding about (a) the profile of beneficiaries of disability allowances or pensions in Albania, and (b) how the proposed disability reforms and potential changes in the system would affect the current beneficiaries. This has helped to better understand the political economy surrounding these reforms and how different political constituencies (major stakeholders) would respond to, and influence the reform efforts. The PSIA made the case for a much-needed reform in this area at a time when the government of Albania had already been moving toward reforming its disability assistance program.[13]

To address the general lack of detailed data on disability, the PSIA team complemented new survey data from the Albania Disability Survey (World Bank 2012b) with qualitative data from focus groups. Using a mixed-methods approach for the analysis was useful in this case, given that the qualitative data provided valuable firsthand experience of beneficiaries. An institutional stakeholder analysis was also conducted to understand the interests of institutions and organizations that can potentially influence disability reforms, which was invaluable in presenting a complete picture of the issues and challenges in this area.

Strikingly, the results from the quantitative survey showed that 11 percent of the beneficiaries of the disability assistance program report no functional disability. The qualitative survey confirmed that benefits have been poorly allocated. The following factors point to structural weaknesses in assigning and administering beneficiaries (World Bank 2012b): (a) scattered legislation (special laws for some disability categories); (b) outdated medical eligibility criteria; (c) medical assessment only (as opposed to medical and functional assessment); (d) conflict of interest among the players who determine disability; (e) weak mechanisms and poor capacity to graduate recipients who are no longer eligible; and (f) weak benefits administration (paper-based records).

The analysis conducted by this PSIA has been critical to substantiate the reform proposals and policy dialogue around the implementation. Specifically, it recommended improvements in *equity* (by improving the

[12] Disability assistance programs are not part of Albania's Living Standards Measurement Study (LSMS), and no qualitative survey has been undertaken before on disability benefits to understand the views of disability assistance beneficiaries and other stakeholders. While overall spending on social assistance is comparable with other countries in the region, the composition has gradually shifted away from benefits targeted to the poor. Two cash transfer programs account for most of this spending: disability assistance benefits and the Ndihma Ekonomike (NE) program, which is the main poverty-targeted social assistance benefit. The relative balance in spending on these two programs has shifted significantly over time in favor of disability benefits. Given the lack of data, this unsustainable increase in disability spending could not be explained at the time, before the PSIA was undertaken.

[13] Interview with PSIA TTL Aylin Isik-Dikmelik, senior economist, April 4, 2016.

disability eligibility criteria and processes) and *efficiency* (by modernizing the administration and strengthening oversight and controls) (World Bank 2014a). This consists of a shift from the medical to the social model that includes functional and medical assessments in eligibility determination. Moreover, the PSIA recommended the use of a poverty severity index instead of simple poverty headcount in identifying beneficiaries. This included the recommendation for an automated management information system (MIS).

The results from this PSIA were used in the design of the results-based Social Assistance Modernization Project (SAMP), which currently supports the reforms of the disability assistance program (World Bank 2012a). The SAMP is a follow-up operation to the Albania Social Sector Reform Development Policy Loan (World Bank 2011a) and will support the implementation of these policy changes to ensure that the benefits accrue to those in need. The PSIA was developed in coordination with the Ministry of Welfare and Youth as part of the dialogue and support for disability reforms under the SAMP, which helped to both build capacity in the understanding of the challenges in this area and to build the government's ownership of, and commitment to, the disability reform agenda. The PSIA contributed to a better design of the project and also informed important follow-up activities.

The government of Albania is committed to reforming disability benefits, with fiscal consolidation as the driver as well as concerns about equity and efficiency. It has already taken important steps in this direction, including the following:

- It has formally endorsed the principles behind disability reforms (the social model) by adopting the United Nations Convention on the Rights of People with Disabilities.
- It has also demonstrated its commitment to redressing imbalances in spending by reforming the indexation of disability benefits (from ad hoc to inflation-based).

The issue of coverage and beneficiary selection should be at the center of the reform agenda on disability assistance. A social insurance scheme that pools the health risks over large populations can address the high costs of disability without the need to rely on assets. The government of Albania has come a long way in designing the disability reform and has pretested it in a small area. The government is now preparing to pilot the reform (in fall 2016) and will do an outreach campaign beforehand to communicate its rationale, build ownership, and ensure the sustainability of the reforms.[14]

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[14] This outreach campaign will help manage the political and social risks arising from the termination of benefits to those who report no functional disability or who are no longer eligible under the new system.

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Chapter 5: Labor Markets

SECTOR OVERVIEW

The role of the government in improving job access has become a key component of the development agenda and is actively supported by the World Bank. Policies following this agenda are often referred to as "activation policies" and "graduation policies"; they are necessary complements to the successful implementation of social assistance programs.[1] The Bank takes into account the importance of integrating labor market policies with well-functioning social safety nets (as further discussed in chapter 4).

According to the Bank's Social Protection and Labor (SPL) Strategy 2012–2022 (World Bank 2012), SPL systems are being built, refined, or reformed in almost every country to help their people find jobs; improve their productivity; cope with shocks; and invest in health, education, and their own well-being. Effective SPL systems, first, build resilience by ensuring protection against sudden shocks. Second, they improve equity by reducing poverty. And third, they promote opportunity to improve people's productivity and incomes by building their human capital.

The World Bank's technical and financial assistance has contributed to rigorous data collection and analysis in this sector to identify policy interventions that improve access to labor markets and labor mobility, with special attention to vulnerable groups. In the Middle East and North Africa, Europe and Central Asia, South Asia, Latin America and the Caribbean, and East Asia and the Pacific regions, one of the main policy imperatives has been increasing access to economic opportunities, particularly among more-vulnerable groups, including youth, women, and ethnic minorities. Schools and universities often fail to impart essential skills to equip those confronting the challenges of the labor market for transitioning to adulthood and active citizenship. The benefits of labor market programs do not always reach young people. Labor informality and exploitation are cited as the primary concern among employed youth in qualitative research. Young entrepreneurs also struggle to gain access to finance, which remains one of the main challenges in successfully establishing a business.

The role of the government in improving job access has become a key component of the development agenda.

This chapter presents highlights and insights from Poverty and Social Impact Analyses (PSIAs) on recent reforms in the provision and delivery of active labor market programs (ALMPs) as well as on challenges related to the labor market integration of refugees. As part of the ongoing policy dialogue with partner countries, the PSIA Multi-Donor Task Force (MDTF) has supported distributional and political economy analysis of labor market reforms in Bangladesh, Brazil, Bulgaria, China, Colombia, Ecuador, the Arab Republic of Egypt, India, Jordan, the former Yugo-

[1] "Activation policies" are defined as social protection and labor policies connecting inactive or out-of-work individuals to jobs and increasing the earnings of active individuals. "Graduation policies" refer to policies targeted at individuals benefiting from social security with the goal of sufficiently increasing income so they do not require social assistance anymore.

BOX 5.1: BHUTAN'S PIONEERING APPROACH TO CULTURE AND DEVELOPMENT

In Bhutan, an ex ante impact assessment led by the World Bank and Bhutan's Ministry of Home and Cultural Affairs contributed to a policy shift in the way the Royal Government envisions managing its cultural assets and landscape. Facing rapid modernization and the abandonment of ancient cultural practices and entire traditional villages, the Royal Government of Bhutan (RGoB) began formulating its first Cultural Heritage Bill in 2010.[a] In line with Bhutan's sustainable development priorities and Gross National Happiness (GNH) philosophy, the bill is envisioned to improve social development, community vitality, and subjective well-being indicators. In this context, the MDTF supported a PSIA that assessed the potential implications of the proposed bill for villages, their owners and households, their cultural assets, and geographic areas.

The PSIA had a dual focus: covering both groups who could be potentially impacted by the bill and the institutional needs for its implementation. Given the novelty of the sector and the lack of referential studies, the PSIA refined multiple quantitative and qualitative methods to define a coherent and relevant mixed methods approach, including the following:

- Stakeholder analysis and institutional mapping, with interviews and focus group discussions
- Compilation of secondary data from various sources
- Sampling and a baseline survey of 56 potential heritage villages and households and selection of 4 sample villages (Drugyel, Korphu, Rinchengang, and Sakteng)
- A rapid appraisal of the remaining traditional houses and their residents in Thimphu
- A poverty assessment to determine the characteristics of those potentially affected by implementation of the bill
- Comparative case studies on incentive mechanisms, penalties, and funding mechanisms

The PSIA determined the profiles of "vernacular heritage sites" and described the potential impacts of the bill along four key transmission channels: assets, employment, financial architecture, and governance. Its findings confirmed the need for revisions to the proposed bill to imbue greater value to heritage assets and establish formal mechanisms for their stewardship. In doing so, the bill is now expected to generate employment opportunities and overall improvements in living conditions for the rural poor and better achieve GNH principles. The PSIA also recommended special attention to the most marginalized and vulnerable groups to further support these principles. The PSIA has also provided the RGoB with a robust and practical framework for the upstream assessment of its cultural heritage policies.

The World Bank team worked closely with its counterparts at the Ministry of Home and Cultural Affairs to ensure that the analytical work was embedded in the ongoing policy discussions.[b] Moreover, the team acted as a convener and facilitator bringing together key government agencies that used to work in isolation. This is resulting in more concerted efforts for the formulation of an integrated approach to the stewardship of Bhutan's cultural landscapes. Upon completion of this PSIA, the RGoB and the Bank have remained engaged on the Cultural Heritage Bill through a follow-up PSIA on the bill's implementation.

This PSIA is the first at the World Bank that explores the role of culture in sustainable development. It demonstrated the unique value and potential of culture for economic and social development, particularly for the poorest in rural areas. Hence, it is likely to contribute to a strategic shift in the Bank's portfolio in Bhutan by systematically incorporating culture as an intrinsic driver of a more inclusive development.

Source: World Bank 2014.
a. Extending the definition of cultural heritage from the monuments to living cultural landscapes.
b. The government decided to include the final PSIA report as an appendix to the bill itself, demonstrating the success of this work.

slav Republic of Macedonia, Mexico, Moldova, Poland, Sri Lanka, Tunisia, Uzbekistan, and Turkey, in addition to a regional PSIA in South Asia. Moreover, PSIAs on unique issues such as preservation of cultural heritage in Bhutan (Box 5.1) have spillover effects and highlight the relevance of labor market opportunities and poverty reduction strategies.

In addition, a PSIA assessed the ex ante poverty and social impact of the planned mechanization policy of cotton harvest in Uzbekistan on farm workers and vulnerable private farmers, and identified mechanisms to mitigate the possible negative impacts of this policy on these groups (Swinkels et al. 2016). If successfully implemented, an accelerated mechanization effort is expected to have an overall positive impact by minimizing the need to massively mobilize labor for cotton harvesting. The findings have been influential in shaping the policy dialogue and the design of Bank operations around the mechanization of the cotton sector. Results have also been used to design the formal ongoing household survey questionnaire that is being administered in the country.

Other salient PSIA topics have been youth inclusion in labor markets and refugee dynamics, activation reform and policies, rural productive inclusion, employability constraints, the minimum wage, work incentives, economic mobility, skills development, gender equity, access to labor markets, and entrepreneurship opportunities. Good practices presented in this chapter include comprehensive analysis of inclusive labor market policies in Tunisia to help propel its young population into the workplace and the distributional impact of refugee influx on Turkey's formal and informal labor markets.

TOOLS AND METHODS

In the area of labor markets, PSIAs have collected data through a variety of qualitative methods (such as interviews, questionnaires, and narrative stories to build in-depth qualitative research) and quantitative methods (such as numeric survey ratings and innovative quantitative assessments that integrate various tools and data sources). For instance, analysis conducted in Tunisia to examine issues of youth exclusion used a combination of tools and methods (World Bank 2015b): (a) rigorous quantitative analysis of data from two household surveys for rural and urban Tunisia, which include a combined household and youth survey tool; (b) comprehensive qualitative research results from youth groups from all around the country; and (c) an institutional assessment of current ALMPs and services for the youth. The methodology developed under this PSIA was designed for future use across other regions and the Bank's Global Practices to collect youth-relevant data globally. It uses a holistic conceptual framework that understands youth inclusion as multidimensional policy challenge.

In the case of a PSIA in Turkey that assesses the distributional impact of Syrian refugees in Turkish host communities (World Bank 2015a), the team benefited from the availability of quality data on both Syrian refugees' origins[2] and destination regions. The PSIA uses a novel instrument to measure the wage and employment effects related to the influx of refugees into Turkish labor markets. The instrument uses a measure of travel distance to make sure that the labor market impacts are not confounded with other place-specific characteristics that influence economic trends and are correlated with distance from the border. The strategy behind this instrument is based on the idea that travel distance from the Syrian governorate (from which the refugee is fleeing) to each potential destination region[3] on the Turkish side is a key determinant of refugee location decisions and thereby can be used to control for certain unobservable characteristics (as further discussed in Box 5.2).

[2] Origins determined from prewar Syrian labor data.

[3] Using Nomenclature of Units for Territorial Statistics, Level 2 (NUTS2) subregions.

BOX 5.2: TRAVEL DISTANCE INSTRUMENTING STRATEGY

In the migration literature, it is fairly common to use travel distance as an instrument for measuring impact. The instrument uses the fact that refugees from different Syrian governorates will use different border crossings (there are 10 between Turkey and Syria) to reach different parts of Turkey, generating considerable variation in travel distances. Once Del Carpio, Wagner, and Triebe (2015) included controls for distance from the border, none of the employment estimates is statistically significant, and the magnitude of the point estimate for the overall employment effect is small. Even without the distance controls, only the instrumental variable results for formal employment are statistically significant, and they suggest a negative pre-trend: the instrument is negatively correlated with the fraction of people in a subregion who attend school.

However, the potential shortfall of this instrument is that distance may also be capturing other differences between communities: the key threat to the validity of any distance-based instrument is that subregions that are close to a border crossing will systematically differ from those farther away. The PSIA team was able to directly deal with this concern by including a high-order polynomial of the inverse distance from the closest Syrian border crossing to the most populous city in each Turkish subregion as a control variable. Thus, the team's estimates do not confound the impact of refugees on the Turkish labor markets with unobservable characteristics that are correlated with distance from the border.

Moreover, placebo tests show that the instrument is uncorrelated with preexisting trends in employment as well as with the likely impact of the 2012 education reform. Del Carpio, Wagner, and Triebe (2015) run regressions using data from the Turkish Household Labor Force Survey (LFS) 2009 and 2011. As a placebo test, the authors pretend that the Syrian refugees arrived between 2009 and 2011, rather than between 2011 and 2014, to see whether the instrument is correlated with Turkish outcomes in this preceding period. The tests show that the instrument is uncorrelated with preexisting trends in employment or with the likely impact of a major 2012 education reform.

Identification relies on the fact that there are multiple border crossings between Turkey and Syria, and Syrians from different provinces have a differential likelihood of using any one of these. Once distance controls are included, the key identifying assumption of the instrument is that unobserved trends in economic outcomes in a subregion systematically depend only on its proximity to the border, while the flow of Syrian refugees also depends on the degree to which Syrians from each governorate are likely to flee to Turkey and the different border crossings they are likely to use. The instrument is significant at the 1 percent significance level in every specification estimated, showing that despite controlling directly for distance from the border, the instrument provides sufficient identifying variation.

Source: Del Carpio, Wagner, and Triebe 2015.

HIGHLIGHTS AND GOOD PRACTICES

Turkey: Impact of Syrian Refugee Influx on Turkish Host Communities

The PSIA in Turkey filled an important knowledge gap by examining the distributional impact of Syrian refugees on Turkey's formal and informal labor markets.[4] The PSIA uses an innovative travel distance instrumenting strategy (further discussed in Box 5.2) to assess the wage and employment effects among different segments of the host population (World Bank 2015a). The analysis is part of a larger research project with development partners that involved intense cross-sectoral work within the World Bank and with different ministries in the government of Turkey (Brenner et al. 2015).

In late 2014, as noted earlier, reliable information on the number and distribution of Syrian refugees across subregions of Turkey became available. The PSIA combines this information with a survey from the Disaster and Emergency Management Authority (AFAD) on the origin cities of Syrian refugees and with the 2011 and 2014 Turkish Household Labor Force Surveys to assess the impact of the refugee influx on Turkish labor market conditions (Del Carpio, Wagner, and Triebe 2015). The instrumental variable estimates are consistent with one-for-one displacement of Turkish workers by Syrian refugees in a local labor market.

The full impact of the presence of Syrian refugees on the labor market has yet to be analyzed. Nevertheless, preliminary findings suggest that the refugees, who overwhelmingly do not have work permits, result in the displacement of informal, low-educated, frequently unpaid, female Turkish workers, especially in agriculture. The fact that the magnitude of the estimated displacement effect is very large reflects the high degree of substitutability between refugees and certain Turkish workers (informal, part-time, and field workers). It also likely reflects the relocation of Turkish workers across provinces (Del Carpio, Wagner, and Triebe 2015).

Although there is net displacement, the inflow of refugees also creates higher-wage formal jobs, allowing for occupational upgrading of Turkish workers. This is likely because refugees decrease the costs of production for Turkish firms (an expansion of the supply of certain types of labor), resulting in a scale effect that appears to outweigh the substitution effect for formal, regular jobs, thus increasing the demand for those types of jobs. In the same vein, all the negative employment effects of the refugee flow is in part-time work, with the number of full-time jobs practically unaffected. Among women, the displacement from the labor market is also associated with an increase in school attendance. The resulting average wage increase is likely because some of those who would have experienced wage losses exited the labor market.

To fully assess the potential impact of work permits, allowing the Syrian refugees to join the formal Turkish labor market in the longer term, would require an understanding of the skill set of the refugee population. Currently, little is known about the refugees who have arrived in Turkey, making data collection a priority. In addition to the research itself (Del Carpio, Wagner, and Triebe 2015),[5] the PSIA contributed to (a) the establishment of a steering committee, consisting of different government agencies and international organizations, to share knowledge and oversee the research; (b) the development of a representative sampling methodology that will be used for future research; (c) a forthcoming quantitative survey with a greater emphasis on the labor market challenges and opportunities for Syrians and host community Turks, which will likely be undertaken in the first half of 2017; and (d) a forthcoming qualitative research survey that will also focus on labor market challenges and opportunities, scheduled to be conducted during early 2017.[6]

[4] The Turkey PSIA was funded by the MDTF and received additional funding from the Swedish International Development Agency (SIDA).

[5] PSIA Task Team Leader (TTL) Stavros G. Stavrou, senior social development specialist, pers. comm., September 9, 2016; interview of Zeynep D. Darendeliler, social development specialist, April 5, 2016.

[6] PSIA Task Team Leader (TTL) Stavros G. Stavrou, senior social development specialist, pers. comm., September 9, 2016; interview of Zeynep D. Darendeliler, social development specialist, April 5, 2016.

The PSIA has had long-reaching influence already:

- It has had an impact on the ongoing Systematic Country Diagnostic (SCD) of Turkey.
- It is expected to provide inputs to the next Country Partnership Framework.
- It has supported the policy dialogue with the Ministries of Labor and Education, the Directorate General of Migration Management, and the Disaster Prevention Agency on structuring programs for refugees. Sessions have been held with these institutions to discuss experiences of development programs targeted toward long-term displaced individuals around the world.

The government of Turkey and the World Bank are currently working in partnership on a program of technical assistance that aims to identify and mitigate the impact of Syrians under Temporary Protection (SuTP) on Turkish host communities. The need to manage host-refugee tensions is an opportunity to learn how to prevent social tensions through intercommunal interaction and trust building. Overall, through a collaborative approach, the Bank has been able to gain the counterparts' trust and buy-in by demonstrating that the research will generate important insights.

The key challenge facing the government of Turkey now is to mitigate the potential negative socioeconomic impacts of hosting SuTP while building on the positive contributions refugees can make and supporting them to be self-reliant until they are able to return to Syria. Investments should be designed to relieve the socioeconomic pressures on host communities and ensure the spread of benefits to them. This should include lessons on how municipalities can be supported to respond to refugees (World Bank 2015b).

Tunisia: Youth Inclusion Study

In Tunisia, the MDTF cofunded a PSIA to provide evidence on the socioeconomic integration of young people who are neither in education, employment, nor training (NEET). Young NEETs aged 15–29 years are most affected by economic exclusion in Tunisia, representing an estimated 33 percent of the population—one of the highest rates in the region (CMI, World Bank, and ONJ 2014). This work supported the Tunisia Youth Inclusion economic and sector work (ESW) and assessed the impact of recent ALMP reforms and proposed reforms on labor market intermediation[7] to inform the Tunisia Employment Development Policy Loan II. The PSIA was successful in shaping the overall youth agenda in the Maghreb region, even beyond Tunisia.

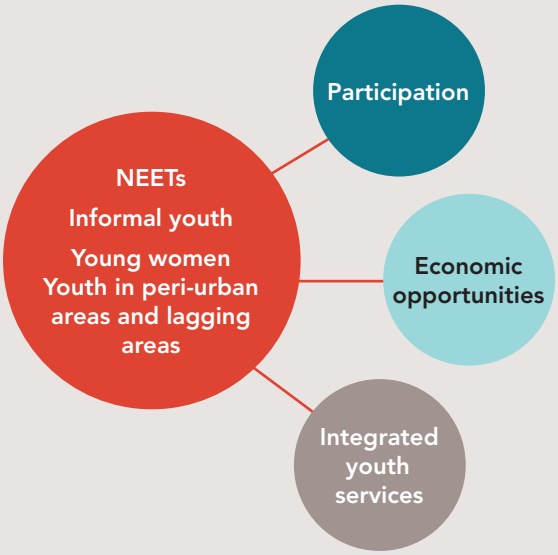
Instead of approaching youth development only through a narrow "job lens" (economic inclusion), it uses a cross-sectoral approach that covers the following dimensions: (a) participation and active citizenship, (b) access to economic opportunities, and (c) youth-friendly services at the local level (Figure 5.1). The multidimensional youth policy approach connects education to jobs in a three-way collaboration among the school system, technical colleges, and local corporate partners. The analysis quantified key issues in youth participation and identified levels of trust in various institutions by various youth segments.[8]

The report recommends that costly ALMPs geared to help university graduates should be redirected toward young people with lower levels of education (World Bank 2015b). Further, there is a need for more nongovernmental and civil society organizations to bring young people closer to other local institutions. Young Tunisians need better career guidance in universities and schools, with their formal education extending to technical and life skills as well as foreign languages. Moreover, better Internet coverage could lead to increased use of online job sites. Last, promoting self-employment among young people by facilitating access to credit is seen as an effective option to redress social and regional disparities.

[7] Proposed labor intermediation reforms concern different categories of youth stakeholders: unemployed graduates, less-educated youth, youth from poor households, and young women.

[8] PSIA TTL Gloria La Cava, senior social scientist, and Tobias Lechtenfeld, social development specialist, pers. comm., June 8, 2016.

FIGURE 5.1: MULTIDIMENSIONAL POLICY FOR YOUTH INCLUSION IN TUNISIA



1. PARTICIPATION AND ACTIVE CITIZENSHIP

- Youth-led community development
- Volunteering
- Youth councils for participation and voice
- Human rights

2. ACCESS TO ECONOMIC OPPORTUNITIES

- Job counseling in secondary and tertiary education
- Skills training
- Apprenticeships/internships
- Job intermediation
- Youth entrepreneurship

3. YOUTH-FRIENDLY SERVICES AT THE LOCAL LEVEL

- Life skills training
- Information and communication technology
- Healthy lifestyles
- Legal support services
- Peer monitoring
- Sports

Source: CMI, World Bank, and ONJ 2014.

This analysis involved intense collaboration across the World Bank's Global Practices and benefited from synergies in the policy dialogue with country's stakeholders. This PSIA has informed the Tunisia Urbanization Review; the Tunisia ESW, "Breaking the Barriers to Youth Inclusion" (CMI, World Bank, and ONJ 2014); the Country Partnership Strategy under preparation; and a new World Bank investment project under preparation, "Productive Inclusion Opportunities for Young Women and Men". The ESW put in place a cross-sectoral steering committee that fosters in-country partnerships and created for the first time a platform for exchanging views on youth inclusion across institutions, and including youth stakeholders.[9] The intense engagement underlying this work also helped strengthen the capacity of Tunisia's National Youth Observatory (Observatoire National de la Jeunesse, or ONJ), which acts as a communications bridge between young people and the government, focusing on challenges and policy issues related to the youth.

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CMI (Center for Mediterranean Integration), World Bank, and ONJ (Tunisia National Youth Observatory). 2014. *Tunisia: Breaking the Barriers to Youth Inclusion.* Policy Research Working Paper 89233, World Bank, Washington, DC.

[9] The steering committee was composed of the Ministry of Labor, Ministry of Youth and Sports, Ministry of International Cooperation, National Statistical Institute, National Employment Observatory, and youth representatives. Recommendations that emerged from the discussions were incorporated into the report and disseminated in Tunisia; Marseille, France; and Washington, DC, at a series of public events, including a flagship event in Tunis with senior policy makers, youth leaders, numerous youth associations, and a series of media outlets. The dataset has been made publicly available, and researchers have been working with it since its release.

Del Carpio, X.V., M. Wagner, and D. Triebe. 2015. "The Impact of Syrians Refugees on the Turkish Labor Market." Policy Research Working Paper 7402, World Bank, Washington, DC.

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Chapter 6: Education

SECTOR OVERVIEW

Education policy is one of the key policy priorities of governments to reduce poverty and improve shared prosperity. As mentioned in chapter 2 on fiscal policy, education has direct and indirect effects on the growth and the distribution of incomes in the medium and long term as well as other important social benefits for individuals and society at large. Across the developing world, one crucial policy mandate has been increasing access to higher quality and more efficient education services, particularly of the more vulnerable groups. These issues are particularly critical in Eastern Europe and Central Asia and Latin America and the Caribbean, as the countries in these regions have reached universal enrollment at the primary and secondary levels of education. However, socially disadvantaged students, especially at the secondary level, face significant barriers to completing school and pursuing a tertiary education, with sizable differences depending on students' location, gender, and socioeconomic background.

One of the key issues in this sector is the high risk of student dropouts. Vulnerable students miss more hours, especially those living in rural areas and farther away from schools. In some countries and regions, especially poorer ones, students are more likely to end their studies once they reach the of their mandatory education period (usually primary school). Moreover, schools and universities often fail to impart skills that adequately equip students for formal and constantly changing labor markets, while, in some countries, university admissions are discretionary and lack transparency. All these issues create disincentives for girls and boys to stay in school and complete their tertiary education. Addressing these challenges requires attention to issues such as school attendance, dropout rates, and school performance.

Analyses have supported the development of national legislation and programs.

To address these issues and support the World Bank Group's twin goals of reducing poverty and boosting shared prosperity, the Bank's financial and technical assistance has contributed robust data collection and analysis on education to identify well-targeted policy interventions that improve governance and support equity in access to, and completion of, higher education. These analyses have supported the development of national legislation and programs to tackle school dropouts and other key issues while strengthening accountability of education services providers in the country.

Although there have been many Poverty and Social Impact Analyses (PSIAs) across all regions of the World Bank Group (Belarus, Brazil, Colombia, India, Malawi, Serbia, and Tajikistan, to name a few), this chapter presents the main insights and contributions from two sets of PSIAs that were instrumental in supporting recent education reforms in Mexico and Moldova. These PSIAs have produced key data and information on student enrollments, school attendance, student transfers, and school performance to inform ongoing education reforms. These analyses

have strategically informed the overall design of policies and programs and have contributed to improvements in their implementation. They have also been successful in strengthening the capacity of country counterparts and building in-country partnerships on education policy reforms.

TOOLS AND METHODS

Education PSIAs often rely on mixed-method approaches combining both qualitative and quantitative methods to support policy reform and inform program and operational lending. As the two sets of PSIAs in this chapter highlight, a wide range of methods can be used depending on the specific education reform, including randomized control trials (where possible), panel data, group discussions, and face-to-face interviews. Data are generally derived from existing information systems such as censuses or surveys or other official data available nationally and internationally.

In Moldova, the PSIA aimed to understand the impact of school network optimization on school attendance. As Figure 6.1 shows, the government planned to close down particular schools and improve the quality of others. This would have an impact on the student population and their education. The PSIA focused on understanding and recommending policy options to address any negative impacts.

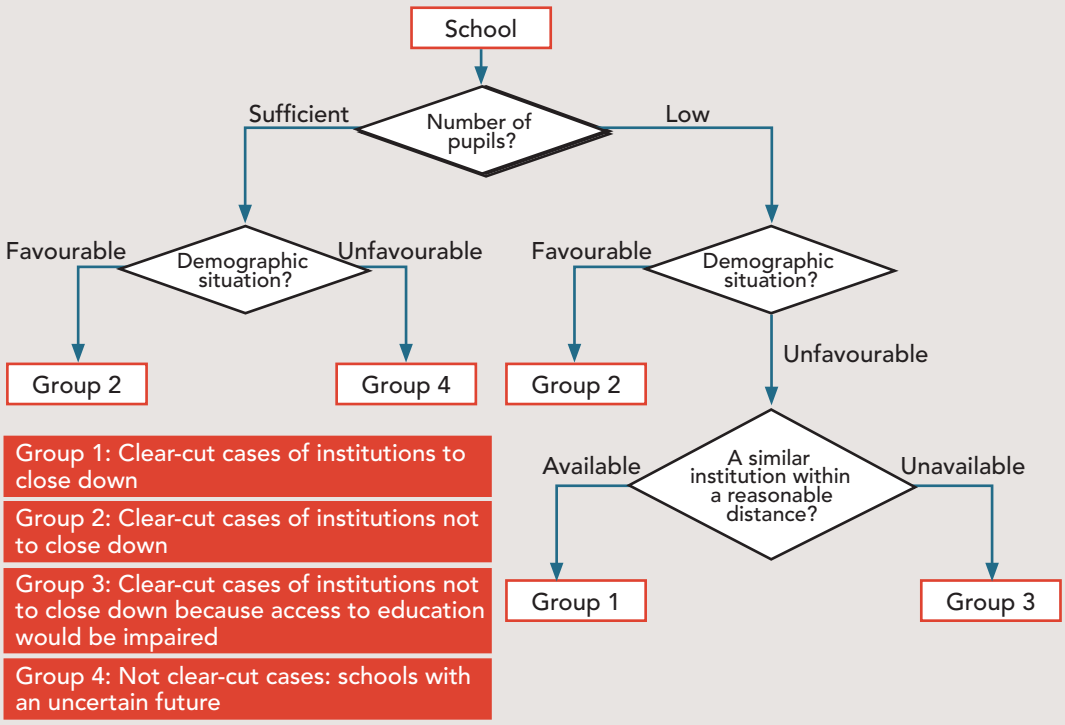
The PSIA relied on descriptive statistics and regression analysis using data from the 2009 Programme for International Student Assessment (PISA) Plus and the student-level education measurement information system (EMIS). It focused on students in areas where the school population was directly affected by the reform to determine whether it had an immediate negative impact on them. The information was used to develop a profile of the bottom 40 percent of primary and secondary school students compared with their well-off peers, as well as to identify determinants of student performance and attendance.

Differences in performance outcomes can be due to a range of factors, which can broadly be classified into either individual characteristics (inherent to the student) or the external environment (such as the school or its geographical location). However, students in similar schools will likely have some similar characteristics and potentially similar performance outcomes. In other words, their performance outcomes may be affected by shared variance such as their location or similar classroom size or the same teacher. To understand the variation due to the different sets of characteristics and account for correlations within these, the quantitative analysis employed hierarchical regression modeling. The analysis explained how much variation in performance was predicted by the student characteristics (such as individual socioeconomic status, gender, ethnicity, urban-rural, or other vulnerabilities) and how much was due to school attributes (such as class size, student-teacher ratio, proportion of qualified teachers, and socioeconomic school composition).[1] It confirmed the importance of both individual and school-level variables, but it also showed that the urban-rural divide was not a significant factor in student outcomes once the analysis was controlled for the school's socioeconomic composition.

Quantitative analysis was supplemented with qualitative analysis. The qualitative study aimed to understand how much information on education reforms, including "quality indicators," was reaching students, parents, teachers, and school directors—and what information is needed on performance and other parameters of education at their institution to be able to demand better education for the students. To do this, the study employed focus groups and semistructured interviews with a sample of school stakeholders. Focus groups were conducted with students and parents and were stratified (by a community deprivation index) in urban and rural communities. Semistructured, in-depth interviews were conducted with school-

[1] Use of hierarchical regression models in education-related analyses allow for distinguishing the impact of school characteristics versus student characteristics. These models also better account for shared variance or correlation within these characteristics. The analysis employed student-level EMIS and PISA 2009 Plus datasets. Although the student-level EMIS and PISA 2009 Plus datasets have valuable data on various aspects of schooling in Moldova, the EMIS is not without shortcomings (in particular, regarding the completeness of the data on student vulnerabilities), limiting possible analysis. Data from Moldova's participation in the 2015 PISA round (which was supported by the World Bank Moldova Education Reform Project) should be released by the end of 2016 and will considerably improve the available data for any future analysis of the role of socioeconomic background on education of importance for education policy makers (World Bank 2015).

FIGURE 6.1: POLICY OPTIONS FOR SCHOOL OPTIMIZATION IN MOLDOVA



Source: Olefir 2015, ©World Bank. Further permission required for reuse.

teachers, school administrators, and educational authorities to see what information is available for stakeholders' oversight of the school work and its performance (Olefir et al. 2015). These analyses complemented each other to identify the determinants of performance and attendance that can be influenced through education reforms to improve the quality of education for all students including the most vulnerable.

In Mexico, the PSIA relied on a randomized controlled trial (RCT) and positive deviance (PD) to analyze and assess different aspects of education reforms (Box 6.1). The RCT supported the design of a strategy to evaluate the effects of the government of Mexico flagship scholarship program for students at risk of dropping out of school. PD was used to identify "positive deviant" students, learn from them, and devise a set of remediation strategies to support students at risk of dropping out.

As mentioned, both sets of PSIAs were useful in informing different aspects of education policies in two very different contexts. The next section sheds more light on the PSIAs themselves and their outcomes.

BOX 6.1: POSITIVE DEVIANCE AND RANDOMIZED CONTROLLED TRIAL IN MEXICO'S EDUCATION REFORM

Positive deviance (PD) is a problem-solving approach based on the observation that in any community there are people (positive deviants) whose uncommon but successful behaviors or strategies enable them to find better solutions to a problem than their peers, despite facing similar challenges and having no extra resources or knowledge than their peers. This approach was used as part of Mexico's PSIA on education reform to identify students who were positive deviants and remained in school despite facing similar challenges as dropouts. The approach was featured in the qualitative evaluation of the Movement against Dropout (Movimiento contra el Abandono, or MCA) program and the decentralized nature of the targeting of scholarships. The MCA early detection toolkit selects schools according to their success and failures in reducing dropouts to identify students at risk and a set of remediation strategies.

The PD methodology consists of five basic steps: define, determine, discover, and design, with monitoring and evaluation (happening throughout the four Ds).

In Mexico, using the PD approach, schools were selected according to their success and failure in reducing dropouts. The selected schools were included in the MCA program. This approach to school selection allowed the PSIA to (a) conduct rigorous impact evaluations of different aspects of the Reform of Higher Secondary Education (Reforma Integral de la Educación Media Superior, or RIEMS); and (b) detect a number of operational lessons and to either confirm or refute assumptions that program operators had at the central level. This approach has a great advantage of being able to be implemented quickly and therefore to course-correct the intervention in a short period of time. PD projects in Argentina, Burkina Faso, Ethiopia, and the United States (New Jersey and California) have addressed dropout rates and the challenges associated with keeping girls in school.

In addition, the PSIA team designed the evaluation for the scholarship program as a randomized controlled trial (RCT). RCT is a study or experiment that aims to reduce bias when testing a new treatment or intervention, by randomly assigning individuals to either the intervention group receiving the treatment under investigation or to a control group receiving standard treatment (or placebo treatment). RCTs have been used in evaluating a number of educational interventions for many years now (for example, trainees are randomly assigned to receive one of two or more educational interventions). Well-designed and implemented RCTs are considered the "gold standard" for evaluating an intervention's effectiveness because they allow for the evaluation of an intervention itself, as opposed to other factors, for causes of the observed outcomes.

The PSIA helped to design the RCT. Once implemented, it will have the advantage of being able to attribute causality to the intervention, even though this will take a longer time, and some schools may not be able to participate in the exercise because of financial constraints.

Source: Avitabile and De Hoyos Navarro 2015; World Bank 2015..

HIGHLIGHTS AND GOOD PRACTICES

Mexico: Reducing Dropouts among the Poor in Upper-Secondary Education

In 2007, the government of Mexico introduced the Reform of Higher Secondary Education (Reforma Integral de la Educación Media Superior, or RIEMS) to address the challenges faced in the country's upper education system. At 40 percent, the dropout rate at the upper-secondary (Educación Media Superior, or EMS)[2] level was exceptionally high when reforms were initiated. A considerable proportion (40 percent) of those who left school in their first year came from the poorest households (in the bottom 40 percent of the income distribution). The high opportunity cost of education, poor educational quality, and low flexibility in programs (to allow for transfers or to switch educational tracks) contributed toward these dropouts.

To address these issues, the reform established a National Secondary Education System (Sistema Nacional de Bachillerato, SNB) to align EMS among the four different providers (federal, state [school], public university, and private). The main elements of the reform include the following:

- *Competency-based curriculum (CBC),* which moves teaching away from the memorization of facts
- *Coordination and regulation,* which sets up common bodies to guide a diverse EMS system
- *Certification,* which acknowledges the adoption of the reform by systems, schools, and students
- *New tools and institutions* that support capacity building and monitoring and evaluation
- *Mentoring and student welfare,* aimed at ensuring equity

In support of these reforms, the World Bank provided technical assistance to the government of Mexico, focusing on their impacts in rural Oaxaca through two PSIA. The first PSIA focused on reforms for accreditation policy for schools managed through the SNB—a central element of the ongoing reform (World Bank 2014c). The second PSIA (World Bank 2015) provided support on the following:

- The design of a strategy to evaluate (using RCT) the government of Mexico's flagship scholarship program for at-risk students
- Qualitative assessment of the Movement Against Dropout (MCA) early detection toolkit, using a PD design whereby schools were selected according to their success and failures in reducing dropouts to identify students at risk and a set of remediation strategies (with a focus on the decentralized nature of the targeting of scholarships)
- Redesign of Construye-T, a youth development program focusing on an innovative socioemotional skills (SES) agenda that promotes self-regulation, self-esteem, perseverance, resilience, grit, and empathy as key competencies for labor market success.

These PSIA were crucial in helping to elevate policy dialogue and maintain focus on education reforms in 2012 when a new government took office in Mexico. The dialogue helped to align the focus of the PSIA work with the priorities of the new government, with a stronger focus on school dropouts and disadvantaged schools. The earlier PSIA supported a rich policy dialogue with the Secretariat of Public Education (SEP) and the Council for the Evaluation of Higher Secondary Education (COPEEMS). This dialogue contributed to modifications to the governing rules of the school accreditation system, allowing more disadvantaged schools into the SNB and enabling them to receive support for improving their quality of education once within the system.

The follow-on PSIA further supported education reforms by bringing greater attention on rural upper-secondary education and its links to the labor market in poorer states such as Oaxaca. It highlighted the

[2] One of the objectives of the EMS is to prepare the student population for the labor market by providing them with competencies and skills that are relevant to employers within and outside their communities.

BOX 6.2: SUPPORTING STUDENTS' SOCIOEMOTIONAL SKILLS DEVELOPMENT IN MEXICO

In recent years, socioemotional skills (SES) have become a topic of interest in the education discourse. There is a general agreement in the literature on the importance of these noncognitive skills, which are demanded by employers and are highly valued by labor markets (as much as cognitive skills) because they represent attitudes that prevent or minimize risky behaviors. The World Bank has played a crucial role on the SES policy agenda and in what works to keep students in school.

Mexico's Construye-T youth development program is one of the world's largest programs focusing on building up SES in students, with the Subsecretariat of Upper Secondary Education (SEMS) overseeing its implementation. The program is executed at the school level by local nongovernmental organizations (NGOs) that train teachers and school directors on how to build up self-esteem, perseverance, empathy, grit, self-regulation, and other SES among high schoolers.

The PSIA was instrumental in firmly incorporating SES within the education agenda. It correctly identified the school environment as the main gateway to improving SES among students. The PSIA provided just-in-time support to help the government of Mexico develop a training program for school principals on how to measure and improve the environment at their schools. This support included capacity-building workshops that focused on innovative ways to building up SES; measure the impact of interventions on SES; and assess, foster, and evaluate school environments.

The Construye-T program provides rich insights into programs aimed at building SES among students. Although the importance of such programs has been long recognized by educators, SES have remained relatively marginal in the core reforms of educational policy in many countries. Yet more can be done. Countries will benefit from incorporating SES into preschool and basic education curricula as well as pedagogic practices through, for instance, (a) self-regulation during the preschool years; and (b) motivation, self-esteem, and capacity to develop healthy interpersonal relationships during adolescence.

Youth employment programs should incorporate training components on behavioral (socioemotional) skills in addition to technical, basic cognitive, or trade-specific skills. Mentoring programs can also benefit older students but are rare and of limited scope. The experiences with similar reforms and interventions in the Australia, Colombia, Peru, Spain, the United Kingdom, and the United States offer useful lessons and insights.

Source: World Bank 2011, 2014c.

importance of teacher training in pedagogical methods and the latest EMS curricula as well as their skills evaluation. It also recommended specialized instruction on rural pedagogic issues such as the use of the mother tongue for instruction.

The PSIA also focused on reducing dropouts by training school principals and teachers on how to identify, assess, and respond to at-risk students and by redesigning the scholarship support system and providing training opportunities, ensuring that teacher training is well articulated, responds to specific teachers' needs, and is accessible to all upper-secondary education teachers. This approach also supported those aspects of the reforms that aim to ensure that poorer and indigenous populations are well targeted.

The technical dialogue helped strengthen the capacity of the Subsecretariat of Upper Secondary Education (SEMS),[3] supporting its ability to address evolving policy priorities in a just-in-time fashion. The PSIA

[3] SEMS manages the social collaboration agenda for Mexican high schools.

supported an extensive knowledge sharing process aimed at SEMS's policy makers so that they could learn from the latest research at the World Bank and best international practices. These workshops built the capacity of the federal and the state education authorities (Box 6.2) regarding teacher policies, policies for at-risk students, strategies for transitioning to the labor market, and general upper-secondary reform issues such as pedagogical approaches to reduce dropouts among the poor.[4]

These PSIAs were critical to the Bank's engagement in Mexico, supporting the development of a series of three development policy operations (DPOs) operations on education. The PSIAs contributed to the successful closure of the Second DPO on Upper Secondary Education in Mexico and laid the foundation for the third DPO by providing critical technical support.[5] In middle-income countries such as Mexico—where there is greater interest in Bank support through technical assistance than through lending operations—the PSIAs played a pivotal role in maintaining the momentum of education reforms and drove the Bank's lending linked to them.[6] These PSIA outcomes on upper-secondary education are relevant not only for Mexico but also for many other countries in the Latin America and Caribbean region.

Moldova: Education Outcomes among Disadvantaged Groups

Moldova is among the poorest countries in Eastern Europe and Central Asia and lags behind on its human development indicators compared with other countries in the region. The poorest population, which is concentrated mainly in rural areas, has the worst education outcomes; they lag behind their peers in urban areas. This is also reflected in the level of satisfaction, with the bottom 40 percent expressing more dissatisfaction with the quality of education than the upper 60 percent of households by income (Olefir et al. 2015). Improving the quality, relevance, and efficiency of the education system, especially for the socially disadvantaged population, is one of the key priorities of the government of Moldova.

This PSIA was conducted to support the government's efforts to reform the education system (World Bank 2014a). It focused on the impact of the school network optimization reform component on school attendance. This PSIA builds on an earlier analysis that highlighted the importance of updated, reliable data on education decision making (World Bank 2014b). This earlier analysis supported the collection and analysis of data on enrollments, attendance, and movement of over 66,000 students in the eight southern regions of Moldova and provided inputs for the design of the Moldova Education Reform Project (MERP).

Following the success of the first PSIA, Moldova's Ministry of Education (MoE) decided to conduct a second, nationwide PSIA exercise in support of the MERP (World Bank 2014a). Using mixed methods, this PSIA aimed to (a) examine the distributional impacts of the school network consolidation to inform ongoing education reforms, including ensuring that students directly affected by the reform are adequately accommodated in the "receiving" schools; and (b) analyze the determinants of performance and attendance of Moldovan students to support improvements in the quality of education for students (both girls and boys) from all socioeconomic backgrounds.

The information produced as a result of the PSIA was pivotal in the development of a student-level education management information system (EMIS) to guide decision making. The PSIA relied on descriptive statistics and regression analysis using data from the 2009 Programme for International Student Assessment (PISA) Plus and the EMIS. Regression analysis of determinants of students' absence shows that, for student grades, both individual and school characteristics do matter; vulnerable students miss more hours (with and without excuse), and among vulnerable students, the impact of additional risk factors depends on the grade level.

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[4] In particular, the Bank pulled together expert practitioners and policy makers to help advise on the redesign of the Teacher Training Program (Programa de Formación Docente, PROFORDEMS)

[5] Since July 2014, all World Bank DPOs have been incorporated into its Development Policy Financing [DPF] framework and are now described as DPF products or operations (World Bank 2016, 32–33).

[6] Interview with PSIA Task Team Leader (TTL) Peter Anthony Holland, senior education specialist, March 9, 2015.

The analysis also shows that the urban-rural divide is not significant once one controls for school socioeconomic composition; urban students miss fewer hours without excuse, and students who have to travel less than 3 kilometers to school miss about 13 percent fewer hours, which underlines the importance of continued monitoring of attendance and dropouts in relation to the school network consolidation process using the EMIS. Indeed, this EMIS has been supporting the development of national legislation and programs to address school dropouts while strengthening accountability of education services providers in the country. The EMIS has been useful in highlighting the importance of the continued need to monitor attendance and dropouts of the resettled school population to ensure that they are adequately accommodated.

These PSIA have provided several valuable policy insights for the delivery of quality teaching and learning across the entire education system in Moldova. The PSIA included stakeholder consultations with students, parents, teachers, and school principals to learn about their knowledge and understanding of school reforms as well as their feedback on the type of information that would be useful to them. This has provided valuable insights for policy makers at the MoE and the World Bank Group for its ongoing operations in the country.

The PSIA have been successful in strengthening the government's capacity to perform analytical work related to education reforms and investments and has had an important influence on in-country partnerships. This included a training workshop for the MoE, the Centre for Information and Communication Technologies in Education, and education-related NGOs, mainly the Institute for Public Policy and the Pro Didactica Educational Center. This helped strengthen the capacity of these institutions on data analysis related to the reforms.

One of the main contributions of the education reforms PSIA in Moldova is the improved capacity of the MoE's Quality Assurance Agency to analyze student performance and inform the implementation of the ongoing MERP. Based on the findings of the PSIA, the Quality Assurance Agency has incorporated a basic questionnaire on socioeconomic background of students into the examination process.

The PSIA process has also helped to advance the implementation of the Disbursement Linked Indicator (DLI) 10 under the MERP: "Revised national testing of all 4th and 9th grade students completed and its results analyzed, publically disseminated and used by the MoE" (World Bank 2014a). It also supports the ongoing Systematic Country Diagnostic (SCD) and the Country Partnership Framework's objective of improved quality of and access to education services. Based on the PSIA, the key next steps for implementation include the following (World Bank 2014a):[1]

- Implementation of reforms of the national student assessment system to increase the reliability and credibility of results and align with international standards and best practices
- Optimizing or "right-sizing" the school network through the application of per capita budget allocations
- Accelerating implementation of school quality assurance standards
- Developing and implementing school principal training program, with a focus on school management and launching reform of teacher and director policies
- Expanding the EMIS to encompass all subsectors, not only the primary and secondary levels
- Reforming curriculum across the different levels of the education system

Overall, the education PSIAs have supported policy dialogue on efficiency and inclusive education reforms in Moldova. The PSIA process is scalable and replicable, as the experience in Moldova has shown. The MoE is interested in conducting a similar analysis to compare performance across students from different socioeconomic groups. Continued strengthening of the statistical and analytical capacity in the country to populate and utilize the EMIS will be important for keeping education reforms on track and promoting accountability at all levels of the school system.

[1] PSIA TTL Anna Olefir, pers. comm., April 15, 2016.

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Chapter 7: Health

SECTOR OVERVIEW

The right to health is a fundamental human right—one that is guaranteed and protected by most countries (Backman et al. 2008). Ensuring equitable access to quality, affordable health services is an important policy area that has gathered greater prominence in recent years with the global movement toward universal health coverage (UHC).[2] Health outcomes are also closely related to income and productivity. While higher incomes facilitate better nutrition, health awareness, and access to health services, better health outcomes support higher human capital formation, contributing to a country's economic development (Bloom and Canning 2000, 2003). This dynamic makes health an integral part of a country's development agenda.

Better health outcomes support higher human capital formation.

However, public expenditure on health care is often very low, especially in developing (low- to middle-income) countries. Although private spending is on the rise, it is uneven and reflective of the income disparities in a country. This uneven spending contributes to two of the main barriers to better health outcomes, especially among lower-income households: (a) weak health systems that afford only limited, uneven access and poor quality of services; and (b) increased financial burden in accessing health care. Of particular concern are catastrophic out-of-pocket (OOP) health expenditures that place a huge and unexpected financial burden on household budgets (see, for example, Xu et al. 2003). Those who are uninsured and poor have less capacity to absorb such health shocks than those who are insured and have higher incomes. At the same time, uneven supply of essential medicines and vaccines, shortages in the health workforce, and poor health infrastructure and facilities contribute to higher levels of preventable morbidity and mortality. This is especially relevant to maternal and child health outcomes.

As countries implement reforms aimed at strengthening health systems and improving health equity, a key consideration is how to adapt and enhance existing poverty-targeting mechanisms and health systems to achieve UHC. Having timely, relevant information on distributional impacts is an important starting point in this process. The Bank has begun undertaking rigorous data collection and analysis through Poverty and Social Impact Analyses (PSIAs) to identify well-targeted policy interventions for achieving UHC. Across the World Bank's regions, PSIAs are informing the health policy agenda by identifying and addressing the constraints in the utilization of quality health services in countries such as in Burkina Faso, Kenya, Kosovo, Maldives, Mexico, the Philippines, Tajikistan, and Zimbabwe. These PSIAs cover diverse topics such as coverage, quality, and affordability of health

[2] Universal health coverage (UHC) is part of Sustainable Development Goal 3: to ensure healthy lives and well-being for all at all ages. It encompasses financial risk protection; access to quality essential health care services; and access to safe, effective, quality, and affordable essential medicines and vaccines for all. For further information, see the "Overview" page on the World Bank's "Universal Health Coverage" topics website: http://www.worldbank.org/en/topic/universalhealthcoverage/overview.

services; increasing access to health services; determining health insurance premiums and copayments; and capacity building for health equity and financial protection analysis.

This chapter presents the main insights and contributions from select PSIAs in the health sector. These PSIAs used innovative approaches to measure and analyze data to inform Bank-supported operations. In Kosovo, for instance, the PSIA supported a comprehensive analysis of health reform policies focusing on the development of pro-poor health insurance packages (World Bank 2015). In Kenya, the PSIA examined the public sector supply chain to understand whether the infrastructure and pharmaceutical budget allocation formula are biased against poorer communities (World Bank 2014c). Similarly, the PSIA in Senegal focuses on providing more-equal and affordable reproductive health care (World Bank 2014a), while the PSIA in Vietnam revolves around closing equity gaps in the quality of health services and in access to health care across regions and different population groups (World Bank 2014b).

These PSIAs have been successful in terms of the using sophisticated, mixed-method analytical approaches and a rich policy dialogue around reforms in the health sector. They have provided or combined key data for policy makers to identify and address the obstacles to the utilization of affordable, quality basic health care services by the poor, particularly by women.

TOOLS AND METHODS

The tools and methods used for health sector analyses at the World Bank are as diverse as the topics they cover. Health PSIAs successfully combine different instruments using a mix of methods to analyze distributional impacts of different health reforms. The choice of methods mainly relies on the availability of up-to-date, quality data. Data sources in health are relatively limited and of varying quality compared with other sectors such as transport or water. Although health specific surveys exist, they have limited information on other aspects such as employment and income. On the other hand, household budget surveys collect limited information on health care services. Such limitations are reflected in the data collection and analytical choices of the PSIAs highlighted here.

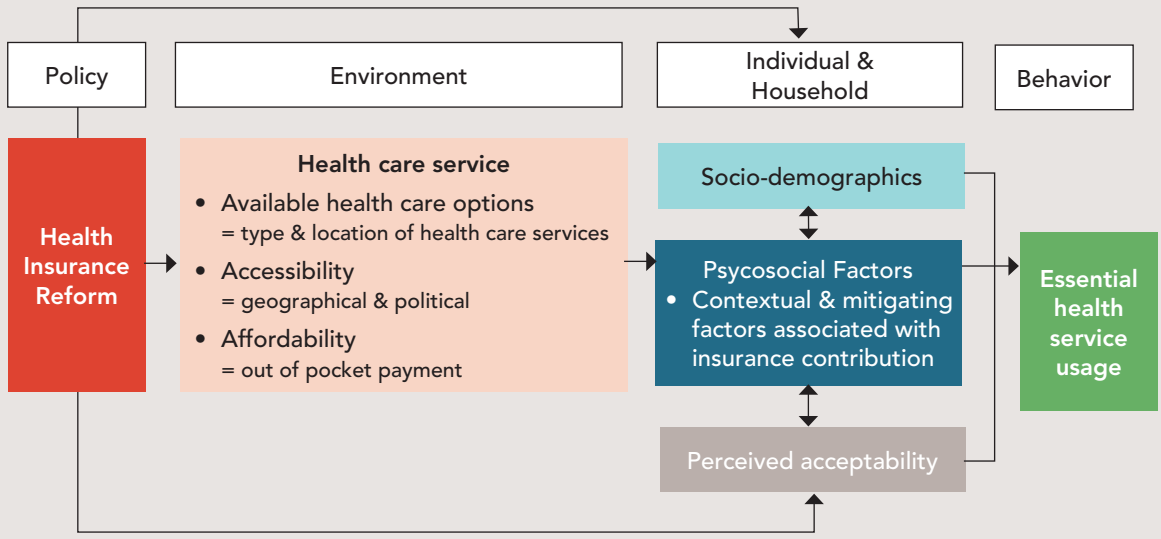
Multiple forms of data collection were used for the PSIAs covered in this chapter. Qualitative approaches involved in-depth interviews, focus groups, and literature reviews. Main sources for quantitative analysis included health facility surveys, censuses, household budget surveys, and other specialized surveys as well as Ministry of Health records.

The PSIA in Kosovo is another good illustration of how mixed-methods approaches can be used to provide real time information. The PSIA supported the Bank's policy dialogue with the Ministry of Health on the design and implementation of Kosovo's mandatory health insurance scheme and its benefits package. Using triangulation, the PSIA collected data in three iterative stages, with earlier stages informing the later stages (Figure 7.1). The analysis quantified the distributional impact of proposed health insurance reforms on poverty. Simulations of the poverty impact of health insurance scenarios were modified to reflect and inform evolving discussions and help shape the reform proposal.

In other cases, relatively newer and innovative methods such as geospatial analysis are being adapted to the health sector. For instance, in Kenya the PSIA used a multidisciplinary approach that integrated three types of datasets—health care facility geocodes, poverty maps, and pharmaceutical supply-chain logistics (shipping and distribution) data—to provide insights on equity in the distribution of medicines (World Bank 2014c). The use of poverty maps in a geospatial framework provided the best methodology for understanding supply-chain network constraints and the geographical dimension of poverty.

The analysis consisted of three related regression exercises using district-level data. This constitutes the first known effort to take advantage of two recent improvements in data availability in Kenya: district-level estimates of the incidence of poverty and geospatial information on the precise location of clinics and dispensaries served by the Kenya Medical Supplies Authority (KEMSA). The analysis overlaid the local-

FIGURE 7.1: CONCEPTUAL FRAMEWORK OF THE PSIA IN KOSOVO



Source: Lee-Kwan and Gittelsohn 2014.
Note: PSIA = Poverty and Social Impact Analysis.

level pharmaceutical supply with poverty data to identify gaps in service, supply-chain constraints, and the geographical dimension of poverty. This methodology has considerable potential for replication and scaling up to support policy decisions and is well worth further exploration, especially for understanding supply chain gaps in Kenya and elsewhere.

In Vietnam, the PSIA employed generalizable reducible metrics (GRM) using clinical observation and exit surveys for data collection, as further discussed in Box 7.1 (World Bank 2014b). Medical vignettes were also used to assess provider knowledge and attitudes while, on the demand side, data were collected on households' backgrounds, including living standards, disabilities, use of medications, preventive medicine, reproductive health, living environments, health-seeking behaviors, and health expenditures (from 6,000 households in eight provinces) using a modified version of household module used in the 2001–02 Vietnam National Health Survey (VNHS).

In Senegal, the PSIA aimed to understand the reasons behind the lack of demand for maternal health services in the Kedougou region. To do this, the PSIA employed a discrete choice experiment (DCE) approach (World Bank 2014a). DCE is an attribute-based measure of preferences that can be used when revealed preference data is missing. Individual preferences about goods and services are estimated by the attributes or characteristics of that good or service. This is a recognized and widely applicable approach for eliciting preference data in the health sector.

The PSIA combined results from a classic demographic household survey that captured socioeconomic and health data on each of the 306 women surveyed with preference data from a DCE questionnaire. The study design and data collection were carried out in close collaboration with the Ministry of Health, the National Agency for Statistics, and Dakar University. The DCE questionnaire was designed with inputs from several focus groups of health workers and pregnant women. The DCE proposed a choice between two hypothetical health facilities with six attributes: distance, transport, health care personnel type, health care personnel attributes, availability of equipment and drugs, and delivery-associated cost. This choice was asked 16 times, with varying levels of attributes. A logistic regression was then used to estimate the impact

BOX 7.1: GENERALIZABLE REDUCIBLE METRICS AND QUALITY OF HEALTH CARE PROVISION

Various approaches have been used to assess health care quality. Principal approaches include vignette tests of health care providers, direct observation of clinical practice, and standardized patients. In this last approach (considered the "gold standard"), well-trained individuals act as real patients without the knowledge of the health professional, which allows the study to record the practice of the doctor for a "standardized" set of symptoms and illness. In Vietnam's case, the standardized patient approach was determined to be prohibitively difficult to implement, so a combination of vignette tests and direct observation was employed. Known as generalizable reducible metrics (GRM), this approach relies on direct observation of clinical practice by a trained observer, combined with exit surveys with patients as they leave the health care facility.

In the GRM framework, a main assumption is that a given set of provider behaviors will predict better performance across all illnesses, and observations for each specific illness are not necessary (that is, average behavior across many illnesses on certain metrics predicts tracer-condition-specific behavior for providers). This relaxation of conditions allows for greater flexibility in assessing the quality of health care, as was the case in Vietnam. Similar approaches have been successfully deployed in different settings, including Cambodia, India, Rwanda, Sri Lanka, and Tanzania.

The most challenging part of the data collection was the clinical observation. It requires each observer to spend between five and eight hours in every clinic to ensure sufficient sample and variation by the time of day. Clinical observations will typically not yield information about patients because these are seldom assessed by providers or are not required for the clinical decision making. However, supplementing clinical observations with exit surveys can yield important new data because (a) they permit estimates of additional outcome variables (such as patient satisfaction); and (b) they provide data on patient characteristics such as education, ethnicity, wealth, and health status, whose impact on provider behavior can be directly assessed.

This methodology was used in Vietnam with the study instruments being developed in close collaboration with government researchers. On the supply side, the study drew from the Service Delivery Indicators (SDI) diagnostic tool;[a] the Service Availability and Readiness Assessment (SARA) tool;[b] and the service provision module for the 2001–02 Vietnam National Health Survey (VNHS), which included the use of vignettes.

Source: World Bank 2014b, 2014d.

a.The SDI diagnostic tool, developed by the World Bank, has already been implemented in several African countries. The tool analyzes quality of services, with health facilities at the core of the service delivery chain. Quality depends on two overlapping dimensions: (a) the availability of inputs and services offered; and (b) how these inputs are utilized and services delivered.

b. The SARA tool—developed by the World Health Organization (WHO) and the U.S. Agency for International Development (USAID) initially for monitoring the Millennium Development Goals (MDGs)—creates tracer indicators of the service availability and readiness to measure progress of health system changes, to plan and monitor key interventions, to provide an evidence base for the country's annual health reviews, and to support planning and managing health systems.

of these attributes (and their levels) on the probability of delivery at a health facility.[3]For Senegal, the model showed good predictive validity for actual facility choice, and thus this tool can be used for eliciting the preferences of health care users, including those who are illiterate. A maternal health care supply survey was also undertaken that covered 28 public health facilities in the Kedougou region of Senegal and covered health worker knowledge, absenteeism, management of maternal and child health services, financing, human resources, and general health facility characteristics (Puret 2015; World Bank 2014a).

[3] PSIA Task Team Leader (TTL) Christophe Lemiere, program leader, pers. comm., June 10, 2016.

The health PSIAs in this chapter show that combining information from different datasets and sources is effective in developing a better understanding of the demand for and supply of health services as well as pro-poor health care reform—as further illustrated in the next section.

HIGHLIGHTS AND GOOD PRACTICES

Kosovo: Health Insurance Contributions and Copayments

In 2012, the government of Kosovo passed the Health Law, which supports the government's substantial reform agenda. This includes the introduction of a mandatory health insurance scheme aimed at raising more revenues for the health sector and improving the quality of care and resource efficiency. A complementary Health Insurance Law was also passed in 2014, which lays out the legal framework for the health insurance scheme (Lee-Kwan and Gittelsohn 2014; World Bank 2015).

The health insurance scheme is expected to be financed through payroll taxes, with a flat rate of 7 percent, split equally between the employer and the employee. This insurance will cover family members of the insured as well, but all other nonexempt people will have to pay a flat fee of €2 per month. The health insurance scheme aims to generate insurance contributions across the board—from people working in the formal and informal sectors of the economy, especially since most people are employed in the informal economy.

This PSIA was designed to analyze the distributional impact of proposed health insurance contributions and copayments in Kosovo. As countries experience the process of health system reform, an important policy question has been how to protect vulnerable groups from the catastrophic and impoverishing effects of health care expenditure. The simulations suggested that catastrophic health spending is lowest and poverty reduction is highest when the health insurance scheme offers exemptions to the poor, generates revenue in a progressive manner, and redistributes benefits from premium revenues among all households (Lee-Kwan and Gittelsohn 2014).

These results have influenced, and are reflected in, the Health Insurance Law, which exempts the poor from these cost-sharing payments and any premiums. It also guarantees some of the health services for all, including emergency care, services for uninsured children, and essential public health services. The package also covers drugs that are currently paid for out-of-pocket and account for approximately 85 percent of all out-of-pocket spending.

Overall, this PSIA was useful in terms of providing timely and relevant data and much-needed distributional impact analysis to inform policy making in real time (World Bank 2015). Kosovo's commitment to the reforms and willingness to engage has been an important success driver as well. The World Bank is also supporting the health insurance reform through the ongoing Kosovo Health Project, which has also benefited from the PSIA. The project is providing specific support to the following aspects of the health insurance program's design and roll-out:

- The outpatient drug benefit scheme, to improve financial protection and deliver visible benefits to those insured
- Simple and clear administrative requirements to prove "exempt" status from paying health insurance premiums
- Social marketing and communications strategies to inform the public and improve enrollment in the health insurance scheme
- Strategies to improve quality of care and public accountability, and monitor and restrict informal payments by health providers (for example, media campaigns on patient entitlements and responsibilities,

credible public complaint and grievance redress procedures, and public disclosure of reports on informal payments)

- Strategies to reduce wait times and improve transparency, such as electronic appointment setting and systematic, data-driven monitoring of wait times for care by the Health Insurance Fund and Ministry of Health

The PSIA also generated policy-relevant insights that have informed the Bank's discussions with the Swiss Agency for Development Cooperation (SDC) Trust Fund in Kosovo to support improvement of the country's poverty targeting mechanisms—a key precondition if the health insurance reforms are to have the desired poverty impact.[4]

Kenya: Pro-Poor Health Care Supply Chains

One of the challenges low-income countries face in the health sector is the distribution of essential medicines and supplies. In Kenya, there are about 7,000 health facilities, of which around 4,000 are operated by the government. The majority of these (3,500) are small health centers and dispensaries that provide primary care. Most of these facilities receive their medicines and supplies from the Kenya Essential Medical Supplies Agency (KEMSA), a quasi-independent affiliate of the Kenyan Ministry of Medical Services and the Ministry of Public Health and Sanitation (Raja, Gwatkin, and Trimble 2013).

This PSIA was conducted to determine the availability and the effectiveness of supply-chain infrastructure in delivering essential medicines and medical supplies to poor communities within the public health system (World Bank 2014c). As highlighted earlier in the "Tools and Methods" section, the PSIA employed geospatial analysis, combining poverty and logistics data with geospatial codes.

The PSIA found that, contrary to the assumption, poorer districts did not fare worse than richer districts. In fact, they received 15 percent more medicines and supplies than richer districts. The results also indicated that transporting supplies to poor districts cost more than the transport costs for richer districts. However, this did not appear to affect how well KEMSA supplies reach poor districts.

KEMSA contracts with private trucking companies to deliver supplies to health facilities, and it is switching its payment system from one based on a "push" approach to one based on a "pull" approach.[5] About one-third of facilities had already switched to this system by 2013. The formula used for determining the ceiling or drawing rights under the pull approach is also being revised. The original formula was based on the number of facilities in a district (70 percent), the district population (10 percent), and the percentage of the district's population living below the poverty rate (20 percent). The new formula considers the clinic workload (50 percent of total weight) and increases the weight of the population size (to 20 percent) while reducing the weight attached to the number of facilities and population below the poverty line (to 15 percent). The PSIA showed that this new formula tended to favor richer districts, but the statistical significance of the relationship is weak.

The PSIA team collaborated closely with KEMSA for the analysis, which was an important factor in its successful implementation and in generating a constructive policy dialogue. The PSIA also supported World Bank operations in the country, including the mid-term review of the Health Sector Project, which provided almost US$80 million in support of procurement of essential medicines and supply-chain strengthening through KEMSA's capitalization. The PSIA also showcased the value of merging data from different sources for a multidimensional analysis and highlighted the importance of the poverty angle in assessing the performance of the pharmaceutical sector.

[4] PSIA TTL Aneesa Aruk, senior public health specialist, pers. comm., April 7, 2016.

[5] Under the "push" approach, each facility automatically receives a predetermined quantity or set of medicines and supplies every quarter, while a "pull" approach determines a ceiling or "drawing right" for each facility, and the facility decides how much and which medical supplies it needs and orders them for each quarter.

Vietnam: Barriers to Equity in Quality Health Care

Over the past 20 years, Vietnam has made considerable progress toward improving the provision of health services across the country. The country has an extensive service delivery system, and most primary health services are covered under the national health insurance program. Nonetheless, there are concerns about the supply and quality of services. Prior analyses have highlighted persistent inequalities in health outcomes related to ethnicity and poverty. For example, only 27 percent of pregnant women in poor households have four or more antenatal care visits, compared with 89 percent of those living in wealthier households. Similarly, the child mortality rate among ethnic minorities is three times higher than among the ethnic majority Kinh/Hoa children. Staff shortages and absenteeism, poor working and living conditions, and lack of policy to support retention of health workers in rural areas has contributed to low quality of care in poor areas.

The PSIA aimed to understand the distributional quality of basic health services in Vietnam (World Bank 2014b). It combined both supply- and demand-side analyses (as detailed in the previous section on methods) to understand the gaps in service provision and utilization as well as the reasons behind these gaps. The study design includes a particular focus on the differences between socioeconomic groups, between ethnic minorities and the ethnic majority, and between urban and rural areas.

This study was conducted jointly by the Bank and the Health Strategy and Policy Institute (HSPI), a research institute of the Ministry of Health for building and modifying health strategies and policies. The PSIA is aligned with Pillar 3 on Opportunity in the current Country Partnership Strategy (CPS) 2012–2016, which includes support to the government of Vietnam to improve the basic public service delivery and access. Moreover, the work contributed to capacity development by engaging with HSPI throughout all phases of the analysis, including study design, questionnaire development, training and piloting, field implementation, quality control processes, and data entry and cleaning. These efforts have not only benefited this specific study but will also have a very important impact on the institute's future activities in terms of research and policy recommendations.

This PSIA is still ongoing but has already begun to shed light on some of the challenges in provision of health services. For instance, the PSIA found the clinical guidelines and case management protocols are often not properly followed by doctors, leading to misdiagnoses of diseases and indicating the need to improve quality of services through training and refresher courses for doctors. The PSIA also highlighted the disparities in use of services across different provinces, with only 18 percent using outpatient services in Dong Thap compared with 74 percent in rural Hanoi and 66 percent in urban Hanoi.[6]

Because Vietnam is at the initial stages of developing policies to address the higher-order concerns in health inequity, barriers to affordable access, and quality of care, this PSIA will be an important source of key information, evidence, and further areas of research that are expected to inform future policy debate on health reforms.

Senegal: Exploring Women's Maternal Health Preferences

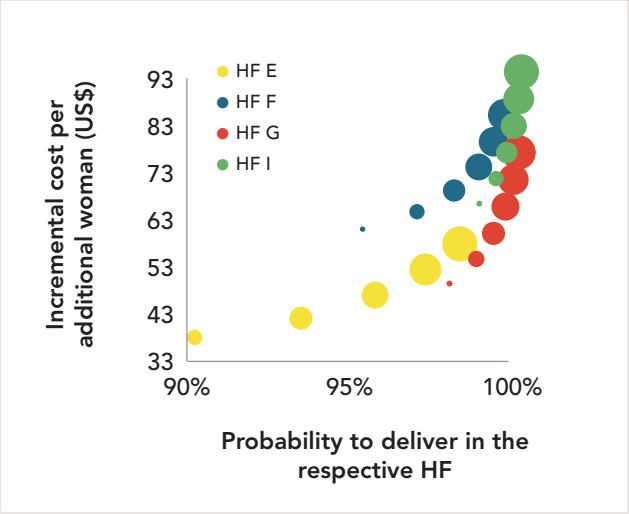
Senegal has a high maternal mortality ratio: 392 deaths per 100,000 live births. The Kedougou region has the worst maternal health indicators, with only 32 percent of women using maternal health services and only 25 percent of pregnant women having skilled attendance at birth. This PSIA was conducted to understand the factors behind women's utilization of, and preferences for, delivery at health facilities in the Kedougou region (World Bank 2014a).

Using a DCE approach, the PSIA aimed to (a) rigorously explore the preferences influencing women's delivery decisions, and (b) simulate the potential cost-effectiveness of various solutions. It found that systematic barriers on the supply side that affect the quality of service were the leading cause of poor utilization:

[6] Vietnam PSIA TTL Gabriel Demombynes and TTL Assistant Ha Thi Ngoc Tran, pers. comm., April 2016.

FIGURE 7.2: COST-EFFECTIVENESS OF DIFFERENT INTERVENTION PACKAGES IN SENEGAL

HF	DIFFERENT PACKAGES OF INCENTIVES
HF E	Health worker behavior + free transport
HF F	Health worker behavior + availability of drugs
HF G	Free transport + availability of drugs
HF I	Health worker behavior + free transport + availability of drugs



Source: Puret 2015.
Note: HF = health facility.

- About two-thirds of the health facilities were understaffed, and existing staff had poor knowledge and skills needed for providing maternal health care.
- Absenteeism, low availability of drugs, and poor quality of equipment also acted as deterrents for women.
- Although the national health policy guarantees free maternal health services, in practice health facilities charged women for maternal health services. This, combined with transport costs and long travel distances, made access to services difficult, especially for poor women.

The analysis showed that the most cost-effective way to improve utilization of services was to ensure free availability of drugs and transport (Figure 7.2).

This was the first time DCE was used in the West Africa region. The DCE results have informed the World Bank-supported result-based financing for the country's Health and Nutrition Financing project. This program combines (a) supply-side incentives paid to health facilities (to improve the quality of health care services); and (b) demand-side incentives paid to pregnant women to help them cover their transport and health care costs. Although a full evaluation is expected in 2018, early results from the demand-side incentives program are showing large participation levels of women already.

This PSIA was critical in understanding how maternal health is addressed through policies and programs in Senegal. It pinpointed that what held women back from delivering at health facilities or with the support of a skilled birth attendant was not their preferences per se but rather hidden costs associated with accessing health services The PSIA also helped to build local capacity for data collection and analysis, especially on the use of DCE.

As the examples from this chapter highlight, health-related PSIAs showcase the flexibility of PSIAs in their focus and use of methods, having covered topics ranging from health insurance to quality of service provision. Although data limitations exist, in most cases, PSIAs were successful in drawing on different resources to

address health sector issues. They have also supported country-level dialogue and action toward reducing the knowledge-implementation gaps in each of the countries.

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Chapter 8: Water

SECTOR OVERVIEW

Water is the quintessential natural resource—a necessity of life. Access to clean drinking water and good sanitation are essential for improving health and hygiene and contributing to higher human productivity. Water is also a limited resource, and its use comes with unique challenges. First among these is water scarcity. According to estimates, about 20 percent of the world's population lives in areas with physical water scarcity, and another 20 percent live with economic water scarcity (that is, water may be available, but access to it is limited because of financial or capacity constraints) (Molden 2007). A second challenge is water quality. If water quality is poor, it poses a public health hazard. Without proper sanitation, living conditions can deteriorate, contributing to poor hygiene and ill health. An estimated 780 million people lack access to improved, clean drinking water, and an estimated 2.5 billion do not have access to improved sanitation (Cooley et al. 2014).

As with any other development issue, challenges and opportunities in the water sector, while broadly similar (such as providing clean drinking water and improving sanitation), are also unique to country contexts. For instance, countries in Eastern Europe and Central Asia face challenges related to an aging water supply infrastructure and system inefficiencies that have required attention within the larger context of transitioning from central to market economies. On the other hand, countries in Sub-Saharan Africa and other regions struggle with a lack of infrastructure and scarcity of water resources. For instance, in Mexico and Mozambique, challenges surround the expansion of water supply to different areas and how to ensure its quality. Improving water supply and sanitation has necessitated rising tariffs as countries move toward reducing subsidies related to public utilities to recover the costs associated with these improvements. In doing so, care needs to be taken to ensure that poor and vulnerable populations are not negatively affected by tariff increases.

The World Bank has used PSIA for understanding on-the-ground realities.

As part of its engagement on water and sanitation, the World Bank has used Poverty and Social Impact Analysis (PSIA) for understanding on-the-ground realities and analyzing the potential impact of policy and programmatic actions. The analyses already undertaken have helped to determine the efficacy of proposed reforms related to water scarcity and use, quality of water supply, and public-private partnerships for scaling up water services to the population.

This chapter focuses on how PSIAs have been used to identify challenges and solutions in the water sector, focusing on household water supply. It draws on PSIA experiences in three countries: Mexico, Mozambique, and Ukraine.[1] Although the PSIAs in all three countries focus on household consumption of water,

[1] The Multi-Donor Task Force (MDTF) supported PSIAs on water resources in the following economies: Albania, Armenia, Georgia, the Kyrgyz Republic, Malawi, Montenegro, Tajikistan, West Bank and Gaza, and the Republic of Yemen.

each has a slightly different approach based on the specific question being asked and the country context (listed in order of appearance in the "Highlights and Good Practices" section below):

- *In Mozambique,* the PSIA focused on the impact of recent water sector reforms, water consumption patterns, and targeting of subsidies in light of these consumption patterns in low-income, peri-urban areas around Maputo (World Bank 2014a, Zuin, Nicholson, and Davis 2012b).
- *In Ukraine,* the PSIA aimed to address demand-side challenges in the uptake of much-needed sector reforms and tariff increases (World Bank 2013).
- *In Mexico,* the PSIA explored issues related to quality and supply of water and sanitation, focusing on vulnerable populations in targeted areas in the State of Oaxaca (World Bank 2015a).

TOOLS AND METHODS

Based on the needs of the assessment and the questions being asked, different PSIAs took different approaches. Several methods were employed, including stakeholder interviews, focus group discussions, and primary and secondary data quantitative analysis.

Recognizing the time and resource constraints, the methods used needed to be sensitive to the question at hand to be able to assess potential impact. This is critical in implementation decision making. In Mozambique, the PSIA employed quantitative analysis, using a sample survey that covered six peri-urban neighborhoods around the city of Maputo, which is home to 106,000 inhabitants (Zuin, Nicholson, and Davis 2012a, 2012b). The survey had been collected earlier as part of another study focusing on the legalization of water resale and was adapted for the PSIA, which covered broader water reform issues from the perspective of these peri-urban neighborhoods. These neighborhoods were selected because they were representative of the water use and supply arrangements in Maputo's peri-urban areas.[2] Using a pre- and post-test design, the survey collected data from 1,284 households. The PSIA then employed multivariate, bivariate, and descriptive techniques to understand the unique context and issues related to water supply and usage in the targeted neighborhoods.

Similarly, in Mexico, the PSIA was based on a household (face-to-face) survey of over 2,060 households in 19 urban centers in the state of Oaxaca (World Bank 2015a, 2015b). It specifically targeted female heads of households or adult women who were responsible for providing water to the household (buying it, carrying it, and so on). It included households that were connected to water service via the Oaxaca Metropolitan Area Water Utility (Servicios de Agua Potable y Alcantarillado de Oaxaca, or SAPAO) and the State Water Commission (Comisión Estatal del Agua, or CEA) and municipal utilities, as well as homes that were not currently connected. The survey was conducted with relatively limited resources but was able to develop a representative sample. The sampling method involved drawing a probabilistic, multistaged sample representative of the poor population living in urban areas of the State of Oaxaca. The methodology was developed with considerations for replicability across other Mexican states. The World Bank worked particularly with the SAPAO and CEA in designing the survey instrument and in sample selection. In addition, the Bank sought the advice of the State Secretariat of Indigenous Affairs on the approach to identifying the urban indigenous population and tailoring the questionnaire appropriately. This helped to enhance knowledge exchange and collaboration across these entities and with the Bank team.

In Ukraine, given the strong focus on household consumers and demand generation, engaging stakeholders meaningfully was important for understanding demand-side constraints. Multiple stakeholders were consulted through interviews, focus groups, and workshops to understand their attitudes; grasp the political economy barriers to reform (including the reasons for lack of consumer interest); and determine how to engage consumers and suppliers in improving accountability and governance. In addition, engaging

[2] The target neighborhoods included Unidade 7, Chamanculo D, and Aereoporto B in District 2; Mavalane A in District 4; Urbanização in District 3; and 25 de Junho B in District 5.

with local authorities responsible for providing services and the consumers was critical in promoting efficient use and greater accountability in the water sector. Consumers especially had to be convinced (through awareness campaigns) that they should take an interest in water issues to increase water efficiency and ensure better water quality (World Bank 2013).

HIGHLIGHTS AND GOOD PRACTICES

Mozambique: Understanding the Distributional Impact of Water Reforms in Maputo

A common challenge facing many low-income and developing countries is how to improve the supply of water to consumers within resource-constrained environments. Many of these countries have traditionally subsidized the supply of public utilities to household consumers. However, as costs increase and consumer prices remain low, the utilities are unable to generate sufficient revenues to maintain or improve services. Increasing tariffs to cover the cost of water supply comes with the challenge of ensuring that there are no regressive distributional impacts. Care has to be taken to ensure that subsidies aimed to provide financial relief to the poor are properly designed and targeted. This requires a strong understanding of the particular context, stakeholders, and their consumption patterns. In Mozambique, water tariff reforms initiated to improve the water sector have had to address this very issue.

Beginning in 2010, the government of Mozambique and the country's Water Regulatory Council (CRA) have engaged on a series of reforms aimed at increasing the urban water supply and improving access to affordable and reliable water supply services. Primary policy changes include (a) adjustments to the tariff structure that decrease water costs for low-income households; (b) reducing connection fees and allowing for payment in installments, accompanied by "connection campaigns" in selected neighborhoods; and (c) legalization of water resale on a pilot basis in three neighborhoods.

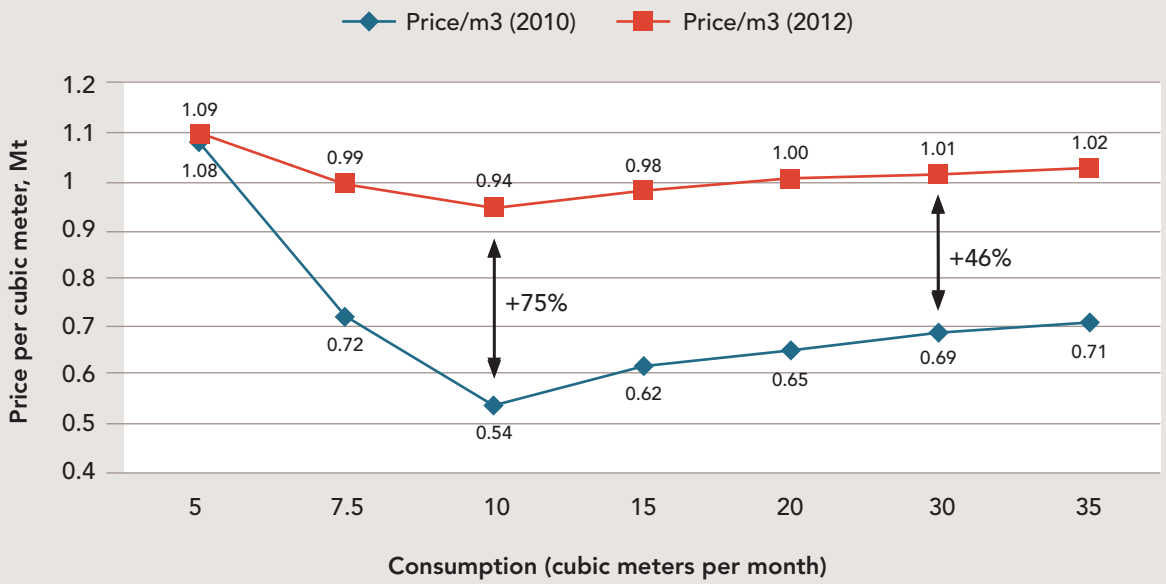
The PSIA in Mozambique aimed to support the government's water reforms through understanding the impact of water sector reforms on water usage, especially among low-income households. It aimed to "identify and interpret observed changes in the water market between 2010 and 2012, and discuss how and the extent to which they may have been affected by the policy interventions implemented during this period" (Zuin, Nicholson, and Davis 2012b).

The PSIA analyzed the water market in several peri-urban neighborhoods within greater Maputo, focusing on (a) the different types of water supply services such as individual (household) water connections, public standpipes, and the purchase of water from neighbors; (b) the socioeconomic and demographic characteristics of households in greater Maputo; and (c) the households' preference and willingness to pay for water service improvements. It also analyzed the impact of potential policy changes, particularly on low-income households.

The analysis showed that, on average, 70 percent of households in the target neighborhoods had a private connection on their premises, albeit with significant variations across neighborhoods regarding coverage, service provider, and reliability. Many households still relied on shared water points, and most lacked sufficient knowledge about water metering, billing, and the variety of plans for water connection and payments.

The PSIA also examined the new tariff structure in Mozambique. Water utility tariffs are based on consumption. Consumption is divided into blocks with increasing prices. The lowest block of consumption is provided at a subsidized rate, assuming that it covers water usage among the poorest households. As part of tariff reforms during 2010 and 2012, the CRA lowered the size of this first, subsidized consumption block from 10 cubic meters to 5 cubic meters, increased the pricing for the upper two consumption blocks, and increased the meter rental fee and the value added tax (VAT) on water utilities.

FIGURE 8.1: WATER PRICE IN MAPUTO, MOZAMBIQUE, BY HOUSEHOLD CONSUMPTION BLOCK (2010 AND 2012)



Source: Zuin, Nicholson, and Davis 2012a.
Note: Mt = Mozambican meticais. Prices include value added tax (VAT) and meter fees.

The PSIA revealed that this new structure of water tariffs would not significantly reduce the financial burden of water expenditures for poor households. First, the total cost to the households includes not only the subsidized tariff but also the VAT and fixed meter rental fees. When these additional costs are taken into consideration, households in the subsidized block end up paying the highest price per cubic meter of water. Second, many low-income households have high levels of water consumption, either because they are large households with big families or because they are selling their water to neighbors who do not have a water connection. Thus, these households end up in the two consumption blocks that experienced the highest price increases between 2010 and 2012 (Zuin, Nicholson, and Davis 2012a, 2012b).

Figure 8.1 shows the tariff structure prereform in 2010 and postreform in 2012. The prices, in Mozambique meticais (Mt), include the cost of the VAT and the meter rental fee. As the figure shows, the price per unit is the highest for the first block of 5 cubic meters of water consumption, and there was a significant increase of over 75 percent in the second block of consumption (of up to 10 cubic meters per month) (Zuin, Nicholson, and Davis 2012a, 2012b).

Given these considerations, the PSIA recommended a review of the tariff structure and subsidies offered under the new structure to better target subsidies for the poorest households, specifically suggesting an alternative pricing mechanism that looks at both location and volume to account for socioeconomic and water supply arrangements in different neighborhoods. It also recommended improving consumer awareness through better communication and consideration of increasing support for the water resale market by ensuring costs are viable for consumers and resellers with fair pricing and competition.

The PSIA helped the government of Mozambique to understand the distributional impact of the water tariff reforms as a whole. The CRA welcomed the recommendations and plans to adopt them gradually

over time. The PSIA also supported the preparation of the economic analysis for the Greater Maputo Water Supply Project.

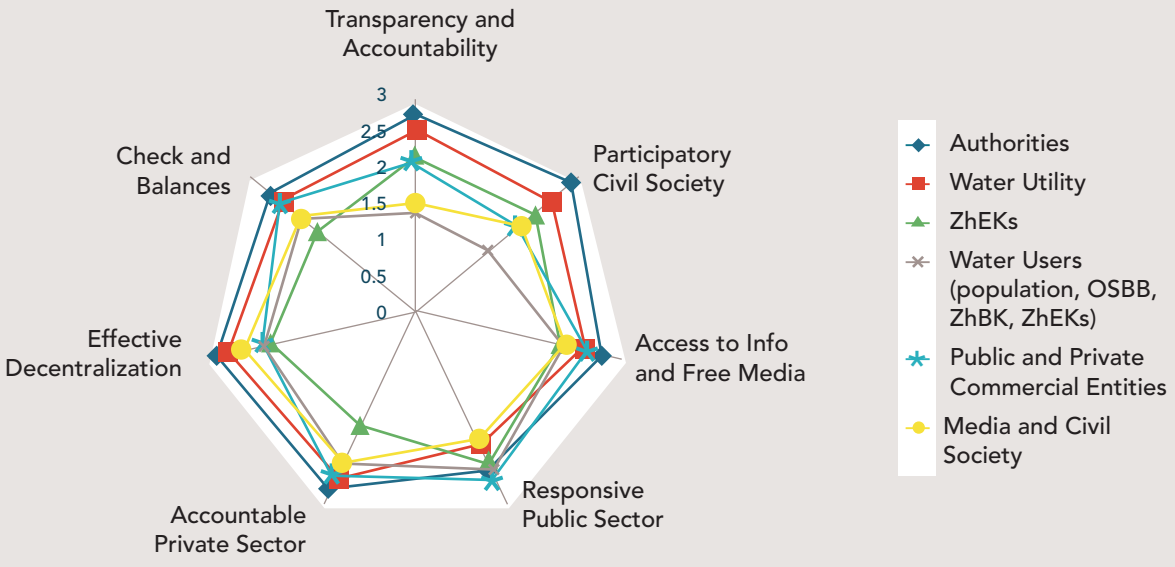
Ukraine: Generating Demand for Good Governance in the Water Sector

Population stress on an aging infrastructure for drinking water and sewage as well as poor management are among the main challenges facing countries in the Europe and Central Asia region. Most of these countries have legacies of the systems developed under the former Soviet Union, with utilities being provided at subsidized rates, considerably below cost recovery. Following the breakup of the former Soviet Union, newly formed countries maintained their existing systems, continuing to provide utilities, including water and sewage, under the older model and at subsidized rates. However, to reduce system inefficiencies and to create a system that would be sustainable in the longer term, countries initiated reforms beginning in the 1990s. These reforms have centered on sensitive issues such as removal of subsidies and improving institutional arrangements.

Recently, Ukraine undertook reforms in the water sector as part of larger energy and utilities reforms to revitalize its outdated and overburdened infrastructure. When water sector reforms were introduced in Ukraine, the economy was at the brink of default and there was considerable social unrest. An increase in tariffs was a condition of the bailout package from the International Monetary Fund. Most consumers also show little trust of the government and local utilities (Figure 8.2).

These conditions, coupled with the Bank's investment in infrastructure through a new project and awareness campaign, helped to generate political acceptance for the reforms. In addition, the National Commission for Regulation of Communal Services (NCRCS) was established in 2011 to regulate the sector toward greater efficiency, sustainability, and improved service delivery. The NCRCS is developing performance

FIGURE 8.2: STAKEHOLDERS' PERCEPTION REGARDING WATER SECTOR GOVERNANCE IN UKRAINE



Source: World Bank 2013.
Note: OSBB = Association of Co-owners of Multi-apartment Residential Buildings. ZhBK = Housing Construction Cooperative. ZhEK = Housing Management Company.

benchmarks and new tariff structures. It is also working on setting mechanisms for disclosing information to consumers and improving accountability mechanisms.

In Ukraine, the PSIA focused mainly on how to generate stakeholder buy-in for the changes, especially among end users. The PSIA was conducted to answer a specific question: how to improve accountability in service delivery. However, given the existing low tariffs and widespread supply of water in the country, although there is little incentive for demanding good governance in the sector (or appetite for tariff increases), the need exists in order to address the problems within the sector.

The PSIA explored ways to increase citizen engagement for greater accountability and better governance. The work focused on major cities and used stakeholder analysis to "filter out weak reform initiatives and identify those that are likely to be politically and technically feasible, and to identify potential champions for reforms" (World Bank 2013). The PSIA uncovered that utilities have limited capacity to collect fees because water is considered an essential good and the right to it is protected under the law. Thus, there was a need for more positive dialogue to change attitudes and behaviors regarding use of water resources. The PSIA's main recommendations included

- Establishing a water service benchmarking system that is publicly available;
- Standardized testing of the quality of drinking water and its public disclosure;
- Conducting public awareness campaigns on consumer rights and water service indicators;
- Institutionalizing consumer feedback through mechanisms such as citizen report cards;
- Developing a more robust metering system that is flexible to respond to different types of residential customers;
- Establishing greater transparency in utility procurement through allowing public monitoring;
- Clarifying the division of responsibilities for maintaining communal water infrastructure and clear complaint-handling mechanisms; and
- Establishing incentives-based regulation and expanding the authority of the country's Water Commission nationwide.

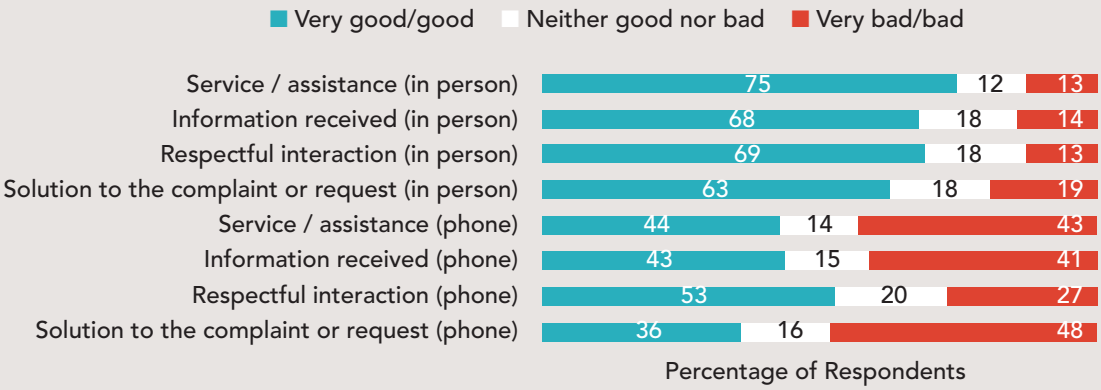
The findings of the PSIA supported the design of the institutional development component in the Second Urban Infrastructure Project (UIP II) and facilitated a follow-on, more in-depth PSIA on institutional development in Ukraine.

Mexico: Water and Sanitation Services among Urban Poor and Indigenous Peoples

The State of Oaxaca, Mexico, is the third-most marginalized state in the country. At 79 percent, it has the third-lowest drinking water coverage in the country, after Chiapas and Guerrero, and the lowest sanitation coverage (71 percent). Only 85 percent of Oaxaca's urban population and 63 percent of the rural population have access to drinking water and sanitation. In addition, uneven and poor quality of water and sanitation services is a major barrier. The lack of a systematic disinfection of water and intermittent service provision lead to water that is unsafe for human consumption. This pushes users—those who can afford it—to buy more-expensive water from private sources. On the supply side, the multiplicity of actors in the sector, lagging capacity of agencies responsible for providing water and sanitation services, and poor interagency coordination make service provision more expensive and inefficient.

The PSIA on water and sanitation in Oaxaca aimed to investigate the use of water and sanitation services, satisfaction, and ability to pay among vulnerable population groups (including the poor, indigenous peoples, and the Afro-Mexican population) in 19 urban areas (World Bank 2015a). These areas were jointly

FIGURE 8.3: EVALUATION OF CUSTOMER SERVICE OF WATER AND SANITATION SERVICES IN OAXACA, MEXICO



Source: World Bank 2015b.

identified by the government of the State of Oaxaca and the World Bank as areas of interest for the Modernization of the Water and Sanitation (MAS) Sector Program. Earlier evaluations of the water sector had identified gaps in knowledge regarding the disposition and ability to pay as well as the water-use patterns and sanitation system of the poor, indigenous migrants and Afro-Mexicans living in urban areas. This PSIA built on this knowledge to inform the implementation of the MAS Sector Program.

The PSIA found that the continuity of services contributes the most to satisfaction among customers. Water service cuts or interruptions are caused mainly by the need to repair pipes or wells. The quantity of water supply was also a major source of concern for households, as expressed by the women responsible for providing water to the households. Most surveyed households had drinking water services as well as sanitation facilities such as a toilet or latrine.[1] Households often supplemented their drinking water supply with water brought in through privately owned and operated water tanker trucks despite the fact that the cost is exponentially higher—reportedly four times higher, on average, across the 19 cities. Overall, households perceived that water from private sources was of better quality than that provided via public services. Just over half (56 percent) of households using only the public water supply considered it to be of good quality, while 77 percent of those using a private water supply considered it better than the public water supply. Perceptions about the quality of services were also more positive among nonindigenous and higher-income, urban households than among indigenous groups and those in lower-income, less-developed areas. Further work needs to be done to understand whether this is a mere perception issue or whether issues of quality do vary across these neighborhoods.

The PSIA also found that although most households (94 percent) looked favorably upon improving the quality of water and sanitation services, their willingness to pay was limited: only 56 percent were willing to pay more for better drinking water, and about 51 percent were willing to pay more for improved sanitation services (Figure 8.3). Those who were not willing to pay more cited financial constraints or a distrust of the utilities to deliver improved services as the two main reasons for their unwillingness. The PSIA recommended improvements in customer services and better, timely communication with consumers about maintenance and repairs to address some of the consumer side issues related to the water supply. The

[1] Sixty-four percent have a water tank, 24 percent have a water pump, and 17 percent had a cistern. Additionally, 81 percent of the households had access to some form of sanitation facility either inside or outside their homes.

evaluation of the complaint handling mechanism could be improved particularly for the services provided by telephone.

The PSIA was designed to complement the implementation of the Program for Results (P4R) operation for the MAS Sector Program in the State of Oaxaca. The results of the study provided a solid evidence base for policy design and service provision planning in the most disadvantaged urban neighborhoods, and they were shared with key stakeholders such as the Oaxaca Metropolitan Area Water Utility, the State Water Commission, the Municipality of Oaxaca, the State Secretary for Infrastructure, the State Secretary for Finance, the Federal Water Committee, the State Secretariat of Indigenous Affairs, and civil society (represented, among others, by the Oaxacan Water Forum through the Institute of Nature and Society of Oaxaca).

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Chapter 9: Energy

SECTOR OVERVIEW

Access to clean, affordable, reliable, and sustainable energy is an important facet of socioeconomic development. Energy resources are critical for supporting the health, well-being, and livelihoods of people across the globe. Yet, not everyone has access to these resources, or their access is uneven. An estimated 1.1 billion people worldwide live without access to electricity, for instance. Similarly, close to 3 billion people use traditional biomass resources such as wood or dung, causing indoor and outdoor air pollution.[2]

In many low- and middle-income countries, energy provision has traditionally been subsidized by the government. However, limited resources and the need to find long-term, sustainable solutions for energy generation and provision have necessitated shifts toward privatization of energy services or subsidy removal. At the same time, concerns over climate change have spurred interest in green growth and low-cost, renewable energy.

Reforms can have both intentional and unintentional distributional impacts. For example, although adapting to climate change and developing renewable energy resources will have positive impacts overall, especially in the long run, reforms may cause energy prices to rise in the short to medium term, making it unaffordable for the poorest or most-vulnerable households. Moreover, regulations associated with a policy may not be readily available or may become too complicated for consumers to fully understand. For instance, regulations regarding ownership and payment for a meter in a building, or regarding consumers' rights, may either provide incomplete information or be too complex for consumers to be able to make informed decisions or take advantage of their options. Understanding and responding to these issues helps to address any potential negative impacts. It also generates more support for the reforms among stakeholders. For example, in India's Himachal Pradesh State, where there is interest in inclusive growth, the World Bank-led Poverty and Social Impact Analysis (PSIA) supported the state government in reviewing its development trajectory and identifying potential challenges and opportunities for hydropower-supported green growth (Box 9.1).

Reforms can have both intentional and unintentional distributional impacts.

To understand the distributional impact of energy reforms, the World Bank has been employing PSIAs extensively in addressing the distributional impacts of energy reforms across different regions and countries such as Armenia, Belarus, Burma, Bulgaria, Morocco, Serbia, Turkey, Ukraine, and Vietnam. This chapter focuses on energy reforms related to electricity supply and tariff regulation in four different contexts.

[2] See data from the World Bank's "Energy" topic website: http://www.worldbank.org/en/topic/energy.

BOX 9.1: PATHWAYS TO SOCIAL INCLUSION AND SUSTAINABLE DEVELOPMENT—THE CASE OF HIMACHAL PRADESH

The Indian State of Himachal Pradesh (HP) has made significant progress toward improving its development outcomes in the past few decades. It is also the home to one of India's main hydropower operations, accounting for 15 percent of the country's hydro-powered energy. At the same time, the watersheds of HP are an important carbon sink for greenhouse gases.

In 2012, the World Bank commissioned a PSIA as part of the Development Policy Loan (DPL) to Promote Inclusive Green Growth and Sustainable Development in Himachal Pradesh to support the state government of HP in its planning for expanding its hydropower potential by 10 gigawatts over the next 10 years.

The PSIA aimed to inform the policy dialogue surrounding the DPL. It was designed as a two-stage, mixed-methods study that would (a) provide a macrosocial analysis of the state's development trajectory, and (b) assess community and household-level knowledge of and attitudes toward hydropower and watershed reforms. The PSIA employed quantitative analysis based on existing household survey data and qualitative analysis using focus groups and interviews to provide further nuanced information about people's perceptions that would have been hard to capture in a survey.

The PSIA highlighted the main factors associated with HP's progress, including a strong focus on inclusive growth and accountability. For instance, it showed that land ownership among the state's Scheduled Castes (SC) has helped them to benefit from poverty reduction interventions as much as other social groups. The state government's investment in infrastructure, especially in hilly and rural areas, as well as in education, sanitation, and health have all contributed to greater inclusive growth.

The PSIA acknowledged the importance of infrastructure investments (especially in hydropower for future economic development) and support of rural development programs (such as on community-based watershed management that supports agriculture and green growth). It also captured citizens' perceptions and concerns and highlighted the importance of more and better communication and awareness building surrounding green growth.

This PSIA was timely and useful for informing the World Bank's lending operations for the state government's hydropower project. The macrosocial analysis provided insights into what worked well in HP and how future infrastructure-led growth may affect its future social and economic trajectory. The PSIA also strengthened the government's understanding of hydropower and watersheds for green growth. Overall, the PSIA generated strong interest on green growth and social and environmental sustainability and has opened new avenues for future dialogue and cooperation between the World Bank and the state government of Himachal Pradesh.

Source: Das et al. 2015; World Bank 2015, 2016.

Among the PSIAs discussed in this chapter, two focus on energy sector reforms in the Europe and Central Asia region (specifically, in Belarus and Uzbekistan), highlighting a common challenge among the region's countries—that of improving energy efficiency and preventing undue or extreme hardship for households as a result of rising prices. Heating, especially in the winter months, is essential to survival in these countries. There is a fine balance between improving energy efficiency and preventing undue or extreme hardship for households as a result of rising prices. PSIAs were carried out in these countries, either as part of a World Bank operation or as stand-alone products, to determine the distributional impacts of subsidy removal and rising prices on poor and vulnerable households.

The chapter also draws on PSIAs on energy reforms in Morocco and Vietnam. In Morocco, the PSIA helped to develop a general equilibrium model to analyze energy reform outcomes (World Bank 2014b). The government's interest in reducing dependence on energy imports and promoting green growth prompted energy reforms. The model was developed to support the government in determining which course of action to take and what the impacts would be. Similarly, in Vietnam, the government was interested in having petroleum prices determined by market forces, with changes in prices closely reflecting fluctuations in international markets. Yet, changes in petroleum prices affect the prices of services and goods across the economy, which in turn affects household consumption. The PSIA focused on developing a model that would help policy makers better understand the potential impact of petroleum price liberalization (Thanh et al. 2012).

TOOLS AND METHODS

PSIAs have the flexibility to use different approaches and methods to address questions surrounding distributional impacts. As in other sectors, PSIAs in the energy sector have used both quantitative and qualitative methods to understand the distributional impacts of policy reforms or a particular course of action. The PSIAs highlighted in this chapter showcase how different methods and tools have been developed and used to support the analysis needed, ranging from surveys to focus group discussions.

BOX 9.2: DEVELOPING A MODEL TO MEASURE ENERGY REFORM IMPACTS IN MOROCCO

The PSIA in Morocco was the first economic evaluation of Morocco's energy strategy. To do this, the PSIA innovated on a CGE model to adapt it to the country's context, using a hybrid CGE model called MANAGE, a recursive dynamic model, with labor growth treated as an exogenous factor and capital growth derived from savings and investment. The model uses constant elasticity of substitution (CES) functions among different inputs. Energy is assumed to be a complement of capital in the short term but a substitute in the long term. Newer capital is assumed to be more energy efficient than old capital, and there is specific capital for solar and wind energy that cannot be used in other sectors. The model also assumes a consumer preference shift toward the newer renewable technologies.

The model also has the capacity for multiple types of inputs and outputs. It assumes Morocco is a small country in terms of trade volume, and its imports and exports do not affect the world prices of goods. It uses the Armington structure of imperfect substitution between imported and domestic goods. Greenhouse gas (GHG) emissions in the economy are tracked as a function of the different types of fossil fuels in use. The model also allows for disaggregating households by wealth quintiles, allowing it to analyze distributional impacts of policy reforms on the poor as well as the entire economy. It uses a constant difference of elasticity (CDE) structure for household demand, calibrated from different price and income elasticities.

The PSIA used data from household surveys and the social accounting matrix (SAM) for 2007. Energy disaggregation was derived from the energy balance provided by the Ministry of Energy, and the data were well integrated into the SAM. Using this information, analysis was conducted for a business-as-usual or reference case (which showed the impacts on the economy if no interventions were made and subsidies were kept in place) as well as two different scenarios that examined the effects of subsidy removal and injection of investments in renewable energy.

Source: World Bank 2013.

The PSIA in Morocco focused on developing a quantitative tool for analyzing the impact of policy reforms in the energy sector using a hybrid computable generalized equilibrium (CGE) model called MANAGE. This is a recursive dynamic model conceived for energy and climate change research, with labor growth being exogenous and capital growth derived from savings and investment decisions. The model has many standard characteristics of a dynamic CGE model of neoclassical economic growth but is adapted to provide more "richness" on the energy sector (Box 9.2).

In Vietnam as well, the PSIA focused on developing a dynamic CGE simulation tool to project how changes in fuel and electricity prices may affect inflation and poverty (Thanh et al. 2012). The model captures both the direct and indirect impacts of fuel price and electricity tariff changes on poverty as well as the variation of impacts across geographical regions. This model also simulated the impact on production costs and the fiscal impact for determining compensation (mitigating measures) to keep welfare of poor households unchanged.

The PSIA analysis relied on 2010 income and expenditure data from the Vietnam Household Living Standard Survey. Because income and price elasticities were not available for Vietnam, the analysis relied on values estimated in another study (Dongling 1999) for less-developed countries. The study estimated income and own-price elasticities for 13 less-developed economies. The PSIA adapted these data to the list of consumption goods in nine broad categories. The data were used to construct the indirect utility function. The Frisch parameter[3] was also estimated from data available in existing literature (Huff et al. 1997). Sensitivity tests were conducted to ensure the robustness of the model. Using different sets of parameters, the study showed that the empirical model could produce relatively stable results without being susceptible to the choice of price elasticities and the Frisch parameter, and thus had potential as a reliable way to assess, ex ante, the impacts related to electricity and fuel price reform.

While the PSIAs in Morocco and Vietnam used quantitative methods to develop and implement tools that provided ex ante insights into policy reforms, the Belarus and Uzbekistan PSIAs used mixed methods (with quantitative and qualitative components) to gain in-depth insights on consumer perceptions and behavior associated with removal of heating subsidies and increasing use of renewable energy resources.

In Belarus, the PSIA examined the barriers and challenges faced by residential energy consumers and other relevant stakeholders in the towns of Smorgon, Kalinkovichi, and Starye Dorogi (SATIO 2013). Data collection instruments were first developed and piloted for validation and then administered. They included

- A quantitative survey of 600 households as well as 36 pilot surveys;
- Twelve focus group discussions with residents and one pilot focus group; and
- Fifteen in-depth interviews, including three in the pilot phase, with experts at different levels of decision making connected with the study topic.

In addition, the PSIA examined available channels of communication to increase public awareness of energy efficiency and renewable energy measures such as media campaigns.

In Uzbekistan, a similar methodology was used (World Bank 2014a). Qualitative analysis was based on focus group discussions, individual interviews, stakeholder mapping, and ethnographic interviews. In two cities where the planned District Heating Energy Efficiency Project will be implemented—Chirchick and Andijan—the following data were collected:

- The quantitative analysis was based on a survey of 300 households, with 150 selected from each city. Although this was a small sample to be representative, the purpose was to obtain a sufficiently large sample of specific heating solution types to allow for analysis.

[3] The Frisch parameter is the marginal utility of income with respect to income.

- Eight focus groups (four in each city) were conducted. These focused on residents of multistory apartments, stratified by gender and heating type.
- Key informant interviews were conducted with eight individuals in Andijan and six in Chirchik, representing energy provision and management across national, municipal, and local divisions to provide a local supply-side perspective on district heating systems. To identify participants for in-depth interviews, a stakeholder mapping was conducted.
- Finally, six interviews with heating consumers were also conducted to provide a detailed account of demand-side issues and behaviors. These were turned into mini case studies to support learning.

HIGHLIGHTS AND GOOD PRACTICES

Morocco: Socioeconomic Impacts of the Green Growth Policy

The government of Morocco is committed to greater energy independence and sustainable green growth. Currently, Morocco imports 96 percent of its total commercial energy, most of which (84 percent) is in the form of oil and coal. In addition, most poor people use wood for fuel, which contributes to deforestation. Reforming the energy sector and moving toward locally produced renewable energy is critical to the Moroccan green growth strategy. This will reduce the country's foreign exchange burden of energy imports and reduce GHG emissions.

Within this context, the government of Morocco's energy strategy has three major goals:

- To guarantee adequate energy supply while also reducing dependence on energy imports
- To limit the environmental impacts of growth
- To guarantee energy access to the population, especially the poor

Understanding the impact of policy reforms ex ante is important in identifying the best course of action. This PSIA was requested by the government of Morocco to develop a simulation model that the government could use to estimate the impact of energy reforms. This would be the first dedicated model to assess the socioeconomic and environmental impacts of different energy policy choices in Morocco. The PSIA required engaging with different institutional actors for the development and utilization of the model who had previously not worked together on this. Support from the PSIA Multi-Donor Trust Fund (MDTF) provided necessary resources for conducting the activity and allowed for recruitment of both local and top-notch international experts. It also showed a useful amount of flexibility in the planning of resources and implementation of the activity, which was necessary to accommodate the heavy institutional transaction costs required in bringing the different actors together.

The World Bank worked with an interministerial group consisting of the Directorate for Planning of the Department of Energy within the Ministry of Energy, Mines, Water and Environment (MEMEE) as well as the High Planning Commission (HPC). This PSIA has helped to facilitate a new collaborative partnership within executive branches that will be important for future energy policy and planning. A substantial amount of effort was spent in building consensus among stakeholders around the objectives and methodological choices behind the activity. This helped to create links between two previously disconnected government units: those engaged in economic modeling at the HPC and those working on the energy policy within the Energy Department (World Bank 2014b).

The PSIA was successful in developing an innovative analytical tool to assess the economic implications of Morocco's green energy policy and to identify the best course of action. It innovated on the standard CGE model (as described earlier in the "Tools and Methods" section) and ran three different energy policy scenarios: a base model and two variants. It also discussed the implications of each scenario. The PSIA showed

that the baseline or "business as usual" case would lead to large increases in energy consumption, dependence on imported energy, and GHG emissions, contrary to the goals of the government. It would also lead to a substantial increase in the government budget burden due to energy subsidies and, ultimately, was not sustainable. In the first variant on the model, the PSIA assumed large investments in renewable energy without addressing the high cost of energy subsidies. In this scenario, the PSIA showed a reduction in economic growth due to the high cost of the renewable investments coupled with the continued energy subsidies. The magnitude of investments required surpasses the national savings capacity and requires foreign capital investment.

In the second variant, the PSIA showed the effects of subsidy removal with renewable investments. This scenario showed the following:

- In the short term, subsidy removal leads to a reduction in economic growth, but growth accelerates substantially in the long term because of the stimulus of reduced taxes and increased energy efficiency.
- The elimination of energy subsidies causes adverse impacts on poor households such that an improved social safety net would be needed to accompany the subsidy reductions.
- A fixed (nominal) exchange rate policy is not compatible with the policy of subsidy reduction because it exacerbates the economic impacts of the subsidy removal. The inflation induced by the subsidy removal causes appreciation of the real exchange rate.
- Subsidy reduction combined with renewable energy and efficiency investments can increase economic growth and reduce GHG emissions.

The PSIA provided a comprehensive economic evaluation of Morocco's energy strategy for the first time. The results of the analysis have informed the energy component of the World Bank's Morocco Inclusive Green Growth DPL series, particularly the reform measures regarding fossil fuel subsidy removal and the renewable energy investment framework. The government also adopted the recommendations under the second scenario in its reform process, pairing subsidy removal with large renewable energy investments in solar and wind, which had been identified as the optimal course of action for enhancing economic growth.[4]

Belarus: Biomass-Based District Heating and Social Impacts

At 90 percent, Belarus's population is highly dependent on district heating. Like other former Soviet Union countries, Belarus has kept residential tariffs low through a series of subsidization and cross-subsidization. As of 2013, heating tariffs were at one-sixth of the cost of production and supply. However, this is not sustainable. Belarus imports 80 percent of its gas from the Russian Federation for heating and electricity generation. To reduce dependence on imports and achieve cost recovery, Belarus aimed to increase residential heating tariffs to cost recovery levels by 2016. To achieve this, residential heating tariffs were expected to increase by 112–256 percent, depending on the international price for natural gas. This was expected to contribute to an increase in the national poverty rate from 5.4 percent in 2009 to about 6.3–7.2 percent in 2014.

To reduce the burden of high energy costs for residents and to ensure continued affordability of energy supplies, energy-efficiency and energy-saving measures were required. The government was also interested in greater use of renewable energy resources to reduce its dependence on imported oil and gas, reduce wastage, and bring down costs. However, the affordability and accessibility of these resources for the poor and vulnerable segments of the population needed further exploration.

[4] Morocco has invested significantly in solar energy to support the implementation of its green growth policy. Most recently, the World Bank launched the Noor-Ouarzazate Concentrated Solar Power Project to support the expansion of the Noor-Ouarzazate Solar Complex to increase its capacity and electricity output.

This PSIA was proposed for that very purpose—supporting the Belarus Biomass District Heating Project. It aimed to assess the "perceived" affordability and the acceptability of energy efficiency and renewable energy measures available to residential consumers of district heating to reduce the cost of energy supply, with a particular focus on the towns of Smorgon, Kalinkovichi, and Starye Dorogi (SATIO 2013).

The PSIA helped to clarify the main issues with reforms from the perspective of local governments and the residents who are the final consumers of district heating. This work allowed for a better understanding of

BOX 9.3: CITIZEN ENGAGEMENT ON HEATING REFORMS IN BELARUS—FINDINGS AND RECOMMENDATIONS

Successful implementation of any reforms requires buy-in for those reforms, especially among affected population groups. The PSIA in Smorgon, Kalinkovichi, and Starye Dorogi on heating reforms helped to bring the perspective of residential consumers of district heating and local service providers to the policy dialogue. The PSIA highlighted consumer choices, ability to pay, and barriers to equitable heating consumption, reaching the following main findings:

- While, at the macro level, the focus is on replacing or updating deteriorating heating networks for greatest levels of energy efficiency, at the micro level, consumers preferred simpler, faster, and less costly methods such as installation of energy-efficient windows and doors.
- Consumers also had low awareness of state and local programs that promote energy efficiency, use of renewable energy, and other energy sources available to them. When informed about focus of the reforms on promoting biofuels as an alternative heating source, residents expressed mixed reactions with concerns over availability and quality of the supply, the technology used, and its effects on the environment.
- Household income, different types of apartment ownership, difficulty of monitoring heat consumption by apartment,[a] lack of cooperation between tenants, concerns over low quality of services, and lack of trust for utilities were all impediments in adopting more energy-efficient methods of heating.
- About 40 percent household residents surveyed indicated that they would have difficulty in paying for increased cost of heating. The survey also showed that, on average, residents were willing to spend 57,000 to 117,000 rubles (roughly US$5.98 to US$12.27)[b] per month to enhance energy efficiency.
- There was a general distrust of utilities, mainly stemming from a lack of transparent billing. This was especially highlighted for the existing system of deductions on capital repairs, which is based on apartment size and linked to the maintenance cost of the building rather than on the cost of these repairs for the building itself.

These types of issues require attention to encourage citizen engagement and buy-in for the reforms. Based on these findings, the PSIA recommended that targeted information sharing strategies be used, including advertisements on utility bills; presentations at building tenant meetings; and communication through social media to raise awareness about the energy efficiency program and resources for residents, focusing on locally relevant information. It also recommended that the government examine the feasibility of programs to encourage energy-efficient methods, such as through preferential loans, ability to pay in installments, and public subsidies.

At the service provision level, transparency in all service provision and billing is important to build customer trust. Finally, installation of meters and heat regulators at the unit level will be important to empower consumers and to create incentives for them to be more energy efficient.

Source: SATIO 2013.
a. Utilities are controlled and metered at the building level instead of the unit or apartment level.
b. At an exchange rate of Rbl 9539.0082 = US$1 (as of December 31, 2013).

their needs, expectations, and concerns regarding heating reforms. It also provided insights on how best to address their concerns. The PSIA highlighted residential consumption patterns, consumers' preferred energy efficiency measures (such as window replacement), and their willingness to pay (estimated between Rub 57,000 and Rub 117,000 per month). The PSIA especially was useful in bringing attention to the fact that residents had incomplete information about the energy-efficient measures being offered and needed more clarity (Box 9.3).

The PSIA also helped to create space for dialogue on poverty in the context of energy reforms. Poverty is a delicate topic in Belarus and had to be approached with sensitivity. The PSIA helped in opening the door for discussion, especially once the Bank team was able to show how poverty and affordability-related issues affected the planned Biomass District Heating Project. The discussion included a focused, half-day workshop on the PSIA aimed at government representatives. It highlighted how the assessment supported the project through asking the right questions, increasing efficiency, and focusing on measures that are more affordable and for which there is greater demand—which also helped to generate greater buy-in from the government on the importance of addressing poverty-related challenges within the project.

The PSIA was supported through the PSIA MDTF, and the work was conducted by a small World Bank team and a local consulting firm (SATIO). The same Bank team also supported the development and implementation of the Biomass District Heating Project. This helped to create synergies, fostering a deeper understanding of the main challenges that residential consumers face because of price hikes, especially those in lower-income households. This knowledge fed back into the design of the project, which now has a greater poverty focus.

Uzbekistan: Cold Comfort—District Heating

As in Belarus, Uzbekistan's municipal district heating (DH) systems provide space heating and hot water to public buildings and urban residential areas. Constructed during the 1950s to 1970s, the systems are in poor condition because of chronic underinvestment in operations and maintenance as well as a lack of upgrades to the infrastructure.

To respond to an aging infrastructure and poor service provision, the government of Uzbekistan began taking steps in 2009 toward reforming the DH system. In support of these reforms, the World Bank initiated the District Heating Energy Efficiency Project (DHEEP) in 2015, which is one of its most significant energy projects in the country. It aims to improve the reliability of heat supply and the quality of heating services in Uzbekistan's three urban centers: Andijan, Chirchick, and the Sergeli District of Tashkent.

The PSIA was conducted to support this project. It aimed to assess the ex ante poverty and social impact of district heating reform in Uzbekistan on vulnerable households and recommend mitigation measures for any negative impacts. The PSIA focused on two of the urban areas included in DHEEP: Andijan (where the DH system no longer provides service to residential customers) and Chirchik (where over one-third of residents still receive DH services).

The PSIA found the following (World Bank 2014a):

- During the winter season, 94 percent of all households, whether connected or not to the DH system, had to employ some form of coping strategy such as wearing extra warm clothing indoors and using alternative sources of heating to supplement poor heating.
- The absolute expenditure on energy was greater for poor households than for nonpoor households, with the extreme poor (bottom 20 percent) spending 28 percent of their total average monthly expenditure on energy, compared with 13 percent for the nonpoor (top 60 percent).

- Large households were the most vulnerable. Because the normative tariff structure was based on family size, households with large families paid the highest tariffs for DH. In comparison, pensioners, people with disabilities, and female-headed households were better off.
- Women generally bore the burden of ensuring household heating and chores related to energy use (such as fetching firewood). With 85 percent of respondents in Andijan and 79 percent of respondents in Chirchik of the opinion that a well-functioning heating system would save time and effort on household chores, reforms that improve provision of DH services would likely benefit women.

Additionally, poor customer service and lack of transparency in billing have resulted in considerable disinterest from consumers to invest in DH improvements. Long response times and even nonresponsiveness of utilities have resulted in a culture where residential DH users often address their own problems themselves to the extent they can; many have invested in alternative sources of heating such as Dutch stoves and Chinese boilers. Moreover, because utilities are bundled, it is difficult for customers to determine the accuracy of their bills, with a strong preference for metered billing rather than normative pricing. Although most people agree that well-functioning household heating would improve the quality of life, there was skepticism about the DH companies' and government authorities' ability to deliver. Thus, although many of the respondents were willing to pay more (to a certain extent and in installments) for better services, there was also concern that the utilities and the government would not be able to deliver (World Bank 2014a).

Based on these findings, the PSIA recommended that DH rehabilitation should be initiated in areas where households are using the least-effective and most-expensive heating options and take steps to ensure that utilities are functioning well. Demonstrating the effectiveness of DH was important, and these would be steps in the right direction. Beyond rehabilitating the conveyance and distribution infrastructure of DH systems, further research on apartment heat retention is recommended in the interests of energy efficiency. In addition, the PSIA recommended a gradual increase in tariffs, with some form of support to the most vulnerable households that should occur parallel to system improvements. Introduction of an installment-based payment system would increase ability to pay. Finally, the PSIA recommended monitoring alternative heating options, particularly Chinese boilers, to understand consumption patterns.

The PSIA generated dialogue on consumer or demand-side issues with the government. It also helped participating cities to understand and commit to developing social action plans to address the issues identified. The PSIA also created interest in expanding the analysis to Tashkent and acted as an entry point for a forthcoming wider study, "Energy Subsidies in Uzbekistan: Impact and the Way Forward." It has also been identified at the World Bank as a best-practice example of engaging with stakeholders and has been presented at multiple Bank events on citizen engagement.

Vietnam: Assessing Price and Tariff Reform—Building Capacity for Change

In 2008 the government of Vietnam initiated steps to bring petroleum prices to international levels to reduce its subsidy bill. This included a substantial initial increase (31 percent) in petroleum prices. This would likely have both direct and indirect impacts on household consumption and expenditures.

The PSIA in Vietnam aimed to help the government to develop an analytical tool for understanding, ex ante, the distributional impacts of such a price increase on inflation and poverty incidence (Tranh et al. 2012). It focused on three issues: (a) quantifying the link between changes in electricity and fuel prices and poverty; (b) identifying key alternatives for future price changes and associated impacts; and (c) understanding the differential impacts across geographical locations. The PSIA team also developed a manual for the analytical tool and delivered multiple training courses to build local capacity on using the tool.

The PSIA simulated multiple scenarios to support the government in understanding potential impacts. The baseline assumed an increase in the prices of electricity and fuel by 10 percent and 5 percent, respec-

tively, keeping all other prices and household production unchanged. Even under this assumed scenario, poverty would immediately increase by 0.65 percent because of an increase in the cost of living.

However, in reality it is likely that increases in the prices of fuel and electricity would affect the production costs of goods and services, in turn also raising those prices and further increasing the cost of living. The analysis showed that if the prices of both electricity and fuel increased by 10 percent, it would (a) lead to a 0.58 percent increase in the consumer price index (CPI), and (b) contribute to a 0.78 percent increase in poverty in the short run and to a 0.88 percent increase in the long run. The PSIA also broke down the impacts by region, allowing for informed policy making.

The analysis emphasized that trying to compensate households after price changes (based on the percentage increase in overall CPI or the percentage increases in electricity and fuel prices) may not help the households to return to their initial levels of welfare. The tool generated considerable interest, including from the Minister of Finance, who was also briefed on the model as part of the dissemination activities.

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Chapter 10: Transport

SECTOR OVERVIEW

Transport is an important driver of economic and social development. It is critical in connecting people to markets and services as well as communities with each other. Improving people's mobility and flow of goods and services is critical for countries to reduce poverty and promote economic growth. However, many people and communities, especially in rural areas, lack access to reliable transport services. There are still many remote communities, especially in low-income countries that lack access to even a single road. This isolation often acts as a barrier to education and employment opportunities as well as to basic services such as health care. The World Bank estimates that about 1 billion people, or 40 percent of the rural population in International Development Association (IDA)-supported countries lack direct access to an all-season road.[1] In other cases, lack of routine maintenance, aging infrastructure, and the pressures of urbanization affect the availability, quality, and safety of transport systems.

Transport is one of the major areas of focus of the World Bank Group's investments. World Bank engagement on transport focuses on a range of issues such as rail, road, air, and water transport infrastructure and policies; urban and interregional transport and connectivity; road safety; and climate resilience. Many countries have considerable scope for improvement in their transport systems. This includes availability of safer, cleaner, and more-affordable services; more-efficient and long-lasting accessibility solutions; better responsiveness to climate change; enhanced competitiveness through more-efficient transport; and generation of employment opportunities.

Transport is critical in connecting people to markets and services.

This chapter focuses on Poverty and Social Impact Analyses (PSIAs) in three countries: India, Pakistan, and Uzbekistan.[2] Each PSIA approaches the transport sector from a slightly different angle, based on the unique context of the issues in the country and the question under study:

- *In Pakistan,* the PSIA aimed to understand the distributional impacts of improvements to the freight rail infrastructure as part of a larger economic and sector work (ESW) on updating the freight rail system to make it more competitive as a regional trade hub (World Bank 2014b).
- *In Uzbekistan,* the PSIA focused on the potential for improving socioeconomic outcomes in the Ferghana Valley through developing a new railway line—the

[1] "Transport: Sector Results Profile," World Bank Projects & Operations web page, last modified April 9, 2014, http://www.worldbank.org/en/results/2013/04/14/transport-results-profile.

[2] Other countries with MDTF-supported PSIAs on transport issues include Albania, Argentina, Brazil, Burkina Faso, Croatia, Ethiopia, the former Yugoslav Republic of Macedonia, the Russian Federation, and Uzbekistan.

Pap-Angren Railway—that would enhance both freight and commuter transport in the region (World Bank 2014a).

- *In India,* the PSIA focused on rural road development under the Pradhan Mantri Gram Sadak Yojana (PMGSY) (Prime Minister's Rural Roads Scheme) program, which had been launched in 2000 (World Bank 2014c). The PSIA was used ex post to understand the effects of greater road connectivity of remote communities with market hubs in three states: Jharkand, Rajasthan, and Himachal Pradesh.

TOOLS AND METHODS

Measurement of transport systems considers six dimensions: accessibility, affordability, quality, efficiency, financial autonomy and costs, and government and institutions. Depending on the specific issue being addressed, the methods may examine one or more of these dimensions. Both qualitative and quantitative methods can be employed for the analysis, as highlighted by the three PSIAs in this chapter. Given the flexibility of methodology and design, PSIAs can be conducted ex ante or ex post. As these examples highlight, this has been useful for transport PSIAs to understand distributional impacts and planning project interventions: although the India study was conducted ex post, the analyses in Pakistan and Uzbekistan were conducted ex ante.

In Pakistan, the broader ESW focused on all six dimensions and relied on multiple analyses, including a strategic environmental assessment (SEA), an analysis of spatial disparities and industrial cluster development, and a PSIA. A series of workshops with the government of Pakistan identified the scope and prepared the groundwork for the analysis using the PSIA and SEA methodologies. The PSIA specifically aimed to answer three questions:

- Which groups will be affected, how, and to what extent over the short and long term?
- What will be the distributional impacts on the well-being of social groups?
- How will Pakistan's freight programs correlate with social cohesion and inclusion in Pakistan?

To address these questions, the PSIA used both quantitative and qualitative methods. The qualitative analysis helped to identify stakeholders within each freight transport sector (ports, aviation, highways trucking, and rail as well as affected communities). Information was gathered through interviews and discussions with members of the different stakeholder groups. The quantitative analysis focused on distributional impacts. For this, the PSIA first developed a social accounting matrix (SAM), representing the flows of all economic transactions that take place within the Pakistani economy. With the SAM, the PSIA used a computable general equilibrium (CGE) model, based on data from the Federal Bureau of Statistics Household Income and Expenditure Surveys of 2005–06 and 2007–08 (the last two years for which these data were publicly available). The CGE model was used to estimate how Pakistan's economy may react to transport reforms proposed by the government. A CGE model is an empirical tool based on neoclassical general equilibrium theory that links a country's current account balances to national savings and investments. In such a model there is no room for current account imbalances, but CGE models are often calibrated to observed data for a country. The model was run for a 10 percent increase in total factor productivity (TFP) of rail transport.[3] The modeling showed that, at this level, there is an overall positive impact on the economy. This helped to identify the main social consequences of increased TFP as well as potential interventions for social development and poverty alleviation (World Bank 2014b).

In Uzbekistan, to understand the unique context and characteristics of the region's (Ferghana Valley) transportation needs and opportunities as well as its challenges such as quality of services, the PSIA used mixed methods. The PSIA devised and executed its own survey focusing on transport and the Ferghana Valley.

[3] The TFP variable refers to the efficiency and intensity with which such inputs are utilized in production, rather than to the portion of output that is explained by the amount of inputs used in production.

New data were collected from both rural and urban areas in the Ferghana Valley (n=638) to capture information on demographics; socioeconomic characteristics; and access to and use of transport services, including frequency of use, major destinations, modes of freight and passenger transportation, and associated costs (World Bank 2014a).

The quantitative analysis was supplemented with 14 focus groups and 29 face-to-face interviews. Focus groups were held with (a) households, including vulnerable households; (b) entrepreneurs from micro- and small enterprises (MSEs); (c) farmers; (d) self-employed; (e) freight carriers; and (f) those employed in handicrafts production. In-depth Interviews were also held with these stakeholder groups as well as representatives of (a) the Chamber of Entrepreneurs and Producers (CEP); (b) large enterprises, including large transport companies; (c) the tourism-related enterprises; (d) local authorities; and (e) the Uzbekistan Temir Yollari' State Joint Stock Railway Company. The focus groups and interviews emphasized the accessibility and quality of services; the impact of these services on the volatility of imports and exports from the Ferghana Valley as well as on the stability of productivity and income; and access to employment, education, and health services (World Bank 2014a).

In India, the PSIA aimed to understand the economic impact of a national road-connectivity program: the PMGSY. The PSIA employed both quantitative and qualitative methods to measure quantifiable differences in the economic impact on villages and gain an in-depth understanding of how the PMGSY roads supported local communities. The PSIA used a quasi-experimental design to compare villages that had PMGSY-supported roads with those without similar road access.[4] Although the villages were selected randomly, the team aimed to also include at least one village at the end of the PMGSY road, because these were most likely to have had no roads before the intervention. A specially designed survey of 66 villages in the states of Jharkhand, Rajasthan, and Himachal Pradesh was conducted with 1,050 households. This included 1,032 supplementary interviews with women in these households.

To compensate for the lack of baseline data, the PSIA relied on people's recall of conditions before the road construction. The survey was supported by 257 focus group discussions, half of which were with women only. The data were further supplemented by key stakeholder interviews with members of local and state governments, transport operators, and agricultural market organizers (World Bank 2014c).

HIGHLIGHTS AND GOOD PRACTICES

Pakistan: Freight Rail Reforms

As the PSIA highlighted, the transport sector constituted 10 percent of Pakistan's gross domestic product (GDP) and provided 6 percent of the employment in the country. The transport sector played an important role in linking other sectors in the economy, contributed to both domestic and international trade, and helped facilitate the spatial transformation occurring in Pakistan. However, inefficiencies in the system were costing Pakistan's economy roughly 4–6 percent of GDP per year.

Within this context, the government of Pakistan's 2011 Framework for Economic Growth sought to place Pakistan on a sustained high economic growth path of 7 percent per year by reducing the cost of doing business, improving the investment climate, and strengthening institutions. Trade and transport reforms are central to achieving the framework's goals.

Pakistan has the potential to become a hub for regional trade, which will have spillovers for economic growth. Central Asia, China, India, and Iran are among the dynamic economies to which Pakistan could connect. However, it is important that the government of Pakistan implement the right types of policies to leverage its geographic location and transport infrastructure.

[4] It compared villages with a PMGSY road (the treatment group) with villages that did not have an all-weather road (the control group).

This PSIA supported a larger ESW on green growth in the transport system in Pakistan. The PSIA contributed to the ESW by (a) identifying social and poverty priority issues associated with the transport and trade policy reforms that the government of Pakistan is planning to carry out in the freight and trade facilitation sectors; (b) assessing alternative interventions to address identified priorities; and (c) recommending cost-effective and feasible policy reforms that could be incorporated as part of the freight and trade facilitation sectors to address social and poverty-related priorities.

The PSIA strengthened the case for infrastructure improvements by showing that a 10 percent increase in transport TFP would increase the income of all households, with the largest potential for income increases among rural agricultural laborers and the urban nonpoor (by 1.4 percent and 1.2 percent, respectively). At the same time, the analysis showed that an increase in the TFP in rail or road transport could adversely affect nonfarm households and the urban poor. At the national level, efficient rail and road sectors have the potential for increasing revenue from indirect taxes through increased imports and exports. Based on the analysis, the PSIA found the following (World Bank 2014b):

- Trade and transport reforms could be highly advantageous, especially if they promote investments associated with industrial development.
- Spatial transformation through connectivity in freight transport infrastructure is essential as a link between industries and domestic and international markets.
- The success of trade and transport reforms is dependent on addressing potential risk issues that will affect vulnerable groups in areas such as social conflict, youth and female employment, HIV-AIDS, and involuntary resettlement and displacement.

A complete set of recommendations based on the overall ESW is presented in Table 10.1.

The ESW supported the policy dialogue between the World Bank and the government of Pakistan, and had an impact on the programs run by the government and civil society. The Planning Commission included recommendations from the ESW in Pakistan's Framework for Economic Growth and used its findings and recommendations to prepare a new "manufacturing revitalization" policy and a new transport policy. This PSIA also had spillover effects on other Bank operations and sector and country strategies. Specifically, the overall analytical methodology (the PSIA and the SEA, collectively referred to as SEPSA) has been integrated into Bank operations such as the Second Trade and Transport Facilitation Project and is the basis of a new operation requested by the government of Pakistan on inclusive industrial growth. The ESW also helped to strengthen the institutional capacity of the Pakistan Planning Commission, the Ministry of Industry, and the National Trade Corridor Management Unit (World Bank 2014b).

TABLE 10.1: PAKISTAN FREIGHT TRANSPORTATION REFORMS: POLICY OPTIONS

Priority social issue	Description	Policy options
Social conflict in urban centers	Ethnic groups could be particularly affected.	Ensure adequate engagement of potentially affected groups in the design and implementation of proposed policies
Urban poor and nonfarm households affected by increase in transport productivity	The urban poor and nonfarm households might lose their livelihoods as a result of reforms in the trade and transport sector.	Promotion of structural change to raise the contribution of industrial manufacturing to the economy, boost employment, and increase fiscal revenues Strengthen connectivity between industrial clusters and domestic and international markets
Urban sprawl	Creation of economic opportunities in urban areas may increase "pull" migration, increasing the demand for housing and public services.	Prioritize slum upgrading and service delivery in urban settings Capacity building required at least in two tiers (provincial and district) of government to better develop and implement urban development strategies that respond to Pakistan's spatial transformations
Probability that small trucking operators lose business to new and larger enterprises because of trade and transport reforms (Truckers largely operate in the informal sector, with little or no contact with government agencies. Programs directed at assisting them will have to reach out to a variety of trucker associations, which cover truck manufacturers, drivers, "adda" owners, and goods companies.)	Urban poor and nonfarm households might lose their livelihoods because of reforms in the trade and transport sector.	Involvement in design and implementation by community development organizations, which typically have experience in advising communities on small-scale enterprise development Advice on small-scale enterprise development from community development organizations to communities
HIV/AIDs transmission	Growth in the road transport sector, under a business-as-usual scenario, is associated with increased spread of sexually transmitted infections, including HIV/AIDS. At the same time, increasing railway's participation and modernizing the trucking sector could significantly reduce the risk of HIV/AIDS transmission.	Strengthen the National AIDS Control Program in the freight transportation sector, including information campaigns targeting vulnerable groups
Involuntary resettlement	Potential involuntary resettlement could result from the construction of freight transport infrastructure.	Create and implement a national resettlement policy that is enforced effectively and uniformly in all provinces and federal territories, with adequate grievance-redress mechanisms

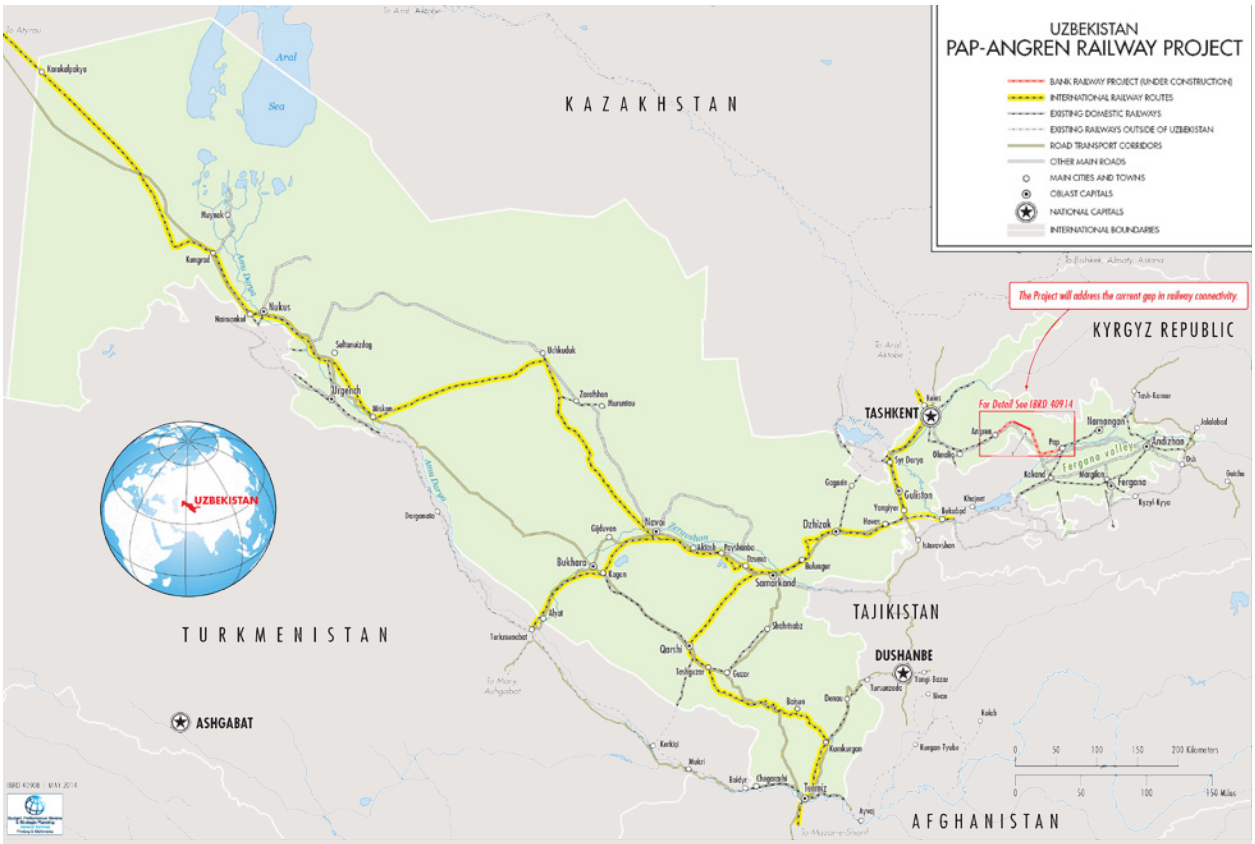
Source: Adapted from Sánchez-Triana et al. 2013.

Uzbekistan: Improving Connectivity through Rail

The Ferghana Valley is located in the easternmost part of Uzbekistan and comprises three provinces: Ferghana, Andizhan, and Namangan. About a third of the country's population lives in the region. While the region has considerable economic potential, it lags behind the rest of the country in terms of socioeconomic development. In 2012, GDP per capita in the three provinces was below the country average (by 11 percent, 32 percent, and 52 percent, respectively), and one-fourth of all the poor in Uzbekistan were concentrated in the region. This is the highest concentration of poverty in any region in the country. Poor transport connectivity has been identified as a significant obstacle to development of the Ferghana Valley (World Bank 2015).

Increasing the capacity for transport in the Ferghana Valley has strong potential for enhancing economic development in the region. Although freight and passenger transport through the region had been increasing by 10 percent annually prior to 2005, the subsequent years have seen a slowdown. By 2014, the transport system—specifically the highway that runs through Kamchik Pass—was close to reaching its capacity. Because of weather-related road closures, traffic congestion, road safety, and increasing costs associated with use of the existing highway system, there is a need for intervention.

MAP 10.1: RAILWAY MAP OF UZBEKISTAN WITH PROPOSED PAP-ANGREN RAILWAY



Source: IBRD No. 40908, approved September 26, 2016. ©World Bank. Permission required for reuse.
Note: (a) The Pap-Angren Railway (denoted as "Bank railway project" in the map legend) is the dark red line shown. (b) This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on part of The World Bank Group, any judgement on the legal status of any territory, or any endorsement or acceptance of such boundaries.

Given the clear need for improving transportation options in the Valley (World Bank 2014a), this PSIA was conducted to inform the World Bank's project supporting the development of a railway line through the Ferghana Valley (Map 10.1). The PSIA aimed to assess the expected distributional and socioeconomic effects of improved rail connectivity in Uzbekistan on the population in the Ferghana Valley, with a particular focus on welfare gains for the poor and other vulnerable groups in the region.

India: Rural Road Development

In 2000, the government of India launched the Pradhan Mantri Gram Sadak Yojana (PMGSY) (in English, the Prime Minister's Rural Road Scheme) with the main objective of connecting eligible communities in rural areas through all-weather roads. Eligibility for the program depended on population size, with a focus on communities of 500 persons or more in the plains, and of 250 people or more in hill states, desert areas, and tribal and backward districts (as identified by the Ministry of Home Affairs and Planning Commission). The program aimed to bring all of India's villages into the mainstream by (a) improving connections to markets; (b) reducing the time spent traveling to and from work or school, even in the rainy season; and (c) improving villagers' access to health services in a timely manner.

Although the PMGSY has helped to connect many communities, little information is available on how communities have benefited, which ones have benefited more than others, and why. Given this context, the PSIA aimed to analyze the differential impacts of the PMGSY public infrastructure policy. It focused on the barriers and capacity constraints in accessing employment opportunities because of poor rural road connectivity among different community groups in villages of Jharkhand, Rajasthan, and Himachal Pradesh states—with a special interest in the impacts on women, youth, and scheduled caste and tribe communities. The findings of the PSIA were expected to inform future phases of the PMGSY and recommend suitable policy interventions.

The PSIA was conducted in close collaboration with India's National Rural Roads Development Agency (NRRDA), an implementing government agency of the Ministry of Rural Development, with the fieldwork conducted by NRRDA and a local consulting firm. This was supplemented by analysis of household-level data by an international consultant with past experience in India specifically linked to the program.

The extensive analysis highlighted the gains made and the remaining issues. It found that the PMGSY has indeed supported new and additional employment and business opportunities and has helped villagers to save time relative to the control group across the three states (World Bank 2014c). Overall, two-thirds of those living in PMGSY villages considered that opportunities had improved, while only a quarter of their counterparts in the control villages felt the same way. However, just under half of all women in the PMGSY villages said that at least some people had benefited. Although the majority in all three states reported that their incomes had increased, less than 30 percent thought that their incomes were more regular or stable than before. The PSIA also found that while greater economic specialization occurred in both the control and treatment villages, PMGSY roads in the treatment villages influenced the cropping patterns to shift toward commercial crops.

In addition, the analysis showed that as the PMGSY roads enabled the men to seek opportunities outside the village, the women tended to take up the slack on the family farm or in the family business, potentially filling the void left behind by the men. In a ranking of income opportunities created by the roads, respondents ranked the opportunity to use the roads for direct movement[5] between villages and other locations for work as the highest-ranked benefit, followed by the creation of local demand for goods and services. The role of direct movement was especially prominent among members of Other Backwards Castes (OBC) and Scheduled Tribes (ST) groups, who tend to depend heavily on unskilled wage labor.[6]

[5] "Direct movement" refers to the use of transport infrastructure—in this case, roads—for travel to different locations.

[6] OBC, ST, Scheduled Castes (SC), and "other" groups refer to population groups based on caste, religion, or ethnicity in India, as classified by the government of India.

For women, the most important avenue for seizing income generation opportunities was the improved connectivity through roads. This increased demand and supply of local goods and services in the neighboring regions and contributed to complementary private investments, such as purchase of more livestock or installation of an irrigation pump. At the same time, women from Scheduled Castes (SC) and "other" groups or those with little schooling did not perceive that they had benefited from the new opportunities. Most women attributed this result to their households' lack of productive endowments, especially the lack of skills.

About one-third of the respondents living in PMGSY villages said that some of their fellow villagers were profiting from new and additional employment and business opportunities, but they claimed not to have done so themselves. The rural poor are inadequately endowed with respect to privately held productive resources and their general economic environment. They all lack something—complementary infrastructure, complementary public policies, or local demand. The study concludes that the women view their households' lack of productive endowments—and, to a lesser extent, the lack of complementary public policies—as the prime grounds for their inability to exploit the potential opportunities generated by the PMGSY roads. This pattern differed strongly from the men, who felt the lack of complementary policies was a dominant reason for not benefiting from the PMGSY roads, with inadequate endowments playing a distinctly minor role.

Further, although the PMGSY provided opportunities to contribute to road development through the "transect walk,"[1] only about 30 percent of villagers interviewed had reported being aware of the event. At the same time, only 18 percent of the household heads reported that one or more family members had helped to build their village's road. Employment opportunities for participation in road construction were provided under India's National Rural Employment Guarantee Scheme (NREGS), but few found this to be attractive employment. Overall, the participation and direct employment of villagers in the planning and building of their PMGSY roads was weak.

Based on this analysis, the PSIA suggested that the PMGSY program consider several policy and programmatic options at the state and national levels to address the challenges faced by the more-excluded groups to share in the benefits equally (World Bank 2014c):

- Investing in training programs for skill improvement and awareness building, especially among women, to exploit new opportunities within their villages such as preparing and selling semifinished goods or processing of agricultural outputs
- Investing in creating local or nearby market centers to increase local demand from nearby villages and towns
- Promoting availability of credit or insurance, including credit for microenterprises through private sector investments to support financing options for microenterprise and small businesses
- Promoting the availability of suitable infrastructure such as agriculture equipment or infrastructure for grain storage to facilitate local enterprise
- Using the PMGSY as an "integrator" of various employment schemes and programs to better link the schemes' benefits and promote community participation
- Giving NRRDA a leading role in improving coordination among the various departments by, for instance, inviting officers of the departments involved to participate in the transect walks

[1] A "transect walk" is intended to offer villagers the opportunity to accompany officials and engineers on a walk along the proposed road alignment, and then to express any reservations and make suggestions for its improvement. The event is supposed to be publicly announced well in advance.

The PSIA findings were shared with the Ministries of Rural Development at the federal and state levels and were well received. The Ministry of Rural Development has also initiated action to incorporate learnings from the PSIA into the program. The study findings and recommendations have informed the World Bank's support to the PMGSY and the program's policies for more equitable distribution of benefits in terms of employment opportunities created by this rural roads program. It also helped clarify the likely short-term impacts of future road works under the ongoing PMGSY program in the country. In addition, this PSIA has informed the methodology being adopted for the ongoing activity "India: Impact Evaluation PMGSY (P153536)."

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Chapter 11: Agriculture

SECTOR OVERVIEW

Rising global demand for food, persistent rural poverty and vulnerability of farmers, and environmental degradation and climate change pose immense challenges for the agricultural sector. To feed 9 billion people by 2050 (UNDESA 2013), substantial increases in productivity and a transformation of the current food system are needed. There is wide agreement in the development community that agricultural growth is key to achieving the World Bank Group's twin goals of ending poverty and boosting shared prosperity, given that 78 percent of the world's poor live in rural areas, mainly relying on agriculture as their primary source of income.[2] Throughout the developing world, more frequent, more intense weather events such as droughts and floods increase food price volatility and put farmers' livelihoods at risk. Other global dynamics, such as growing demand for high-value products and emerging trade routes, may provide new opportunities.

To feed 9 billion people by 2050 substantial increases in productivity are needed.

Government intervention in agricultural markets is intended to correct market failures in order to improve efficiency and coordination in the sector, increase the productivity and value added of local production, improve producers' access to markets, foster farmers' resilience to shocks, or ensure food security for the domestic population. For instance, to improve the terms of trade vis-à-vis international traders and buyers, many developing countries have established quasi-governmental organizations (such as marketing boards) that manage international trade and prices for a given commodity. Although public interventions in input, credit, and output markets may be instrumental in addressing barriers in agricultural development, government effectiveness is not uncommonly hampered by mismanagement and corruption. In recent years, there has been renewed focus among development partners on mobilizing private investment in agriculture to complement cost-effective public support (Townsend et al. 2013). Moreover, governments need to carefully consider potential trade-offs of a given policy instrument. For instance, price regulation that intends to protect farmers' income may conflict with the goal of guaranteeing affordable food for the urban population (Lundberg 2005, 151).

Poverty and Social Impact Analyses (PSIAs) in agriculture have been predominantly conducted in Sub-Saharan Africa (including Burundi, Guinea-Bissau, Mozambique, Democratic Republic of Congo, and Ghana), but all six regions have received Multi-Donor Trust Fund (MDTF) grants for agriculture-related PSIAs, including the Middle East and North Africa (Morocco), Latin America and the Caribbean (Nicaragua), South Asia (Nepal and Pakistan), East Asia and the Pacific (China and Indonesia), and Europe and Central Asia (Uzbekistan). Moreover, the MDTF

[2] Compared with other sectors, agriculture is estimated to be two to four times more effective in raising incomes among the poorest ("Agriculture" topics page, World Bank website, http://www.worldbank.org/en/topic/agriculture/).

supported a multicountry study in the West African Sahel that examines rural resilience to shocks and vulnerability to malnutrition.[3] Other MDTF-funded PSIA topics include fertilizers and seed distribution programs; mechanization and labor conditions (cotton harvesting); mobilization and targeting of agricultural investment; institutional governance (farmers' cooperatives); price stabilization and procurement policies (in the rice and grain sector); industrialization and competition (in the cashew sector); and liberalization and privatization (in the coffee sector).

TOOLS AND METHODS

Governments have great interest in tools and methodologies that help them to identify and target reforms and investments that foster growth in marginalized rural areas. Given the importance of the rural economy and export agriculture for the poor in the developing world, boosting productivity and access to markets for the rural population remains a key policy objective for the World Bank and its clients. The impact of any given reform can be evaluated along different transmission channels, which include input prices, commodity prices, credit and interest rates, employment, wages, market structure, taxes and transfers, and public goods.[4]

In the development community, the concept of the value chain has evolved as a key framework to identify the winners and losers of policy changes or external shocks in agriculture. Specifically, the framework aims to understand the processes and interactions of firms and individuals that contribute to the creation and delivery of agricultural products to consumers. Increased attention to producers' links to domestic and global markets is driving new approaches to generate growth and reduce poverty. In fact, the value chain literature brought forth a large number of approaches and methodologies that help to identify priority sectors and development potential; develop strategies to increase value capture and value creation; enhance opportunities in global markets; improve the business and policy environment; and monitor and evaluate value chains toward the overall development goals (Webber and Labaste 2010).

Examples for the use of the value chain framework among MDTF-funded PSIAs include work in Guinea-Bissau, Mozambique, and Pakistan (World Bank 2015a, 2015b, 2015d). In Guinea-Bissau, analysis of the cashew sector builds on a theoretical value chain model that characterizes competition and the pass-through of price changes at the farmer-trader link and the trader-exporter link (as further discussed below in the "Highlights and Good Practices" section). The simulation of counterfactual scenarios provides important inputs for the policy dialogue on export duties. Academics and World Bank teams from other departments have expressed interest in applying this model to other areas.

In Mozambique, a model developed in the context of a PSIA calculates the direct and indirect value added generated along the coastal fisheries value chain, as well as their distribution among households, capital owners, and the state (see Box 11.1). By offering a variety of economic indicators, the value chain model helps to improve the monitoring and evaluation capacity of the Ministry of Fisheries. Although quantitative value chain analysis is very common, the value chain literature also acknowledges the use of qualitative methods such as key informant interviews, participatory chain mapping, and focus groups, particularly in contexts where reliable data are limited (Donovan et al. 2015, 16).

[3] The study covers the Sahel belt of the West African dry lands, including Burkina Faso, Ghana, Mali, Niger, Nigeria, and Senegal (World Bank 2014b).

[4] This list is not exhaustive (see Lundberg 2005).

BOX 11.1: MOZAMBIQUE—MONITORING AND EVALUATION OF THE COASTAL FISHERIES VALUE CHAIN

Over the past two decades, Mozambique has developed a comprehensive statistical system for the fisheries sector, relatively unique by the amount and diversity of data and time series available. However, the government's data collection and processing is highly fragmented and poorly implemented, without a clearly defined policy objective. The Bank team worked closely with the government of Mozambique to develop a standardized socioeconomic model that enables authorities to significantly improve performance tracking of the fisheries sector. Specifically, the PSIA helped to integrate various datasets in order to evaluate both the social and economic impact of coastal fisheries along the entire value chain, including both the harvest and postharvest sectors.[a] The work was part of a technical assistance agreement with the government of Mozambique, and it had the objective of enhancing the administration's capacity to apply tools for a sound economic management of the sector.

The value chain model gives a clear and detailed picture of the contribution of the coastal fisheries sector to the economy. The Ministry of Fisheries indicated willingness to embed the model into its national information system in order to inform progress monitoring and provide policy guidance. The adoption and use of the model was supported by complementary training for ministry staff, a user manual for the model, and a case study describing the economic impacts of the fisheries sector in the country. However, the PSIA indicated that limited technical and institutional capacities remain important challenges that need to be addressed to ensure effective use and expansion of the model in the future. The principal constraints identified relate to the difficult access to quality data[b] and to the limited exposure of the ministry staff to economics.[c]

Source: MdP 2014; World Bank 2015d.

a. It calculates the direct value added generated by each subsector, the indirect value added for upstream activities (intermediate consumption), and the distribution of the direct and indirect value added among households, capital owners, and the state.

b. Although available quantitative data is rich at the production level (fishing and aquaculture), data are lacking for upstream activities such as processing and marketing. The main constraint for model development would reside in obtaining data for small-scale and informal fishing activities, which are the most labor-intensive, tend to be female-operated, and contribute to the livelihoods of the poorest.

c. Recommendations of the PSIA include the following: (a) data collection and processing need to be improved and streamlined, given that data must be collected from various sources within the fisheries administration; and (b) a complementary long-term training program should be developed to support adoption, correct use, and development of the model within the administration. The Bank team continues to work with the client and potential partners to ensure deployment and improvement of the model.

Another important development in this sector has been the use of innovative geospatial approaches. A case in point is an MDTF-funded PSIA conducted in Nicaragua that introduces a new angle to investment prioritization (World Bank 2013a). The team developed a tool to classify microregions according to their unique characteristics and potential for development, an area not covered by previous sector analyses (see Box 11.2).[5] Specifically, the tool combines poverty maps and market accessibility analysis with an econometric stochastic profit frontier model. Although detailed socioeconomic profiles help to inform policy prioritization (by identifying deprived regions), they fall short of accommodating the criterion of resource optimization. Unlike poverty maps or cluster analysis, this PSIA offers a model that identifies those regions where investments have the biggest potential impact on poverty reduction, given certain economic and geographic constraints.

[5] Microregions are defined along four dimensions: poverty, agricultural potential, average farm efficiency, and market access.

BOX 11.2: NICARAGUA—NEW TOOLS FOR INVESTMENT PRIORITIZATION

In the context of an economic and sector work (ESW) on competitiveness and integration in Central America, an MDTF-funded PSIA supported the development of a tool that allows policy makers to prioritize investments in agricultural development. This PSIA applied the analytical tool to the Nicaraguan context, but further analysis on Guatemala, Honduras, Panama, and Nicaragua soon followed.

In Nicaragua, geographic information system (GIS) technology, a detailed georeferenced household survey, and good availability of micro-level biophysical data enabled construction of a typology that captures the heterogeneity of rural populations based on a variety of socioeconomic, institutional, and physical criteria.[a] Areas that have a high incidence of poverty but low potential in agricultural development need to be targeted through cash transfer programs or other social policy measures. On the other hand, areas that show high productive potential in the presence of efficiency bottlenecks require targeted investments (for example, investments that improve accessibility or reduce transaction costs).

The policy discussions have confirmed that this type of analysis is highly relevant for Nicaragua and other governments in the region, where the Bank is continuing its engagement on investment prioritization and agricultural development.[b] The PSIA had an impact on Bank activities in Nicaragua through the Agriculture Public Expenditure Review and the sectorwide approach in agriculture (PRORURAL).

Source: World Bank 2012, 2013a.

a. The criteria include climate, topography, production assets, access to roads and markets, off-farm job opportunities, demography (such as population density and gender distribution), and institutions and services (such as credit providers).

b. The ongoing dialogue with clients and stakeholders is considered to be instrumental given the complexity of the model and demand for the Bank's assistance to apply the analysis to policy making.

MDTF-funded PSIAs have highlighted the value of participatory methodologies and political economy analysis. PSIA is ultimately about identifying the people who are likely to be affected by a given policy. However, in addition to the analysis of potential impacts, it is important to understand the perceptions and political influence of different stakeholder groups, as has been illustrated in the case of coffee sector reforms in Burundi (described in the "Highlights and Good Practices" section below). Even sensible and technically sound reforms are deemed to fail if the interests and positions of powerful stakeholders are not taken into account. Thus, a sense of ownership among all relevant stakeholders is crucial to ensure effective policy implementation and minimize unintended consequences.

Quantitative methods are still dominant in most PSIAs in agriculture, but experiences from the MDTF show that qualitative methods are increasingly employed to collect and analyze data, either to complement or to replace quantitative approaches. PSIAs from Burundi and Uzbekistan are examples for the use of qualitative methods. In Burundi, focus group discussions provided insights on capacity constraints among coffee cooperatives and were helpful to interpret and validate the quantitative results from a household survey (World Bank 2014c). In Uzbekistan, the collection of qualitative data through focus group discussions, semistructured interviews, and mini case studies was used to shed light on social and labor issues related to the mechanization of cotton harvests (World Bank 2013b).[6] Soliciting the views of cotton farmers and pickers was crucial to identify critical social risks as well as the groups that are most likely to be affected. The methodology proved to be useful to start the policy dialogue on a new and highly sensitive issue. In both countries, qualitative findings have been used to design a sound questionnaire for a complementary household survey.

[6] Inquiry techniques that were used included participatory wealth ranking, scoring and ranking of problems and options for solving them, and formal questionnaires for collecting farm economic data (World Bank 2013b).

HIGHLIGHTS AND GOOD PRACTICES

Guinea-Bissau: Revisiting Instruments to Support the Cashew Economy

In Guinea-Bissau, a PSIA found strong evidence to advocate for the abolition of an existing export levy on cashews, given its negative impact on poverty. Despite considerable political instability, this PSIA has successfully created public awareness on the issue and influenced the government's policy discussions around cashew sector reforms. Cashew production is vital for Guinea-Bissau's economy and plays a key role in the country's strategy for poverty reduction, given that it is the primary source of household income for the poor. Raw cashew nuts are the country's main export good, with export volumes increasing substantially in recent years. However, only a fraction of harvested cashews are processed in the country, pointing to missed opportunities to improve value creation. Smuggling into neighboring countries—to circumvent the high export taxes in Guinea-Bissau[7]—is estimated to make up a significant portion of cashew exports (Hanusch 2016).

In 2011, the government introduced a surcharge on cashew exports to finance the newly established Fund to Promote the Industrialization of Agricultural Products (FUNPI). FUNPI was created, in the presence of high global cashew prices, to increase the value added of cashew production through improved processing capacity. Although the importance of policies that support agribusiness development were evident, FUNPI also created concerns about the potential negative impact on poverty of the export levy, particularly when international prices are low. Moreover, FUNPI had failed to achieve its intended objective, as resources had leaked and none of the envisaged promotion of cashew processing had taken place. In this context, a PSIA was conducted to provide analytical foundations for the policy dialogue on cashew sector reforms (World Bank 2015a). It was intended to support a development policy operation (DPO) and an investment project with an emphasis on cashew sector reform, yet a military coup in April 2012 led to the suspension of World Bank operations in Guinea-Bissau, delaying the PSIA work. It was only resumed when the Bank started reengaging with Guinea-Bissau in late 2013.

The analysis builds on a theoretical model of the export agriculture value chain, whereby exporters, traders, and farmers operate under imperfect competition.[8] The dominance of a small number of traders and exporters, who capture the bulk of the cashew rents, weakens the farmers' position in the value chain. In the face of these distortions in competition, the introduction of the FUNPI levy is borne mainly by farmers (who absorb 80 percent of the levy), while exporters (13 percent) and traders (7 percent) only absorb a small fraction. Likewise, farmers are more exposed than others in the value chain to international price shocks (either positive or negative), because these have strong effects on farm-gate prices.

Simulations of the welfare effects show that poor and rural households are disproportionally affected by these effects because their share of income derived from cashews is much higher (Cont and Porto 2014). Accordingly, the FUNPI levy hit poor cashew-producing households the hardest (scenario B in Table 11.1: Welfare Effects of FUNPI Levy in Guinea-BissauTable 11.1). Overall, it was estimated that the FUNPI levy raised extreme poverty (at the national extreme poverty line of US$1 per day) by 3 percentage points. The results thus indicate a robust and pronounced negative impact on poverty that has to be pitted against a lack of progress on cashew processing—the intended purpose of FUNPI.

[7] Industrial and other export taxes add up to 11 percent of the reference price, which the government defines at the beginning of every export season. In 2011, an additional tax was introduced that finances the Fund to Promote the Industrialization of Agricultural Products (FUNPI), with a contribution of CFAF 50 per kilogram (approximately US$100 per ton) of exportable cashews (Cont and Porto 2014, 7). (In contrast to other exports taxes, the FUNPI surcharge is a per-unit tax.)

[8] The model characterizes the value chain as an oligopsony in the farmer-trader link and as a bilateral oligopoly in the trader-exporter link. Cashew processors interact as buyers at the final stage of the value chain (Cont and Porto 2014).

TABLE 11.1: WELFARE EFFECTS OF FUNPI LEVY IN GUINEA-BISSAU
Percentage change in household consumption

	Scenario A: 2013 intl. price	Scenario B: max. intl. price	Scenario C: average intl. price
All Households	**-5.3**	**34.7**	**9.3**
Poor Households	-7.89	51.67	13.85
Non-Poor Households	-4.4	28.86	7.74
Urban Households	**-1.65**	**10.78**	**2.89**
Urban Poor Households	-3.24	21.25	5.7
Urban Non-Poor Households	-1.39	9.12	2.44
Rural Households	**-8.46**	**55.42**	**14.86**
Rural Poor Households	-9.39	61.51	16.49
Rural Non-Poor Households	-7.92	51.91	13.92
Cashew Producers	**-11.03**	**72.26**	**19.37**
Poor Cashew Producers	-12.28	80.48	21.58
Non-Poor Cashew Producers	-10.38	68	18.23

Source: Cont and Porto 2014, 29.

Note: FUNPI = Fund to Promote the Industrialization of Agricultural Products. Base scenario = no FUNPI levy in place, using the 2013 international price (US$799.88 per ton). Scenario A = FUNPI levy in place (compared with base scenario), using the 2013 international price (US$799.88 per ton). Scenario B = FUNPI levy in place (compared with base scenario), using the maximum international price between 2008 and 2013 (US$1,350 per ton, in 2011). Scenario C = FUNPI levy in place (compared with base scenario), using the average international price between 2008 and 2013 (US$950 per ton).

Additionally, the PSIA looked at the combined effect of the FUNPI tax with other policy measures to explore the potential impacts of FUNPI when funds are used as originally intended:

- Complementary policies that increase competition are beneficial by reducing costs at the respective links with traders and exporters in the value chain.
- Policies that increase the processing capacity are likely to create added value by displacing volume from exporters to processors.
- The provision of services to farmers directly reduces farmers' production costs but would also affect cashew supply and consequently equilibrium prices.

Although all these policies would help to recover reductions in farm-gate prices and household welfare, taken separately none of these measures was estimated to likely be sufficient to compensate for welfare losses incurred by the FUNPI levy. Therefore, a comprehensive policy package and dramatic improvements in the governance of FUNPI would be required to achieve its objectives. Given the magnitude of the negative poverty impacts of the tax, the PSIA recommends the abolition of the levy as the preferred scenario.

The findings were presented in Guinea-Bissau in September 2014, causing considerable public debate, including wide news coverage. There were strong voices within the government demanding the suspension of the FUNPI levy, and increased public awareness was crucial to build momentum and move forward with the reforms. The Bank followed up on recommendations through a number of projects and contrib-

uted to increased visibility of the issue among donors.[9] Several policy recommendations of the PSIA—including the abolition of the FUNPI levy but also recommendations with implications for rice and social protection policy—are included in the Country Economic Memorandum (CEM), which was presented at the donor roundtable in early 2015 and is informing the Bank's wider strategy in the country. Through these various channels, the Bank's engagement played an important role in the policy dialogue that led to the successive reduction of the FUNPI rate (by 20 percent), followed soon after by the complete suspension of the FUNPI levy.

The country's political instability and weak institutions were a major challenge for this PSIA. Guinea-Bissau is a poor and fragile state with a considerable lack of data for policy analysis. The coup d'état of 2012 caused a political and economic crisis that put the Bank's activities at risk. However, in spite of these barriers, the PSIA team reengaged as soon as the suspension of activities was lifted and managed to generate a robust analysis under considerable time pressure. The suspension of the FUNPI levy is estimated to have reduced extreme poverty by 3 percentage points, making this PSIA an important contributor towards achieving the Bank's goals. The success of this PSIA was related to a variety of factors, including some beyond the control of the research teams undertaking the analysis. Yet, the example also shows that adequate responses can address these risks and help policy makers to navigate through often difficult reform processes.

Burundi: Building Consensus for Policy Action in the Coffee Sector

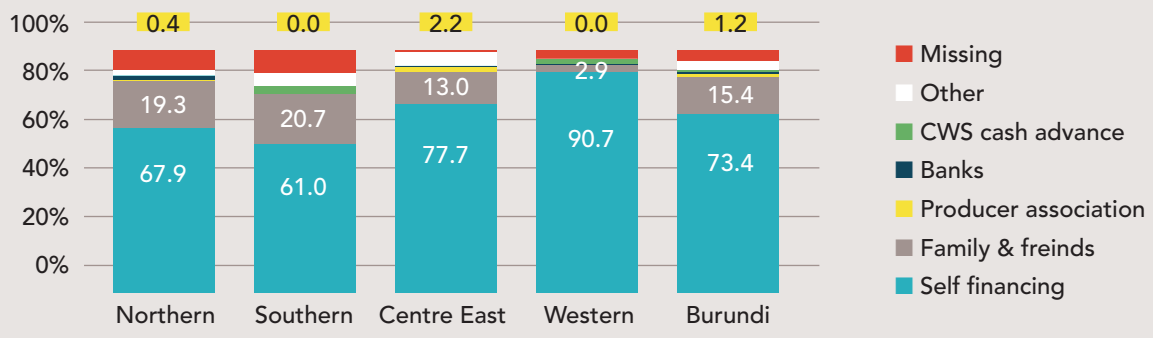
In Burundi, PSIA helped to address the concerns of a group of key stakeholders in the coffee sector—the coffee producers (World Bank 2014c, 2015c). Coffee is big business in Burundi, accounting for over 60 percent of export revenues (as of 2011). Over half of Burundian rural households rely on coffee proceeds, directly and indirectly, for their livelihood. In 2007, coffee proceeds provided 43.8 percent of direct revenues for rural households. Although agricultural production and export has been the domain of the private sector, the public sector owned about 85 percent of coffee washing stations (CWS) for cleaning coffee berries, an intermediate step in the coffee supply chain.

There are about 118 CWS in Burundi, strategically located so that harvested cherries from plantations can reach washing and pulping equipment no later than six hours after harvest. However, CWS have suffered from poor management affecting the quality of coffee. Because Burundi exports 100 percent of its coffee, addressing the quality issue was imperative as it affects price. Therefore, in 2008, the government of Burundi decided, with support from international partners including the World Bank, to privatize the CWS. This was part of larger reforms initiated in 2005 to enhance the competitiveness of Burundian coffee in international markets.

However, there has been considerable opposition to this by coffee growers, stemming from concerns about how privatization would affect their livelihoods. The issue became highly politicized, leading to a suspension of privatization activities. The coffee growers' lobby also sent a formal complaint to the World Bank to stop the privatization on humanitarian grounds. One of the underlying issues was insufficient consultation with coffee growers. They were concerned that privatization of CWS would weaken their position in the coffee value chain, given that CWS operate as the link between coffee growers and exporters. Volatile coffee prices in the international markets and delays in payments to farmers for their produce also contributed to their concerns. Under the reforms, the government had also reserved 25 percent of the CWS shares for local coffee grower associations to purchase, but the financial requirements to qualify as a buyer for these shares were difficult to meet. These concerns triggered a discussion between the Bank, the government, and other donors, which resulted in the PSIA.

[9] The Bank is continuing the dialogue on FUNPI through the Private Sector Rehabilitation and Agribusiness Development Project. Moreover, other donors were involved in the policy discussion. The International Monetary Fund discussed the reduction of the FUNPI levy in its 2014 Rapid Credit Facility (RCF) and made the audit of FUNPI a structural benchmark of its 2015 Extended Credit Facility (ECF).

FIGURE 11.1: HOUSEHOLDS' FINANCING SOURCES FOR COFFEE ACTIVITIES IN BURUNDI, BY REGION



Source: World Bank 2014c, 77.
Note: CWS = coffee washing stations.

The PSIA found no evidence to suggest that privatized CWS reduced household welfare for the majority of the coffee growers. However, the PSIA also identified some vulnerable groups that needed special attention. Data analysis showed that those who sell their coffee cherries to private washing stations, while having incomes about 21 percent higher than those who sell to public CWS, may be more vulnerable to external price shocks. The PSIA did not find robust signs that coffee growers selling cherries to private CWS have lower household welfare. No significant differences were found regarding

- Coffee revenues per household;
- Food consumption per household member; or
- The farmers' (and, as such, heads of household) perceptions of being poor.

The PSIA also highlighted the need for up-front investment in the supply chain with better communications and more-inclusive reforms. Households overwhelmingly continued to self-finance their coffee activities after privatization, with other financing sources playing only a marginal role (Figure 11.1). The PSIA recommendations include (a) assisting coffee growers with finding durable solutions for financing the 25 percent reserved shares; (b) supporting capacity building and training to improve crop productivity; and (c) for the most vulnerable households, promoting diversification of activities toward nonagricultural business.

The PSIA results were disseminated through different communications channels including the government and coffee grower networks. This helped to better engage stakeholders, while the analytical evidence helped to generate buy-in for the policy reform. As a result of this exercise, a new project focusing on the whole value chain for the coffee sector was launched and, as of late 2014, privatization of CWS was back on the Parliament's agenda.

Democratic Republic of Congo: Interventions against Sexual & Gender-Based Violence

In an exceedingly challenging operating environment, a PSIA conducted in the Democratic Republic of Congo (DRC) explored the nexus between trade and gender by testing the effectiveness of specific interventions (World Bank 2014a). Small-scale, cross-border traders provide critical trade links across neighboring countries in the African Great Lakes Region. Yet in the DRC, these traders, the large majority of whom

are women, frequently face harassment and demands for bribes at the border.[10] They also face a volatile security situation inside DRC's territory, as conflict in the eastern part of the country continues to pose a threat to their lives and livelihoods. This PSIA is also motivated by an increased interest in regional trade integration in Sub-Saharan Africa, where the existence of fragmented national markets lowers opportunities for trade gains and agricultural value chains.[11] While contributing to economic growth, the facilitation of cross-border trade for small-scale women traders will also portray an important gender empowerment component if trade facilitation is not at the cost of sexual and gender-based violence (SGBV).

In 2011 the World Bank's Africa Region Gender Innovation Lab embarked on a quantitative study with the goal of informing the discussion about the constraints these small-scale traders face (García Mora and Roshan 2013). The work built on a qualitative survey from 2009 and aimed to further the understanding of corruption and SGBV taking place at the border. In this context, the PSIA MDTF supported an impact evaluation of a cross-border training program, which sought to help policy makers devise gender-smart interventions in the trade sector, with the goal of replicating the model in other border posts in the Great Lakes Region (World Bank 2014a).[12] In addition to quantitative data collection through baseline and endline surveys (in 2011 and 2013), focus groups were conducted in May 2012 to prepare traders for a mobile-phone data collection element of the project.

The impact evaluation uses a randomized control trial to assess the impact of the trader training on corruption, SGBV, and income indicators for small-scale traders in Rwanda and the DRC. The evaluated interventions included (a) workshops that trained cross-border traders on taxes and tariffs, information related to sexual harassment and bribes at the border-crossings, and formation and management of cooperatives; and (b) workshops that trained border officials on taxes and tariffs and on traders' rights. The project and analytical work was conducted in close collaboration with national and local government entities in the DRC[13] as well as in partnership with the Catholic University of Bukavu and with International Alert, a nongovernmental organization (NGO) that has been working with small-scale traders in Eastern DRC since 2009. It is important to note that the PSIA faced a number of challenges related to the sensitivity of the topic, political instability, and the fragile and conflict-affected environment (Box 11.3).

The surveys and focus group discussions indicate that corruption and SGBV are predominant trade barriers. The findings from a randomly selected sample of traders in the DRC towns of Goma and Bukavu revealed that 67 percent of respondents reported having experienced some form of corruption; 10 percent reported having undergone some form of physical violence; 31 percent reported having been insulted; and approximately 5 percent of traders reported having experienced some form of SGBV while crossing the border during a 30-day recall period. Structured interviews with 66 border officials from the four main border agencies (customs, immigration, hygiene, and arms control) and focus group discussions with traders revealed that the officials demonstrate higher socioeconomic welfare than the traders. They also report low job satisfaction and poor working conditions, have limited knowledge about correct fees and border crossing procedures, and have reported conflicting information on border payments. Finally, contrary to the traders' accounts, they also reported low rates of SGBV at border crossings.

The impact evaluation results indicate a drop in (self-reported) bribe payments and SGBV, which was possibly related to a change in trading patterns among those traders who participated in the workshop: that is, some traders opted to cross the border at times when the guards were not present.[14] Paradoxically, desired results can be attained through nondesired channels, without changing the nature of legal cross-

[10] Recent (2013–14) Demographic and Health Survey (DHS) data from the DRC revealed that 28 percent of women aged 15–49 years in North Kivu and 35 percent of those in South Kivu experienced sexual violence.

[11] Also see Brenton and Isik (2012).

[12] The intervention itself was designed and led by the Africa Region Trade Practice (now part of the World Bank's Trade and Competitiveness Global Practice); project activities took place from March 2012 through July 2013.

[13] The Ministries of Finance, Trade, Agriculture, Interior, DGDA (customs office), and DGM (immigration office).

[14] Preliminary results were presented at the PSIA workshop, "From Evidence to Policy: Innovations in Shaping Reforms in Africa," Cape Town, South Africa, July 21–24, 2015. The final paper will be released in 2016.

BOX 11.3: IMPACT EVALUATION IN THE DRC IN THE CONTEXT OF CONFLICT AND POLITICAL INSTABILITY

Between 2011 and 2013, the MDTF supported an impact evaluation of a training program designed to empower small-scale traders and to reduce trade barriers at the border between Rwanda and the DRC. The trainings were conducted for both traders and border officials to inform them about existing taxes and tariffs, as well as the traders' rights in the face of sexual harassment and corruption. This PSIA illustrates some of the difficulties that researchers face when conducting fieldwork on sensitive issues and in challenging environments. Although impact evaluations have some common challenges, conducting such an analysis in a fragile and conflict-affected country comes with its own problems.

Multiple breakouts of violent conflict occurred during the study period that adversely affected the fieldwork. Further, elections in the DRC in the fall of 2012, which were accompanied by significant political instability, caused additional delays. The deteriorating security situation in the Eastern DRC and the capture of the city of Goma by M23 rebels in November 2012 delayed the training activities conducted by the partner NGO (International Alert). Data collection was additionally hampered by the lack of infrastructure in parts of the Eastern DRC.

The evaluation used a randomized control trial to measure the training program's impact on several indicators related to corruption, SGBV, and income. The baseline survey used a random sample of 628 female traders (of whom 75 percent live in the DRC and 25 percent in Rwanda). However, randomization of the sample of 66 border officials was obstructed because the government of the DRC defined a subset of border officials from whom the research team was permitted to draw a sample to interview. Thus, it is impossible to evaluate the training of border officials in a rigorous manner.

Moreover, the experimental mobile-phone survey of traders was dropped in February 2013 after several months and multiple unsuccessful attempts to establish contact with a threshold number of baseline survey respondents. Given the high mobility of traders and the sensitive nature of the intervention, there were problems verifying the identities of some traders based on the data collected at baseline. The surveyed traders exhibited a low degree of trust when initially approached by survey enumerators.[a] Therefore, an intensive tracking exercise was conducted during the follow-up survey to increase the response rate and ensure a sufficiently large panel sample for the two survey waves. Thus, the team managed to complete the impact evaluation despite these challenges.

Source: García Mora and Roshan 2013; World Bank 2014a.
a. For instance, some traders were wary of being identified as smugglers or potentially being reported to authorities (despite assurances to the contrary).

border trading activities. However, in this case, the results may not be sustainable. A major limitation of this PSIA was the difficulty in evaluating the training of border officials (as discussed in Box 11.3). In fact, the training and incentives of border authorities may prove critical for sustained change in this area.

Interventions that target training on taxes, tariffs, and trade regulations are not always straightforward. The general ambiguity around the tax regime could only be partly addressed, because it is to some extent deliberate: the lack of clear information benefits certain actors who wish to extract rents. It also appears that addressing information constraints may be necessary but insufficient to address the challenges faced by small-scale traders in the Eastern DRC. It is equally important to create permanent mechanisms that ensure both social accountability and access to critical information. The informality of tariff mechanisms and regulations on the borders in the Great Lakes regions requires extensive reforms, including improvements in enforcing and monitoring existing regulations. Yet, there is clearly a need for further analysis of the causality of corruption and SGBV and its nexus to ongoing trade reforms.

This work spurred the policy dialogue on gender-informed programming to improve the conditions of cross-border traders in the region. This dialogue was carried out not just at the local and national level, but also extended regionally and influenced the operations of the World Bank and relevant partners. Collaboration with civil society organizations, particularly the partnership with International Alert, helped to strengthen advocacy and raise the issue of SGBV in the dialogue around trade reforms. Within the World Bank, the engagement led to the integration of a conflict prevention strategy into the national strategy of the World Bank in the DRC.[1] The accompanying analytical work was used to inform the design of a regional operation on cross-border trade in the Great Lakes region.

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Chapter 12: Final Remarks

This report highlighted good practices and specific innovations of the Poverty and Social Impact Analysis (PSIA) approach in the context of PSIA challenges and opportunities in different sectors and thematic areas. The report covers 10 thematic areas, but, in fact, many PSIAs are cross-sectoral in nature and touch upon issues that are connected to more than one theme. Moreover, the PSIAs featured here cover only a subset of the broad range of sectors and topics represented among all PSIAs funded by the PSIA Multi-Donor Task Force (MDTF).

Similarly, the PSIA exhibit substantial diversity in terms of "product types" and how they are embedded in World Bank operations. For instance, some PSIAs fed into the Bank's economic and sector work (ESW), improving their pro-poor focus and incorporating specific policy recommendations (such as the PSIA on freight transportation reforms in Pakistan and the one on investment prioritization in agricultural development in Nicaragua). Others have, at different design stages, informed one or more of the Bank's Development Policy Financing (DPF) products. The PSIAs included in this report also address poverty and social exclusion in the context of technical assistance (TA) connected to lending operations or have contributed to global and regional knowledge products. One of the greatest advantages of PSIA is its flexibility and capacity to adapt to different contexts and needs. The main lessons learned from the PSIA experience are reflected in their adaptation of methods, support to capacity building, and enhancement informed policy dialogue and Bank lending operations in client countries.

The PSIA exhibit substantial diversity in terms of "product types" in World Bank operations.

METHODOLOGY

PSIA use a diverse and wide range of methods, which can integrate cutting-edge poverty analysis with various forms of social analysis. The choice of methods in PSIA is driven by (a) the question being studied; (b) data availability; and (c) time, capacity, and resources.[2] The use of particular methodologies—whether qualitative, quantitative, or mixed—varies across sectors and is driven by the research focus. For instance, PSIA on fiscal policies are overwhelmingly quantitative because they focus on *vertical inequalities* (welfare implications along the income distribution). In other areas, such as social protection and health, the emphasis on *horizontal inequalities* is more common (group- or identity-based disadvantages), often requiring qualitative data to identify vulnerable groups and understand the underlying dynamics of exclusion. Some have also employed experimental designs (such as the discrete choice experiment in Senegal, as detailed in chapter 7) and quasi-experimental designs (such as the assessment of rural roads development in India, described in chapter 10).

[2] For guidance for practitioners on choosing the right methodology, see Coudouel and Paternostro (2005, 2006); Holland (2007); and World Bank (2003).

Mixed-methods studies have been common among MDTF-funded PSIAs. One aspect of determining the best mix of methods concerns the nature of outcomes the PSIA is trying to assess. Qualitative data on *subjective outcomes* (such as "life satisfaction" or "feeling treated with respect") contrast with quantitative data on objective outcomes (such as income or literacy scores). Good practices have successfully integrated different methodologies (either sequentially or concurrently), including the following design strategies:

- *Exploratory design*, which uses qualitative data to explore relevant issues to design a survey or a new instrument.
- *Explanatory design*, in which qualitative results help to explain and interpret the findings of a quantitative study.
- *Triangulation*, which uses qualitative and quantitative data in a complementary way to confirm or cross-validate findings.
- *Nested design*, in which the study is guided by either a qualitative or a quantitative research design but embeds the other method to address a particular aspect.

A recurring theme in the spectrum of qualitative methods has been to solicit perceptions of beneficiaries and other stakeholders. Researchers acknowledge their importance for the analysis of processes of exclusion and inclusion. As such, many methods to inquire about subjective views (such as focus group discussions or stakeholder workshops) play an important role in raising awareness about policy issues and thereby propel the national dialogue around reforms. Given that awareness of existing policies or reform proposals is often strikingly low, such methods are particularly important. For example, in the water and energy sectors, information asymmetries can contribute to increased cost for consumers. In Ukraine, engaging with stakeholders through interviews, focus groups, and workshops was crucial to identify demand-side constraints in the water sector. Understanding consumer attitudes helped to design an effective awareness campaign as well as to improve accountability of service providers (chapter 8).

Innovations in PSIA have taken various forms. They include new tools for data collection and analysis, the integration of existing methods and frameworks to address a policy issue, and the application of well-established approaches to new fields and policy instruments. Although many innovations presented in this report are driven by new technologies and the availability of more and better data (such as geospatial data in health and agriculture), there are also examples where innovative approaches are developed as a response to poor data. This is highlighted in the PSIA on cultural heritage and sustainable development in Bhutan. This PSIA developed its methodology through multiple refinements to quantitative and qualitative methods, often learning through trial and error because of the lack of referential studies and the scope of this analysis. The team used both exploratory and explanatory strategies and put together a comprehensive upstream assessment of a proposed bill on cultural heritage (chapter 5, Box 5.1).

Many innovative studies have supported and have benefited from the transfer of technical knowledge, both within and across regions. Standardization and harmonization of certain research instruments have become important to the PSIA agenda. This applies to multicountry studies (such as the Commitment to Equity [CEQ] assessments, and the Subsidy Simulation Stata Package [SUBSIM] applications in the Middle East and North Africa region)[3] that allow for international and intertemporal comparison, as well as to national efforts to standardize and integrate monitoring and evaluations systems (such as the PSIA of the fisheries sector in Mozambique, discussed in chapter 11, Box 11.1).

Additionally, ownership and in-country capacity to generate and use PSIA are important considerations in the choice of tools and methods. There is a potential trade-off between (a) the level of sophistication of certain methods, and (b) their accessibility and feasibility given existing capacity, resource, and time constraints. PSIA teams have addressed this trade-off in different ways, depending on the client's

[3] For more information about the CEQ assessments, see chapter 2, Box 2.1 2.1. For more about SUBSIM, see chapter 3, Box 3.13.1.

needs and local circumstances. Innovative models such as SUBSIM helped Bank teams in various countries in the Middle East and North Africa region to produce robust simulations of subsidy reforms under tight budgets and timelines. On the other hand, to ensure local ownership in Cameroon and Sierra Leone, the PSIA teams developed a subsidy simulation model that took into account the client's existing technical capacity.

PROVIDING POLICY MAKERS WITH EVIDENCE

Another feature of PSIA, as showcased in this report, is their role in helping policy makers to make informed decisions about the trade-offs they face when designing and implementing policy reforms. The value of PSIA lies in providing evidence to quantify and rationalize these trade-offs, which are otherwise difficult to grasp. For instance, short- and long-term effects need to be balanced in a sensible way. An example is the adoption of renewable technologies, whose overall positive impact in the long run (especially by reducing climate-change-related costs) may cause energy prices to rise in the short to medium term.

The analyses of fiscal policies presented in this report offer insights into the relative importance of different revenue and spending categories regarding their distributional and budget impacts. For example, in Indonesia, a striking 23 percent of public spending goes toward energy subsidies. These are important for the poor, but the more affluent population groups benefit the most in absolute terms.[4] A broader look at the fiscal system suggests considerable potential to raise, reallocate, and spend fiscal resources more effectively, especially from an equity point of view. PSIA strengthens the narrative in favor of these types of complex reforms that help to free fiscal resources for more pro-poor policies.

Generally, PSIA is conducted ex ante to inform policy design or implementation, but they may also provide ex post lessons from previous interventions. It is fairly common that PISA have elements of both ex ante and ex post evaluation, given that they are conducted in the midst of a larger reform process. In some countries, the MDTF supported more than one PSIA to follow up on previous work and accompany long-term sectoral reforms. (See, for instance, the discussions of PSIAs in chapter 3 on Cameroon and in chapter 4 on Fiji.)

The PSIA experience highlights the challenges in designing policies that reach the poorest and most vulnerable groups. These groups often face multiple deprivations that are perpetuated by social norms and a general lack of voice and empowerment. Although PSIA aim to identify and mitigate adverse impacts, as the experiences presented here underscore, they also help identify opportunities that either leverage positive impacts or improve the efficiency of a given policy. For instance, a PSIA in India found that the public investments in rural roads had limited benefits for rural women (chapter 10). Although men were more likely to travel to other areas, women benefited indirectly through the auxiliary demand created for local goods and services. This has implications for small-business or agribusiness policies and labor market opportunities. Breaking the vicious cycle of poverty and social exclusion often requires integrated policy interventions in various sectors and on different levels. A good example in this regard is the PSIA on youth inclusion in Tunisia that, instead of using a narrow "job lens," opted for a holistic approach that spans the areas of (a) participation and active citizenship, (b) access to economic opportunities, and (c) youth-friendly services at the local level (chapter 5).

Even pro-poor reforms that are targeted toward underserved communities tend to have potential for increasing effectiveness and efficiency through complementary policy measures. A discrete choice experiment (DCE) in Senegal strengthened the case for piloting a maternal health conditional cash transfer (CCT) program to encourage better maternal and newborn health outcomes (chapter 7). In Albania, another PSIA assessed the allocation mechanisms for disability benefits. It demonstrated that good poverty

[4] In Indonesia, the richest decile receives eight times more than the poorest decile in absolute terms (chapter 3).

targeting requires in-depth knowledge about the use of public services and the realities on the ground and suggested policy changes to address existing inconsistencies and improve targeting accuracy (chapter 4).

INFORMING OPERATIONS AND POLICY REFORMS

PSIA have also influenced policy dialogue and contributed to changes in the course of reforms. The nature of the relationship between research and policy making has been a long-standing topic of investigation for social scientists. While there is a rich literature on this topic, no single explanatory model can possibly do justice to the complex policy environments, institutional structures, and political arrangements that influence decision-making processes.[5] Although some generic lists of success factors are certainly useful,[6] it is important to bear in mind that PSIA is a realist approach that assumes that context really does make a difference to program outcomes. At the same time, it is generally difficult to attribute follow-up actions to the PSIA work itself, because so many factors influence the policy-making process. Moreover, in many cases, the successful implementation of PSIA recommendations can only be verified in the medium or long term.

Nevertheless, some broad lessons can be learned from the successful engagements highlighted in this report:

- *Increasing public awareness* has in many cases ensured the government's buy-in or shifted the national policy dialogue by amplifying the voices of stakeholders outside government. It goes almost without saying that the effective communication of PSIA results is crucial in this process. As has been emphasized elsewhere (see the resources in appendix I), this review reaffirms that a communication strategy with dissemination and learning activities should be considered an integral part of the PSIA process.

- *Close cooperation and partnerships with key stakeholders* may prove instrumental to the success of the Bank's engagement. Support for more inclusive, evidence-based policies requires both tapping into local expertise and enabling local champions—within or outside government—to participate more effectively in the policy-making process.

- *Uptake of PSIA recommendations and continuation of policy discussions* by World Bank country teams is very important, given that reform processes tend to be slow and require assistance over extended periods. Thus, linking policy recommendations to follow-up operations (including technical assistance, lending, and investment activities) may be necessary to advance the dialogue on difficult issues.

The PSIA on cashew policies in Guinea-Bissau illustrates how these various dimensions come together and ultimately succeeded in influencing government policy. First, extended policy discussions with various stakeholders generated a debate within government. Second, wide news coverage and public awareness was crucial to build momentum to move forward with the reforms. Third, PSIA findings were incorporated in the Bank's country program, and several operations from the Bank and other donors followed up on issues raised by the PSIA (chapter 11).

In Fiji, the Bank's engagement resulted in two consecutive PSIA that assessed the country's social protection policies (covering both ex ante and ex post evaluation). The scope and depth of this analysis and the close collaboration with counterparts ensured the government's endorsement of the recom-

[5] In the field of international development—where research is driven by the aim to influence policy—it has been claimed that cutting-edge knowledge is underused by decision makers or that research neglects the concerns of the poor in a top-down fashion. Several development organizations have programs that aim to understand the factors that determine the use of evidence in policy making: see, for instance, Jones (2011) and the website of the Research and Policy in Development (RAPID) program at the Overseas Development Institute (ODI) (https://www.odi.org/programmes/rapid/).

[6] A World Bank report that reviews the link between PSIA and policy and planning processes in partner countries finds that the more-influential PSIAs tend to be associated with the following factors: alignment with the national policy calendar, operational relevance and usability, high-level champions on the government side, and local advocates in Bank or development partner offices at the country level (World Bank 2009).

mendations made by the PSIA with the suggested policy changes to be implemented with follow-up assistance from Bank (chapter 4).

PSIA also underscore the relevance of the context in which the analytical work was conducted. This includes the local political landscape, ongoing policy discussions, and existing engagements with the World Bank and other development partners. A critical aspect in this regard is the configuration of stakeholder interests, often referred to as the "political economy" of reforms. Several cases illustrate how the choice of methods, the scope of analysis, and the definition of complementary and follow-up activities took these contextual factors into consideration.

The success of PSIA is also influenced by external factors that are beyond the control of research or government teams. For instance, political instability has been a challenge for PSIAs conducted in Guinea-Bissau and Sierra Leone. In the Democratic Republic of the Congo, the PSIA was conducted in a fragile and conflict-affected environment; it had to contend with not only political sensitivities but also insecurity and the high mobility of survey participants (chapter 11). Yet, as these experiences reveal, it is critical to find adequate responses to address these risks and help policy makers to navigate through often difficult reform processes.

Ultimately, all reforms have winners and losers, and policy makers have to balance competing interests, notwithstanding the reform's technical plausibility and expected results. It is not unusual that reform efforts result in protests, social unrest, or even governments stepping down. There are many instances across the globe where reforms have stalled or reversed because of political pressures. For instance, phasing out consumer subsidies is a particularly delicate issue. Therefore, systematic assessment of political economy risks and consultations with stakeholders are indispensable elements of PSIA. For instance, in Cameroon, the World Bank team commissioned a series of interviews and focus groups to identify key stakeholders and assess the population's level of awareness of price subsidies and potential reactions to policy reform (chapter 3). The PSIA found that the population in anglophone areas was more sensitive to subsidy reforms and presented a higher potential for social unrest. This stemmed from their strong sense of ethnic and regional exclusion; thus, to be successful, reforms would need to ensure transparency and ensure sensitivity to their concerns.

STREGTHENING PARTNERSHIPS AND LOCAL CAPACITY

PSIA have contributed to strengthening and disseminating tools, processes, and institutions that promote evidence-based and inclusive policies. For instance, improved data collection and better monitoring and evaluation systems support policy makers, development partners, and stakeholders from civil society in their efforts to work toward greater equity and more inclusive and sustainable development. In the context of the MDTF, efforts to foster PSIA capacity have covered formal and informal technical training, standardization of data collection, and support of organizational development and participatory decision making. An example is the multicountry engagement to implement the CEQ approach, a diagnostic tool for distributional analysis of fiscal policies (chapter 2, Box 2.1).

The country studies had a special emphasis on capacity building. With the MDTF's support, technical workshops were conducted in Armenia, Ethiopia, Indonesia, Jordan, and South Africa between January and June 2014. In addition to technical training, in-country workshops were used to present preliminary findings of the analysis and to solicit government and stakeholder feedback on the results. In all cases, the teams undertaking the analysis included local counterparts who work in think tanks, universities, or on country office staffs previously unfamiliar with incidence analysis.[7]

[7] The final independent evaluation of the PSIA MDTF found that in-country stakeholders considered informal on-the-job training to be the most valuable and effective way to build local technical capacity (World Bank 2016a).

Better collaboration and communication among stakeholders enhances capacity to incorporate evidence in policy making. This makes new partnerships (both nationally and with international actors) an integral part of capacity building. PSIA experiences show that there is considerable scope for better use of local knowledge and experience in policymaking. For instance, in Bhutan, the PSIA brought together key government agencies which used to work in isolation. This resulted in improved coordination and facilitated the design and subsequent implementation of an integrated approach to cultural assets management (see Box 5.1). Capacity building requires careful attention to the local political economy. The technical trainings and workshops that are frequently conducted as part of PSIAs, tend to be an entry point for new partnerships and improved communication between various stakeholders.

Part of the challenge in supporting capacity development is that it is a slow process that requires a long-term vision and continuous engagement. This raises questions about the expectation that PSIA engenders institutional change through one-shot interventions. There also may be a potential trade-off between impactful analysis, that informs policymakers in a timely manner, and capacity building, which generally takes more time to build. Some of the experiences presented here suggest that working with strong local advocates for PSIA who can engage in decision-making is critical. An approach that is narrowly focused on technical aspects often fails to achieve local ownership and sustainability with regard to the use of evidence and analytical tools in the national policy process.

A LOOK TO THE FUTURE OF PSIA

Discussions around the 2030 agenda and the adoption of the Sustainable Development Goals (SDGs) by the international community have highlighted the need for a new inclusive development framework. There is global consensus that economic growth is not sufficient to reduce poverty; growth needs to be inclusive. In developing countries especially, large disparities still remain in access to both public services and economic opportunities, demanding immediate global action. This requires not only political will for reforms but also initiatives that advance the understanding of how certain policies affect the dynamics of poverty and social exclusion. By squarely focusing on policy action, PSIA-type analyses play a critical role in this regard. The work showcased in this report illustrates how research teams can successfully engage with policy makers and other key stakeholders to assess and address the needs of the most vulnerable and disadvantaged populations.

PSIA is an integral part of the World Bank's social inclusion agenda and helps the Bank to align its operations in all sectors with the twin goals of ending poverty and boosting shared prosperity. The World Bank is committed to the continuity of PSIA work beyond the life span of the MDTF that financed the work highlighted in this report. Each one of the recently formed Global Practices of the World Bank is aligning its knowledge and operational work with the organization's twin goals of eliminating poverty and shared prosperity. Given their relevance to policy and lending, PSIAs are often financed directly through the Bank's budget. This avenue of PSIA financing is going to be all the more important in coming years.[8] The Bank has the following specific mechanisms to further enact its commitment to PSIA in the near future:

- *Development Policy Financing (DPF):* DPF products[9] are governed by the Bank's Operational Policy (OP) 8.60, which emphasizes, among other principles, a systematic assessment of the potential poverty and social consequences of policies supported by Bank operations, especially for poor and vulnerable groups. The Bank holds itself accountable to its policies through a systematic review of DPFs every three years—the Development Policy Financing Retrospective—which includes an assessment of PSIA compliance (World Bank 2016, 33). Moreover, resources such as the DPF Academy and training materials on

[8] According to the independent evaluation, 70 percent of task team leaders (TTLs) cited financial constraints as the biggest challenge to the sustainability of PSIA (World Bank 2016a). TTLs also highlighted the considerable scope for further improving the knowledge and learning structure for PSIA beyond the MDTF.

[9] "The World Bank's policy for Development Policy Financing was updated in July 2014 to provide a unified framework for all development policy operations, leaving room for customizing content and design to country circumstances. DPF is delivered in the form of loans, credits, or guarantees to support a government's medium-term program of policy reforms" (World Bank 2016b).

PSIAs are available to support the Bank staff in learning and increasing their capacity to incorporate PSIAs in DPF products.

- *Systematic Country Diagnostic (SCD):* The SCD—part of the World Bank's Country Engagement Model (World Bank 2016, 27–29)—is a diagnostic exercise, in collaboration with national authorities and other country stakeholders, to identify key challenges and opportunities for a country to accelerate progress toward development objectives that support ending absolute poverty and boosting shared prosperity in a sustainable manner. This includes conducting upstream PSIA-type work to understand poverty and social inclusion issues.

- *Environmental and Social Framework (ESF):* This is a new progressive framework that was approved in August 2016 and will broaden the mandate of environmental and social risk assessments. Under the ESF, PSIA-type analyses will also be required for investment lending that is linked to policy reforms. The new framework consolidates and clarifies the Bank's environmental and social policies and harmonizes them with those of other development institutions. The ESF strengthens the protection for people and the environment, making important advances in areas such as transparency, accountability, nondiscrimination, and public participation. The new requirements are expected to take effect in early 2018.

One of the most pressing constraints to foster evidence-based policy making and the PSIA agenda is client and stakeholder capacity in developing countries, particularly in low-income countries and fragile and conflict-affected environments. On the other hand, middle-income countries have shown great capacity to conduct, mainstream, and use the results of PSIA, as some of the examples from this report illustrate. There is a need for a global partnership for PSIA focusing on capacity building and knowledge sharing across the entire development community to improve the quality, frequency, and impact of PSIAs across the world.

Appendixes

APPENDIX I: RESOURCES

Seminal Learning Resources and Toolkits

Abramovsky, L., and D. Phillips. 2015. "LATAX: A Multi-Country Flexible Tax Micro-Simulation Model." Manual, Institute for Fiscal Studies, London.

Angwafo, M., and P. Chuhan-Pole. 2015. "From Evidence to Policy: Innovations in Shaping Reforms in Africa." Conference publication for Policy and Social Impact Analysis (PSIA) Conference and Learning Event, PSIA Multi-Donor Task Force, Cape Town, South Africa, July 21–24.

Araar, A., and P. Verme. 2016. "Prices and Welfare." Policy Research Working Paper 7566, World Bank, Washington, DC.

Coudouel, A., A. Dani, and S. Paternostro, eds. 2006. *Poverty and Social Impact Analysis of Reforms: Lessons and Examples from Implementation.* Washington, DC: World Bank.

Coudouel, Aline, and Stefano Paternostro, eds. 2005. *Analyzing the Distributional Impact of Reforms: A Practitioner's Guide to Trade, Monetary and Exchange Rate Policy, Utility Provision, Agricultural Markets, Land Policy, and Education.* Vol. 1 of 2. Washington, DC: World Bank.

———. 2006. *Analyzing the Distributional Impact of Reforms: A Practitioner's Guide to Pension, Health, Labor Markets, Public Sector Downsizing, Taxation, Decentralization, and Macroeconomic Modeling.* Vol. 2 of 2. Washington, DC: World Bank.

Inchauste, G., and N. Lustig, (eds.). Forthcoming. *The Distributional Impact of Taxes and Transfers: Evidence from Eight Developing Countries.* Washington, DC: World Bank.

Gertler, P.J., S. Martinez, P. Premand, L.B. Rawlings, and C.M.J. Vermeersch. 2016. *Impact Evaluation in Practice.* 2nd ed. Washington, DC: Inter-American Development Bank and World Bank.

Lustig, N., and S. Higgins. 2013. "Commitment to Equity Assessment (CEQ): Estimating the Incidence of Social Spending, Subsidies, and Taxes. Handbook." Working Paper No. 1, Commitment to Equity (CEQ) Project of the Center for Inter-American Policy and Research (CIPR); Inter-American Dialogue; Center for Global Development; and Department of Economics, Tulane University, New Orleans.

Manghee, S., and A. Poole. 2012. "Approaches to Conducting Political Economy Analysis in the Urban Water Sector." Water Papers, Working Paper No. 74741, World Bank, Washington, DC.

Olivieri, S., S. Radyakin, S. Kolenikov, M. Lokshin, A. Narayan, and C. Sánchez-Páramo. 2014. *Simulating Distributional Impacts of Macro-dynamics: Theory and Practical Applications.* ADePT Series. Washington, DC: Word Bank.

Verme, P., and A. Araar (eds.)., 2016. "The Quest for Subsidies Reforms in the Middle East and North Africa Region: A Microsimulation Approach to Policy Making." Policy Research Working Paper 7754. World Bank, Washington, DC.

World Bank. 2003. "A User's Guide to Poverty and Social Impact Analysis." Reference guide, World Bank, Washington, DC.

———. 2007. *Tools for Institutional, Political, and Social Analysis of Policy Reform: A Sourcebook for Development Practitioners.* Washington, DC: World Bank.

———. 2008. "The Political Economy of Policy Reform: Issues and Implications for Policy Dialogue and Development Operations." Social Analysis. Report No. 44288-GB, World Bank, Washington, DC.

———. 2009. "Poverty and Social Impact Analysis (PSIA): Reviewing the Link with In-Country Policy and Planning Processes." Synthesis Report. Report No. 4844-GB, World Bank, Washington, DC.

———. 2013. *Inclusion Matters: The Foundation for Shared Prosperity.* New Frontiers of Social Policy. Washington, DC: World Bank.

Evaluation of Bank Support to PSIA

Independent Evaluation Group (IEG). 2010. *Analyzing the Effects of Policy Reforms on the Poor: An Evaluation of the Effectiveness of World Bank Support to Poverty and Social Impact Analyses.* Washington, DC: World Bank.

World Bank. 2011. "Multi-Donor Trust Fund Annual Report." World Bank, Washington, DC.

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———. 2014. "Multi-Donor Trust Fund Annual Report 2013." World Bank, Washington, DC.

———. 2015. "Multi-Donor Trust Fund Annual Report 2014." World Bank, Washington, DC.

———. 2016. "Multi-Donor Trust Fund Annual Report 2015/16." World Bank, Washington, DC.

World Bank Group. 2015. "2015 Development Policy Financing Retrospective: Results and Sustainability." World Bank, Washington, DC. http://pubdocs.worldbank.org/en/420441457100264616/DevelopmentPolicyRetrospective2015.pdf.

Useful Links

Commintment to Equity (CEQ): http://www.commitmentoequity.org/.

SUBsidy SIMulation Stata Package (SUBSIM): http://www.subsim.org/.

Development Impact Evaluation (DIME): http://www.worldbank.org/en/research/dime.

Poverty and Social Impact Analysis (PSIA): https://povertyandsocialimpact.org/.

APPENDIX II: METHODOLOGY

This publication is based on a systematic desk review that was followed by consultations with task team leaders (TTLs) of selected Poverty and Social Impact Analyses (PSIAs). The overarching question guiding this exercise was, what lessons can be learned from good practice PSIAs that have informed the policy dialogue in their respective thematic areas? To account for the complexity of PSIA, the review covered both (a) the scope and depth of analysis, and (b) the policy relevance and engagement. The selection process involved four steps (Figure A.1):

I. All Multi-Donor Trust Fund (MDTF) grants were screened to assess the universe of PSIAs to be considered for the review. The review excluded administrative and dropped grants, as well as exclusive knowledge and learning activities. Moreover, grants that were not formally closed by December 31, 2015, were not included to ensure that sufficient documentation and evidence is available to draw conclusions on the success of the PSIA. 215 PSIA grants met these criteria and were considered for the review. Figure A.3 in appendix III presents a complete list of these grants.

II. The team reviewed output and monitoring documents for a total of 113 PSIA MDTF grants that have been completed between 2010 and 2015. To efficiently allocate time and resources, the review focused on PSIAs with sufficient documentation. PSIAs were excluded from the review, if TTLs had not submitted output documentation by March 2016. Table A.1 and Figure A.2 present the pool of PSIAs with available documentation. The types of output documents varied, including PSIA reports (internal or published), journal papers, PowerPoint presentations, book chapters, notes in loan documents, and sector notes, among others. Additionally, grant monitoring documents (GRMs) were reviewed, particularly to learn about the operational and programmatic context, as well as complementary activities to the analytical work. During the review particular attention was given to PSIAs that had been featured previously in learning events, seminars, technical notes, or reports as best practices.

III. Forty-five PSIAs were shortlisted as potential best practices or because of innovative aspects. The review matrix template in Table A.2 shows a list of our review criteria, which covered the analytical approach and research design; the distributional impacts (who is affected, why, and how); the policy and programmatic context; and follow-up actions on PSIA recommendations (contribution to policy design, capacity building, and Bank operations). The TTLs of shortlisted PSIAs were asked to provide additional inputs and/or missing documentation. These consultations took place either through interviews or via email (with TTLs and/or team members).

IV. Based on the information from available documents and additional consultations, 39 PSIAs were selected to be included in the report (featured either as case studies, innovative tools and methods, or complementary boxes). Draft write-ups were shared with TTLs/team members soliciting their feedback to make sure that the information was accurate and complete.

FIGURE A.1: SELECTION PROCESS

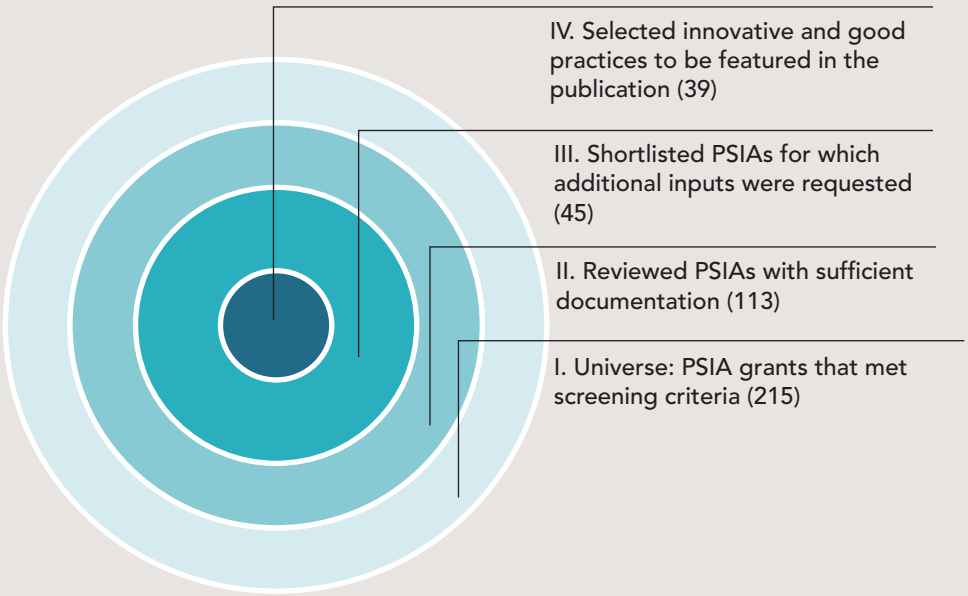

TABLE A.1: NUMBER AND SHARE OF PSIAs WITH AVAILABLE DOCUMENTATION

Among MDTF-funded PSIAs

Total number of PSIAs	215	(100%)
Without documentation	23	(11%)
With output report(s)	113	(53%)
With GRM only (no report)	79	(37%)

Note: GRM = Grant Reporting and Monitoring. Excludes administrative and dropped grants, as well as exclusive knowledge and learning activities.

FIGURE A.2: NUMBER AND SHARE OF PSIAS WITH AVAILABLE DOCUMENTATION

Among MDTF-funded PSIAs

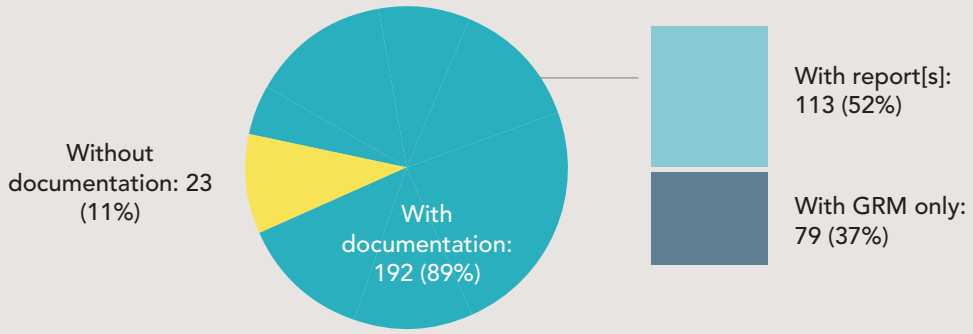

FIGURE A.3: NUMBER AND SHARE OF PSIAS WITH AVAILABLE DOCUMENTATION

Among MDTF-funded PSIAs

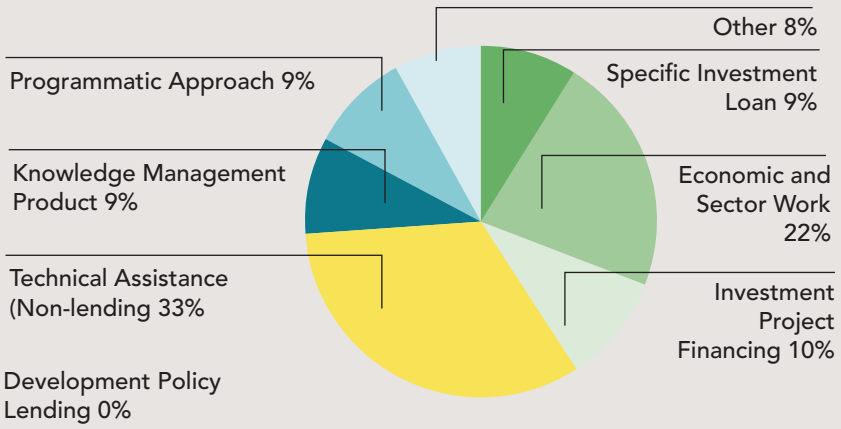

TABLE A.2: REVIEW MATRIX TEMPLATE

					Scope and Depth of the Analysis					Policy relevance and engagement			
Identifier (TF#/P#)	Title	Country	Document(s) reviewed	Linked to DPL (Y/N)	Who is affected? (Identified groups)	How are they affected? (Types of deprivation)	Why are they affected? (Depth of analysis)	What can be done? (Mitigation measures)	Innovation in Topic, Instrument Method	Influence on Policy dialogue & design	In-country partner-ships	Challenges & Successes in capacity building	Communi-cation & Knowl-edge sharing

APPENDIX III: LIST OF PSIAs

TABLE A.3: LIST OF PSIAs INCLUDED IN THIS PUBLICATION

Chapter	Region	Grant Name	Country	Grant Manager
Fiscal Policy	LCR	Distributive Impact of Colombia's 2012 Tax Reform	Colombia	Carlos Rodriguez Castelan
Fiscal Policy	LCR	Manual of MEXTAX, Micro-Simulation Program	Mexico	Samuel Freije-Rodriguez
Fiscal Policy; Subsidy Reform	Global	CEQ Country Studies — Distributional Impacts of Fiscal Policy	Multiple countries (Incl. South Africa and Indonesia)	Maria Gabriela Inchauste
Subsidy Reform	AFR	Food and fuel subsidies reform and its implications for households' welfare	Cameroon	Prospere R. Backiny-Yetna
Subsidy Reform	AFR	Regional PSIA Tools and Training for Fuel Subsidies	Sierra Leone	Kristen Himelein
Subsidy Reform	MNA	Prices and Welfare Study	Regional - Middle East and North Africa	Paolo Verme
Subsidy Reform	MNA	Regional Subsidies in MNA	Regional - Middle East and North Africa w(Morocco)	Paolo Verme
Social Protection	EAP	Measuring Targeting Accuracy and Poverty Impact of the Social Protection Policies	Fiji	Oleksiy Ivaschenko
Social Protection	EAP	The Welfare Impact of Social Protection Policies in Fiji	Fiji	Oleksiy Ivaschenko
Social Protection	ECA	Simulation of the Cost and Outcomes: The Romania Minimum Social Insertion Income Safety Net Program	Romania	Emil Daniel Tesliuc
Social Protection	ECA	Improve the Effectiveness of Albania's Disability Benefits	Albania	Aylin Isik-Dikmelik
Social Protection	LCR	Assessing the Impact of the CCT Graduation Strategy	Ecuador	Nelson Gutierrez
Labor Markets	ECA	The Syrian Refugee Crisis: Understanding The Distributional Impact of Refugee Influx on Turkish Host Communities	Turkey	Zeynep Durnev Darendeliler
Labor Markets	MNA	Youth Inclusion Study in Tunisia	Tunisia	Gloria La Cava
Labor Markets	SAR	Poverty and Social Impact Analysis of Heritage Reform in Bhutan	Bhutan	Stefania Abakerli
Education	ECA	Performance and School Attendance of Socio-Economically Disadvantaged Students	Moldova	Anna Olefir
Education	ECA	Measuring Impact of School Optimization Reform	Moldova	Andrea C. Guedes
Education	LCR	Reducing Dropouts Among The Poor	Mexico	Peter Anthony Holland
Education	LCR	Support for Improving Equity in Mexico Upper Secondary Education Reform	Mexico	Peter Anthony Holland

TF#	Linked to (Project Type)	Start date	Closing date
TF014703	Programmatic Approach	Apr-13	Jul-14
TF013082	Programmatic Approach	Aug-12	Nov-12
TF014445	Knowledge Management Product	Feb-13	Sep-15
TF018204	Technical Assistance (Non-lending)	Oct-14	Aug-15
TF016285	Technical Assistance (Non-lending)	Jan-14	Jun-15
TF018260	Knowledge Management Product	Oct-14	Jun-15
TF015508	Knowledge Management Product	Aug-13	Jun-15
TF014001	Economic and Sector Work	Jan-13	Dec-13
TF011938	Technical Assistance (Non-lending)	Mar-12	Oct-12
TF010959	Specific Investment Loan	Oct-11	Jun-13
TF099387	Specific Investment Loan	Mar-11	Dec-12
TF014335	Technical Assistance (Non-lending)	Dec-12	Aug-14
TF017528	Programmatic Approach	Jul-14	May-15
TF099364	Economic and Sector Work	Feb-11	Oct-13
TF012213	Technical Assistance (Non-lending)	Apr-12	Jun-14
TF018651	Investment Project Financing	Dec-14	Jul-15
TF010273	Specific Investment Loan	Jul-11	Jan-13
TF016808	Development Policy Financing	Mar-14	Apr-15
TF011538	Development Policy Financing	Jan-12	Sep-13

TABLE A.3: LIST OF PSIAs INCLUDED IN THIS PUBLICATION *continued*

Chapter	Region	Grant Name	Country	Grant Manager
Health	AFR	Analysis of Demand for Reproductive Health Services (Discrete Choice Experiment)	Senegal	Christophe Lemiere
Health	AFR	Pro-Poor Healthcare Supply Chains	Kenya	Gandham N.V. Ramana
Health	EAP	Barriers to Equity in Quality Health Care	Vietnam	Gabriel Demombynes
Health	ECA	Distributional Impact of Health Insurance Contributions and Copayments	Kosovo	Aneesa Arur
Water	AFR	Evaluate the Distributional Impact of Water Policy Reforms	Mozambique	Luiz Claudio Martins Tavares
Water	ECA	PSIA for Demand-Side Governance in Water Sector	Ukraine	Tamar Sulukhia
Water	LCR	Analysis Of The Existing Water And Sanitation Services Among Urban Poor And Indigenous Peoples In Oaxaca	Mexico	Charles Delfieux
Energy	EAP	Assessing Social Impacts of Price and Tariff Reforms in Vietnam: Building Capacity for Change (DPO)	Vietnam	Quang Hong Doan
Energy	ECA	Impact of District Heating Reform	Uzbekistan	Pekka Kalevi Salminen
Energy	ECA	Biomass-Based District Heating Poverty and Social Impacts	Belarus	Pekka Kalevi Salminen
Energy	MNA	PSIA of Morocco's Climate Policy	Morocco	Andrea Liverani
Energy	SAR	PSIA on Himachal Pradesh Green Growth DPL	India	Pyush Dogra
Transport	ECA	Impact Assessment of Improved Connectivity	Uzbekistan	Jacques Bure
Transport	SAR	Rural Road Development in India: Distribution of PMGSY Project Benefits Among Women, Youth, and Scheduled Caste and Tribes	India	Sangeeta Kumari
Transport	SAR	PSIA on the Freight Transport System Reform	Pakistan	Ernesto Sanchez-Triana
Agriculture	AFR	Socio-Economic Impact Model for Coastal Fisheries	Mozambique	Xavier F. P. Vincent
Agriculture	AFR	PSIA of Coffee Sector Reforms	Burundi	Mamadou Ndione
Agriculture	AFR	Poverty and Distributional Impacts of Cashew Policy Reforms	Guinea-Bissau	Marek Hanusch
Agriculture	AFR	Amelioration of Border Conditions Project in Eastern DRC	Congo, Democratic Republic of	Markus P. Goldstein
Agriculture	LCR	Prioritizing Rural Investments in Nicaragua	Nicaragua	Thomas Edward Haven

TF#	Linked to (Project Type)	Start date	Closing date
TF099434	Investment Project Financing	Apr-11	Jun-13
TF098406	Specific Investment Loan	Nov-10	Mar-12
TF018105	Programmatic Approach	Sep-14	Aug-15
TF013429	Technical Assistance (Non-lending)	Oct-12	Jan-14
TF011705	Investment Project Financing	Jan-12	Apr-13
TF011330	Economic and Sector Work	Dec-11	Aug-12
TF017023	Program-for-Results	Mar-14	Apr-15
TF099893	Technical Assistance (Non-lending)	Jul-11	Jun-12
TF016398	Investment Project Financing	Jan-14	Aug-14
TF012769	Technical Assistance (Non-lending)	Jul-12	Jun-13
TF099362	Economic and Sector Work	Dec-10	Jun-13
TF011782	Technical Assistance (Non-lending)	Feb-12	Aug-14
TF016440	Investment Project Financing	Jan-14	Jan-15
TF013249	Specific Investment Loan	Sep-12	Jun-15
TF011110	Knowledge Management Product	Nov-11	Dec-14
TF014768	Technical Assistance (Non-lending)	May-13	Jul-14
TF014303	Development Policy Financing	Feb-13	Aug-14
TF011785	Development Policy Financing	Feb-12	Jun-14
TF099586	Technical Assistance (Non-lending)	Apr-11	Oct-13
TF097479	Economic and Sector Work	Aug-10	Aug-12

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW

Grant Number	Region	Grant Name	Country	Grant Manager
TF098380	AFR	Poverty and Social Impact Analysis for Results Based Financing in Health in Burundi	Burundi	Andrew Sunil Rajkumar
TF098406	AFR	Pro-Poor Healthcare Supply Chains	Kenya	Gandham N.V. Ramana
TF098447	AFR	Experimental Phone Survey	South Sudan	Gabriel Demombynes
TF099453	AFR	PSIA of Artisanal and Small-Scale Mining (ASM) Policy	Ghana	Kristina Svensson
TF099434	AFR	Analysis of Demand for Reproductive Health Services (Discrete Choice Experiment)	Senegal	Christophe Lemiere
TF099586	AFR	Amelioration of Border Conditions Project in Eastern DRC	Congo, Democratic Republic of	Markus P. Goldstein
TF099681	AFR	Strategy for High Frequency, Independent PSIA for Tanzania's CAS	Tanzania and South Sudan	Johannes G. Hoogeveen
TF099831	AFR	Double-Shift Schedule Public Private Partnership Impact Evaluation	Uganda	Sukhdeep Brar
TF099758	AFR	Social Safety Nets in Lesotho and Swaziland	Africa	Emma S. Mistiaen
TF099490	AFR	Municipal and Civil ICT Capacity/ Capability on Vulnerable Climate Change-Affected Community	Mozambique	Paula Dias Pini
TF099914	AFR	Increasing Linkages for Pro-Poor Tourism	Cabo Verde	Andres F. Garcia
TF011784	AFR	PSIA on Corporate Income Tax Reforms	Niger	Robert Johann Utz
TF011417	AFR	Electricity Subsidy Reform	Sao Tome and Principe	Marco Antonio Hernandez Ore
TF011595	AFR	Assessment of the Political Economy of Food and Fuel Subsidies Reform	Cameroon	Ruslan G. Yemtsov
TF011705	AFR	Evaluate the Distributional Impact of Water Policy Reforms	Mozambique	Luiz Claudio Martins Tavares
TF011750	AFR	Estimating the Impact of Price Shocks on Africa's Economies	Africa	Delfin Sia Go
TF011635	AFR	SAM for the South African township of Dieplsoot	South Africa	Sandeep Mahajan
TF011785	AFR	Poverty and Distributional Impacts of Cashew Policy Reforms	Guinea-Bissau	Marek Hanusch
TF012083	AFR	Impact of Subsidy Reform and Social Protection Alternatives for the Poor	Sudan	Monica Yanez Pagans
TF012489	AFR	Presumptive Tax Reform	Tanzania	Yutaka Yoshino
TF013394	AFR	Support to Disadvantaged Children	Malawi	Muna Salih Meky
TF013983	AFR	Mainstreaming PSIA for Policy-making	Ghana	Vasco Molini
TF014128	AFR	Evaluating and Enhancing Local Benefits from Large Agricultural Investment	Ghana	Klaus W. Deininger

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Nov-10	Sep-12	Human Development	Specific Investment Loan	Reviewed	
Nov-10	Mar-12	Human Development	Specific Investment Loan	Reviewed	Shortlisted
Dec-10	Jun-11	Economic Mgmt	Economic and Sector Work	Reviewed	
Apr-11	May-13	Environment and Natl Resources Mgmt	Technical Assistance Loan	Reviewed	
Apr-11	Jun-13	Human Development	Investment Project Financing	Reviewed	Shortlisted
Apr-11	Oct-13	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	Shortlisted
May-11	Apr-12	Economic Mgmt	Knowledge Management Product	Reviewed	
May-11	Mar-12	Human Development	Adaptable Program Loan		
Jun-11	Sep-12	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	
Jun-11	Sep-12	Environment and Natl Resources Mgmt	Specific Investment Loan	Reviewed	Shortlisted
Aug-11	Sep-12	Financial and Pvt Sector Dev	Economic and Sector Work	Reviewed	Shortlisted
Nov-11	Jun-14	Public sector gov	Economic and Sector Work		
Dec-11	Dec-12	Environment and Natl Resources Mgmt	Development Policy Financing	Reviewed	
Jan-12	Jun-12	Human Development	Knowledge Management Product	Reviewed	Shortlisted
Jan-12	Apr-13	Environment and Natl Resources Mgmt	Investment Project Financing	Reviewed	Shortlisted
Jan-12	Sep-12	Economic Mgmt	Global Monitoring		
Feb-12	Aug-12	Urban Development	Economic and Sector Work		
Feb-12	Jun-14	Economic Mgmt	Development Policy Financing	Reviewed	Shortlisted
Apr-12	Dec-12	Human Development	Technical Assistance (Non-lending)		
May-12	Dec-14	Economic Mgmt	Development Policy Financing		
Aug-12	Nov-14	Human Development	Specific Investment Loan		
Jan-13	Aug-15	Public Sector Gov	Economic and Sector Work		
Jan-13	Jun-14	Rural Development	Research Services		

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF014384	AFR	West Africa Regional Road Transport DPO	Africa	Volker Treichel
TF014303	AFR	PSIA of Coffee Sector Reforms	Burundi	Mamadou Ndione
TF014436	AFR	Project Vulnerability and Resilience in the Sahel	Africa	Andrew L. Dabalen
TF014418	AFR	Improving the Effectiveness of Social Safety Nets	Lesotho	Lucilla Maria Bruni
TF014617	AFR	Impact Analysis of Mobile Banking Reform	Botswana	Paula F. Lytle
TF014721	AFR	Technical Assistance to Enhance Poverty-Orientation and Local Governance of the Locality Development Fund, River Nile State	Sudan	Mosllem Ahmed Alamir
TF014768	AFR	Socio-Economic Impact Model for Coastal Fisheries	Mozambique	Xavier F. P. Vincent
TF016359	AFR	Micro Simulation Tools to Assess Poverty and Distributional Impacts of Macro Shocks	Botswana and Namibia	Victor Sulla
TF017006	AFR	Spatial poverty, inequality and agricultural growth	Ethiopia	Ruth Hill
TF016554	AFR	Linking general subsidies reform and safety nets	Mauritania	Aline Coudouel
TF016285	AFR	Regional PSIA Tools and Training for Fuel Subsidies	Sierra Leone	Kristen Himelein
TF016649	AFR	Strengthening Health Financing Equity	Zimbabwe	Ronald Upenyu Mutasa
TF016972	AFR	Poverty and Distributive Impacts of Fiscal Reform.	Congo, Democratic Republic of	Franck M. Adoho
TF017100	AFR	Equity Health Care Reform	Burkina Faso	Haidara Ousmane Diadie
TF017936	AFR	Distributional Impact Analysis in Practice	Africa	David Evans
TF018026	AFR	Strengthening the capacity on multi-dimensional poverty analysis	Angola	Rafael Chelles Barroso
TF018204	AFR	Food and fuel subsidies reform and its implications for households' welfare	Cameroon	Prospere R. Backiny-Yetna
TF018198	AFR	Extractives and community welfare	Mali	Johannes G. Hoogeveen
TF018273	AFR	Fuel and Electricity Subsidies Removal and Partial Retrenchment of Public Sector Employees	Ghana	Vasco Molini
TF018253	AFR	Agricultural Rehabilitation and Recovery Support	Congo, Democratic Republic of	Michael B. O'Sullivan
TF018287	AFR	Long-term Prospects for Economic Growth, Trade and Poverty Reduction in Africa	Africa	Maryla Maliszewska

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Feb-13	Apr-15	Public Sector Gov	Development Policy Financing	Reviewed	
Feb-13	Aug-14	Financial and Pvt Sector Dev	Development Policy Financing	Reviewed	Shortlisted
Mar-13	Dec-14	Social Dev and Protection	Economic and Sector Work	Reviewed	
Mar-13	Mar-15	Social Dev and Protection	Technical Assistance (Non-lending)		
Apr-13	Aug-15	Financial and Pvt Sector Dev	Knowledge Management Product		
Apr-13	Jun-14	Public Sector Gov	Economic and Sector Work		
May-13	Jul-14	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Dec-13	Aug-15	Economic Mgmt	Programmatic Approach	Reviewed	
Jan-14	Jun-15	Rural Development	Economic and Sector Work	Reviewed	
Jan-14	Aug-15	Social Dev and Protection	Investment Project Financing		
Jan-14	Jun-15	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Feb-14	Mar-15	Human Development	Programmatic Approach		
Mar-14	Aug-15	Public Sector Gov	Economic and Sector Work		
Apr-14	Jul-15	Human Development	Impact Evaluation		
Aug-14	Aug-15	Other / Not Applicable	Research Services		
Aug-14	Jun-15	Public Sector Gov	Economic and Sector Work		
Oct-14	Aug-15	Economic Mgmt	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Oct-14	Aug-15	Environment and Natl Resources Mgmt	Economic and Sector Work	Reviewed	
Oct-14	Aug-15	Economic Mgmt	Economic and Sector Work	Reviewed	
Oct-14	Aug-15	Rural Development	Impact Evaluation		
Oct-14	Aug-15	Trade and Integration	Global Monitoring	Reviewed	

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF018304	AFR	Distributional Dimensions of HIV/AIDS and Demographic Dynamics	Southern Africa	Lucilla Maria Bruni
TF098685	EAP	Tax Incidence Analysis	Thailand	Saiyed Shabih Ali Mohib
TF098821	EAP	Making Climate Change Policies Work for the Poor	Vietnam	Yasmeen Nasser Al Tabbaa
TF099292	EAP	Assessing Policy Options for the National Food Authority (NFA)	Philippines	Manohar Sharma
TF099291	EAP	Housing Policies, Urban Planning, and Social Integration	China	Meskerem Brhane
TF010497	EAP	Improving Accessibility to Jobs and Services for the Urban Poor in a Metropolitan Area	China	Ke Fang
TF099893	EAP	Assessing Social Impacts of Price and Tariff Reforms in Vietnam: Building Capacity for Change (DPO)	Vietnam	Quang Hong Doan
TF010496	EAP	Pilot CDD Impact Assessment	China	Ulrich K. H. M. Schmitt
TF010617	EAP	Ethnic Minority Poverty Reduction in Vietnam's Central Region	Vietnam	Son Thanh Vo
TF011920	EAP	KALAHI-CIDSS Community Empowerment Activity Cycle (CEAC) Process Evaluation	Philippines	Sean Bradley
TF011919	EAP	Capacity-Building for Health Equity and Financial Protection Analysis and Use for Evidence-Based Decision Making for Universal Health Care	Philippines	Roberto Antonio F. Rosadia
TF012280	EAP	Identifying barriers to female rural migrant workers' access to services and social assistance	China	Patricia Maria Fernandes
TF011938	EAP	The Welfare Impact of Social Protection Policies in Fiji	Fiji	Oleksiy Ivaschenko
TF012274	EAP	Enhancing Rice Price Stabilization	Indonesia	Sjamsu Rahardja
TF013312	EAP	Poverty and Inequality Analysis	Mongolia	Carolina Diaz-Bonilla
TF013770	EAP	Qualitative and Quantitative Dimensions of Inequality in Vietnam	Vietnam	Reena Chandu Badiani-Magnusson
TF014001	EAP	Measuring Targeting Accuracy and Poverty Impact of the Social Protection Policies	Fiji	Oleksiy Ivaschenko
TF014268	EAP	Equity and Health Implications of Sin Tax Reform: Strengthening the Dialogue in EAP	East Asia and Pacific	Caryn Bredenkamp
TF014073	EAP	Access to Land by IP Groups: Using Ethnographic Methods to Inform Policy-makers	Philippines	Patricia Maria Fernandes

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Oct-14	Aug-15	Human Development	Economic and Sector Work		
Jan-11	Oct-11	Economic Mgmt	Technical Assistance (Non-lending)	Reviewed	
Jan-11	Jun-12	Environment and Natl Resources Mgmt	Economic and Sector Work	Reviewed	
Feb-11	Aug-12	Economic Mgmt	Impact Evaluation		
Feb-11	Jun-13	Urban Development	Technical Assistance (Non-lending)		
Jun-11	Nov-12	Urban Development	Economic and Sector Work	Reviewed	
Jul-11	Jun-12	Economic Mgmt	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Sep-11	Dec-12	Rural Development	Specific Investment Loan	Reviewed	
Sep-11	Aug-12	Social Dev and Protection	Economic and Sector Work	Reviewed	Shortlisted
Jan-12	Aug-12	Human Development	Investment Project Financing	Reviewed	
Feb-12	Jan-14	Human Development	Programmatic Approach		
Mar-12	Oct-14	Rural Development	Knowledge Management Product		
Mar-12	Oct-12	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Mar-12	Jun-14	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	
Sep-12	Jun-14	Public Sector Gov	Economic and Sector Work		
Nov-12	Dec-13	Public Sector Gov	Programmatic Approach		
Jan-13	Dec-13	Social Dev and Protection	Economic and Sector Work	Reviewed	Shortlisted
Feb-13	Mar-14	Human Development	Technical Assistance (Non-lending)		
Feb-13	Nov-14	Rural Development	Investment Project Financing		

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF018101	EAP	Euqiity and Governance in Farmers' Cooperatives	China	Jun Zhao
TF018103	EAP	National Electrification Plan	Myanmar	Dejan R. Ostojic
TF018271	EAP	Strengthening China's cash transfer Program (Dibao)	China	Dewen Wang
TF018099	EAP	Identifying groups and determinants of severe and persistent poverty	East Asia and Pacific	Andrew Beath
TF018098	EAP	Effectiveness of social protection programs	Mongolia	Obert Pimhidzai
TF018102	EAP	Social Pension Scheme	Papua New Guinea	Oleksiy Ivaschenko
TF018100	EAP	Effects of health insurance expansion to the near-poor	Philippines	Caryn Bredenkamp
TF018105	EAP	Barriers to Equity in Quality Health Care	Vietnam	Gabriel Demombynes
TF018104	EAP	The impact of the 'ho khau' household registration system on migrants	Vietnam	Linh Hoang Vu
TF018282	EAP	Climate Change and Poverty Analysis	Vietnam	Christophe Crepin
TF018312	EAP	Targeting poverty and inequality	Thailand	Reena Chandu Badiani-Magnusson
TF099026	ECA	Efficiency and Equity in Fiscal Adjustment	EU Accession Countries	Emily Sinnott
TF099181	ECA	Poverty Alleviation Issues Associated with Poland's Energy Efficiency Program	Poland	Claudia Ines Vasquez Suarez
TF099098	ECA	PSIA for Railway Sector	Bulgaria	Mohammed Dalil Essakali
TF099387	ECA	Improve the Effectiveness of Albania's Disability Benefits	Albania	Aylin Isik-Dikmelik
TF099671	ECA	The Impact of Energy Reforms on the Poor	Europe and Central Asia	Uwe Deichmann
TF010273	ECA	Measuring Impact of School Optimization Reform	Moldova	Andrea C. Guedes
TF010348	ECA	Health Sector Poverty and Social Impact Analysis	Tajikistan	Wezi Marianne Msisha
TF010784	ECA	PSIA of Public Works Program	Latvia	Emily Sinnott
TF010959	ECA	Simulation of the Cost and Outcomes: The Romania Minimum Social Insertion Income Safety Net Program	Romania	Emil Daniel Tesliuc
TF010891	ECA	Informing Policy Development on Roma Inclusion	Bulgaria	Roberta V. Gatti
TF011210	ECA	PSIA for Kakheti Regional Development	Georgia	Joanna Peace De Berry

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Sep-14	Aug-15	Rural Development	Technical Assistance (Non-lending)		
Sep-14	Aug-15	Environment and Natl Resources Mgmt	Investment Project Financing	Reviewed	
Sep-14	Sep-15	Public Sector Gov	Economic and Sector Work		
Sep-14	Oct-15	Public Sector Gov	Economic and Sector Work		
Sep-14	Sep-15	Public Sector Gov	Technical Assistance (Non-lending)	Reviewed	
Sep-14	Aug-15	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	
Sep-14	Sep-15	Human Development	Technical Assistance (Non-lending)		
Sep-14	Aug-15	Human Development	Programmatic Approach	Reviewed	Shortlisted
Sep-14	Aug-15	Public Sector Gov	Programmatic Approach	Reviewed	
Oct-14	Feb-16	Environment and Natl Resources Mgmt	Economic and Sector Work		
Oct-14	Sep-15	Public Sector Gov	Programmatic Approach		
Jan-11	Jun-11	Economic Mgmt	Economic and Sector Work		
Feb-11	Dec-11	Environment and Natl Resources Mgmt	Development Policy Financing	Reviewed	
Feb-11	Mar-12	Public sector Gov	Development Policy Financing		
Mar-11	Dec-12	Social Dev and Protection	Specific Investment Loan	Reviewed	Shortlisted
Apr-11	Nov-13	Human Development	Economic and Sector Work		
Jul-11	Jan-13	Human Development	Specific Investment Loan	Reviewed	Shortlisted
Aug-11	Sep-12	Human Development	Investment Project Financing	Reviewed	
Sep-11	Aug-12	Social Dev and Protection	Development Policy Financing	Reviewed	
Oct-11	Jun-13	Social Dev and Protection	Specific Investment Loan	Reviewed	Shortlisted
Oct-11	Oct-12	Social Dev and Protection	Technical Assistance (Non-lending)		
Nov-11	Jun-12	Rural Development	Learning and Innovation Loan	Reviewed	

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF011666	ECA	Making Work Pay: The Impact of Tax and Social Benefit Design on Labor Market Outcomes	Macedonia, former Yugoslav Republic of	Indhira Vanessa Santos
TF011296	ECA	PSIA on Policy Options for an Inclusive Sports Sector	Russian Federation	Sarah G. Michael
TF011330	ECA	PSIA for Demand-Side Governance in Water Sector	Ukraine	Tamar Sulukhia
TF012336	ECA	Designing Affordable Energy Efficiency Solutions in Poland's Residential Buildings	Poland	Claudia Ines Vasquez Suarez
TF012769	ECA	Biomass-Based District Heating Poverty and Social Impacts	Belarus	Pekka Kalevi Salminen
TF012707	ECA	Distributional Impact of Benefits Package and Financing Reforms	Macedonia, former Yugoslav Republic of	Indhira Vanessa Santos
TF012883	ECA	PSIA on Fiscal Reforms in the Education Sector DPL	Serbia	Caterina Ruggeri Laderchi
TF013077	ECA	Social Protection Policies and Programs in ECA -- Distributional Impact of Crisis Response	Europe and Central Asia	Ramya Sundaram
TF013324	ECA	Distributional Impact of Policies to Enhance Competitiveness	Macedonia, former Yugoslav Republic of	Kenneth Simler
TF013236	ECA	Employability in FYR Macedonia: Constraints and Policy Options	Macedonia, former Yugoslav Republic of	Indhira Vanessa Santos
TF013429	ECA	Distributional Impact of Health Insurance Contributions and Copayments	Kosovo	Aneesa Arur
TF013779	ECA	Inclusive Activation in Bulgaria	Bulgaria	Ulrich Hoerning
TF013852	ECA	PSIA of the National Transport Improvement Project	Russian Federation	Jung Eun Oh
TF014077	ECA	Economic and Health Impacts of Harmonization of Tobacco Excise in the Customs Union	Russian Federation	Antonino Giuffrida
TF014051	ECA	PSIA of Growth, Competitivness and Savings Policies DPL	Turkey	Marina Wes
TF015464	ECA	Addressing the Challenges to Energy Affordability in ECA: Country Experiences and Opportunities for Learning	Europe and Central Asia	Michelle P. Rebosio Calderon
TF016162	ECA	Expanding Participatory Forestry Management (PFM)	Kazakhstan	Angela G. Armstrong
TF015972	ECA	Heat Tariff Reform and Social Impact Mitigation	Belarus	Fan Zhang
TF016146	ECA	Impact of Rural Land Registration Program 2014-2023 to Vulnerable Population	Romania	Mika-Petteri Torhonen
TF016051	ECA	Assessing the Socio-Economic Impacts of TVET Institutions Network Reorganisation	Russian Federation	Kirill Vasiliev
TF016212	ECA	Governance in Education	Tajikistan	Abla Safir

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Nov-11	Mar-14	Economic Mgmt	Technical Assistance (Non-lending)		
Dec-11	Dec-12	Social Dev and Protection	Specific Investment Loan	Reviewed	Shortlisted
Dec-11	Aug-12	Urban Development	Economic and Sector Work	Reviewed	Shortlisted
Apr-12	Oct-13	Environment and Natl Resources Mgmt	Development Policy Financing		
Jul-12	Jun-13	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Jul-12	Dec-13	Human Development	Technical Assistance (Non-lending)	Reviewed	
Aug-12	Nov-13	Public Sector Gov	Technical Assistance (Non-lending)	Reviewed	
Sep-12	Jun-14	Social Dev and Protection	Knowledge Management Product		
Sep-12	Mar-14	Public Sector Gov	Technical Assistance (Non-lending)	Reviewed	
Oct-12	Dec-13	Economic Mgmt	Technical Assistance (Non-lending)	Reviewed	
Oct-12	Jan-14	Human Development	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Dec-12	Aug-15	Human Development	Technical Assistance (Non-lending)		
Dec-12	Dec-13	Urban Development	Investment Project Financing	Reviewed	
Jan-13	Jun-14	Human Development	Technical Assistance (Non-lending)		
Jan-13	Jun-13	Trade and Integration	Development Policy Financing	Reviewed	
Aug-13	Jun-14	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)		
Nov-13	Aug-15	Environment and Natl Resources Mgmt	Specific Investment Loan		
Nov-13	Jul-14	Environment and Natl Resources Mgmt	Economic and Sector Work		
Nov-13	Oct-15	Rural Development	Technical Assistance (Non-lending)	Reviewed	
Dec-13	Sep-15	Human Development	Investment Project Financing		
Dec-13	Aug-15	Human Development	Technical Assistance (Non-lending)	Reviewed	

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF016092	ECA	Judicial Services and Smart Infrastructure Project -- Pilot PSIA	Azerbaijan	Amitabha Mukherjee
TF016398	ECA	Impact of District Heating Reform	Uzbekistan	Pekka Kalevi Salminen
TF016440	ECA	Impact Assessment of Improved Connectivity	Uzbekistan	Jacques Bure
TF016597	ECA	Electricity and Heating PSIA	Kyrgyz Republic	Sarosh Sattar
TF016596	ECA	Governance and Corruption PSIA	Kyrgyz Republic	Sarosh Sattar
TF017320	ECA	Railways Reform	Croatia	Jean-Francois Marteau
TF017424	ECA	Justice Sector PSIA	Kazakhstan	Amitabha Mukherjee
TF017482	ECA	Asan Public Service Delivery Model - Enhancing The Focus on Vulnerable Groups	Azerbaijan	Amitabha Mukherjee
TF017438	ECA	Targeting of Social Assistance	Armenia	Matteo Morgandi
TF017463	ECA	Improved Connectivity Along Newly Rehabilitated/Upgraded Roads	Macedonia, former Yugoslav Republic of	Liljana Sekerinska
TF017530	ECA	The Mechanization of Cotton Harvest	Uzbekistan	Robertus Antonius Swinkels
TF017529	ECA	Road Safety and Poverty	Albania	Artan Guxho
TF017528	ECA	The Syrian Refugee Crisis: Understanding The Distributional Impact of Refugee Influx on Turkish Host Communities	Turkey	Zeynep Durnev Darendeliler
TF017696	ECA	Impact of Accelerated Land Registration to Informal Urban Dwellers	Romania	Pedro L. Rodriguez
TF018214	ECA	Informing Decisions on Jobs and Schooling	Moldova	Abla Safir
TF018651	ECA	Performance and School Attendance of Socio-Economically Disadvantaged Students	Moldova	Anna Olefir
TF018610	ECA	Social Inclusion and Activation Reforms	Poland	Daniel P. Owen
TF018737	ECA	Targeted Social Assistance Program	Georgia	Josefina Posadas
TF018760	ECA	Water Supply and Sanitations Services	Tajikistan	Robertus Antonius Swinkels
TF018738	ECA	National School Optimization Program	Belarus	Irina Oleinik
TF018763	ECA	Review of Policies for Internally Displaced Persons	Georgia	Michelle P. Rebosio Calderon

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Dec-13	Oct-15	Public Sector Gov	Specific Investment Loan		
Jan-14	Aug-14	Environment and Natl Resources Mgmt	Investment Project Financing	Reviewed	Shortlisted
Jan-14	Aug-15	Trade and Integration	Investment Project Financing	Reviewed	Shortlisted
Jan-14	Sep-15	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)	Reviewed	
Jan-14	Oct-15	Public Sector Gov	Technical Assistance (Non-lending)		
May-14	Aug-15	Trade and Integration	Investment Project Financing	Reviewed	
May-14	Oct-15	Public Sector Gov	Investment Project Financing		
May-14	Oct-15	Public Sector Gov	Investment Project Financing		
May-14	Aug-15	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	
Jun-14	May-15	Trade and Integration	Investment Project Financing	Reviewed	
Jun-14	Aug-15	Rural Development	Knowledge Management Product		
Jun-14	May-15	Trade and Integration	Investment Project Financing	Reviewed	
Jul-14	Aug-15	Social Dev and Protection	Programmatic Approach	Reviewed	Shortlisted
Jul-14	Aug-15	Urban Development	Development Policy Financing	Reviewed	
Oct-14	Aug-15	Human Development	Technical Assistance (Non-lending)		
Dec-14	Jul-15	Human Development	Investment Project Financing	Reviewed	Shortlisted
Dec-14	Sep-15	Social Dev and Protection	Technical Assistance (Non-lending)		
Dec-14	Oct-15	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	
Dec-14	Aug-15	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)		
Dec-14	Jul-15	Human Development	Technical Assistance (Non-lending)	Reviewed	
Dec-14	Aug-15	Social Dev and Protection	Technical Assistance (Non-lending)		

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF018939	ECA	Distributional Implications of Irrigation Water Subsidies in Armenia	Caucasus	Nistha Sinha
TF018885	ECA	Assessing the poverty and social impact of mechanization of cotton harvest on farmers and farm workers	Uzbekistan	Robertus Antonius Swinkels
TF019305	ECA	Social Impact of the Deregulation of Professions in Poland	Poland	Roberta V. Gatti
TF019172	ECA	Poverty and Social Impact Assessment for Transport Operations in Uzbekistan	Uzbekistan	Mustapha Benmaamar
TF019019	LAC	Distributive effects of transport infrastructure in Colombia	Colombia	Carlos Rodriguez Castelan
TF019297	LAC	LFP participation decisions, human capital accumulation and minimum wages in Mexico	Mexico	Wendy Cunningham
TF0A0555	LAC	CL Social Inclusion for Shared Prosperity PSIA	Chile	Carlos Rodriguez Castelan
TF097240	LCR	Labor Markets: Reforming the Cajas de Compensación Familiar (CCFs)	Colombia	Theresa Jones
TF097239	LCR	Assessing the Distributional Impacts of Peru's Social Programs Decentralization	Peru	Alessandra Marini
TF098011	LCR	PSIA on Overhaul of Social Transfers	Dominican Republic	Aline Coudouel
TF097479	LCR	Prioritizing Rural Investments in Nicaragua	Nicaragua	Thomas Edward Haven
TF097760	LCR	Building Resilience of the Poor to Disaster and Climate Risk	Mexico	Rodrigo Serrano-Berthet
TF097880	LCR	Distributive Analysis of the 2009 Fiscal Reform in Mexico	Mexico	Samuel Freije-Rodriguez
TF097988	LCR	Distributional Effects of Fiscal Reforms in Jamaica	Jamaica	Sona Varma
TF098305	LCR	National Job Formation System	Colombia	Aline Coudouel
TF099891	LCR	Sustainable Housing Solutions for the Urban Poor Residing in Rio de Janeiro	Brazil	Alessandra Campanaro
TF011538	LCR	Support for Improving Equity in Mexico Upper Secondary Education Reform	Mexico	Peter Anthony Holland
TF012231	LCR	Reforming the National Targeting Policy for Mexico's Social Programs	Mexico	Francesca Lamanna
TF012317	LCR	Long-Term Impacts of Colombia's CCT "Familias en Acción"	Colombia	Aline Coudouel
TF012247	LCR	Beyond Pensions: Providing Income Security to the Elderly in LAC	Latin America	Rafael P. Rofman
TF012504	LCR	Domestice Violence - Implementation of the Maria da Penha Law	Brazil	Elizaveta Perova
TF012498	LCR	The Distributional Effects of Drug Related Crime and Violence across Municipalities in Mexico	Mexico	Katherine M. Scott

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Dec-14	Sep-15	Rural development	Technical Assistance (Non-lending)		
Jan-15	Aug-15	Rural development	Knowledge Management Product		
Feb-15	Jun-15	Human development	Technical Assistance (Non-lending)		
Feb-15	Aug-15	Trade and integration	Investment Project Financing	Reviewed	
Feb-15	Aug-15	Trade and integration	Programmatic Approach		
Mar-15	Jun-15	Human development	Technical Assistance (Non-lending)		
Jun-15	Aug-15	Social Dev and Protection	Development Policy Financing		
May-10	Dec-10	Human Development	Technical Assistance (Non-lending)		
Jul-10	Aug-12	Human Development	Development Policy Financing	Reviewed	
Aug-10	Dec-12	Human Development	Technical Assistance (Non-lending)	Reviewed	
Aug-10	Aug-12	Rural Development	Economic and Sector Work	Reviewed	Shortlisted
Sep-10	Jun-11	Social Dev and Protection	Development Policy Financing		
Oct-10	Sep-11	Economic Mgmt	Technical Assistance (Non-lending)	Reviewed	
Oct-10	Dec-12	Economic Mgmt	Development Policy Financing	Reviewed	
Nov-10	Apr-13	Economic Mgmt	Technical Assistance (Non-lending)		
Apr-11	Sep-13	Urban Development	Development Policy Financing	Reviewed	
Jan-12	Sep-13	Human Development	Development Policy Financing	Reviewed	Shortlisted
Mar-12	Aug-14	Social Dev and Protection	Technical Assistance (Non-lending)		
Apr-12	Aug-14	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	
Apr-12	Jun-14	Social Dev and Protection	Economic and Sector Work	Reviewed	
May-12	Dec-12	Social Dev and Protection	Economic and Sector Work	Reviewed	
May-12	Jun-14	Human Development	Programmatic Approach		

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF013082	LCR	Manual of MEXTAX, Micro-Simulation Program	Mexico	Samuel Freije-Rodriguez
TF014335	LCR	Assessing the Impact of the CCT Graduation Strategy	Ecuador	Nelson Gutierrez
TF014165	LCR	Using Available Quantitative Data to Support Urban Transport Subsidy Reform	Argentina	Shomik Raj Mehndiratta
TF014493	LCR	Analyzing the Equity and Pro-Poor Impacts of a Pioneering Pay-for-Performance Health Program	Argentina	Andrew Sunil Rajkumar
TF014589	LCR	Impact Evaluation for the Tocantins Sustainable Regional Development Project	Brazil	Satoshi Ogita
TF014662	LCR	Pernambuco Equity and Inclusive Growth	Brazil	Magnus Lindelow
TF014703	LCR	Distributive Impact of Colombia's 2012 Tax Reform	Colombia	Carlos Rodriguez Castelan
TF014660	LCR	PSIA on Social Inclusion in Peru	Peru	Maria Eugenia Genoni
TF014621	LCR	Social Inclusion and Mining in Peru	Peru	German Nicolas Freire
TF014989	LCR	Assessing the Impact of Fiscal Policies and External Shocks in Paraguay	Paraguay	Maria Ana Lugo
TF015000	LCR	Assessing the Performance and Sustainability of "Pacto Pela Vida" Citizen Security Plan in Pernambuco	Brazil	Juan Carlos Parra Osorio
TF016280	LCR	Improving the Distributional Impact of Social Policies	Dominican Republic	Miriam Matilde Montenegro Lazo
TF016796	LCR	Minimum Wage And Social Assistance Policy	Ecuador	Pablo Facundo Cuevas
TF016808	LCR	Reducing Dropouts Among The Poor	Mexico	Peter Anthony Holland
TF016809	LCR	Fiscal Policy In The Mexican Strategy To Prevent And Control Obesity, Overweight And Diabetes	Mexico	Maria Eugenia Bonilla-Chacin
TF017023	LCR	Analysis Of The Existing Water And Sanitation Services Among Urban Poor And Indigenous Peoples In Oaxaca	Mexico	Charles Delfieux
TF017059	LCR	Public Transport Tariff Changes In Bogotá	Colombia	Camila Adriana Rodriguez Hernandez
TF017129	LCR	The Geography And Evolution Of Poverty In Bolivia: Poverty And Expenditure Maps	Bolivia	Maria Ana Lugo
TF016991	LCR	Assessing Federal & State Programs For Rural Productive Inclusion In Northeast Brazil	Brazil	Maria de Fatima de Sousa Amazonas
TF017321	LCR	Capacity Building On Tools For Distributional Analysis	Paraguay	Maria Ana Lugo

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Aug-12	Nov-12	Human Development	Programmatic Approach	Reviewed	Shortlisted
Dec-12	Aug-14	Social Dev and Protection	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Jan-13	Feb-14	Urban Development	Adaptable Program Loan		
Mar-13	Dec-14	Human Development	Specific Investment Loan	Reviewed	
Apr-13	Jun-15	Rural Development	Specific Investment Loan	Reviewed	
Apr-13	Dec-14	Public sector gov	Development Policy Financing	Reviewed	
Apr-13	Jul-14	Economic Mgmt	Programmatic Approach	Reviewed	Shortlisted
Apr-13	Jun-14	Social Dev and Protection	Programmatic Approach	Reviewed	
May-13	May-15	Social Dev and Protection	Economic and Sector Work		
May-13	Apr-14	Economic Mgmt	Economic and Sector Work	Reviewed	
Jun-13	Nov-15	Social Dev and Protection	Economic and Sector Work		
Jan-14	Dec-14	Social Dev and Protection	Specific Investment Loan		
Feb-14	Aug-15	Human Development	Economic and Sector Work		
Mar-14	Jun-15	Human Development	Development Policy Financing	Reviewed	Shortlisted
Mar-14	Jun-15	Human Development	Technical Assistance (Non-lending)		
Mar-14	Jul-15	Environment and Natl Resources Mgmt	Program-for-Results	Reviewed	Shortlisted
Apr-14	May-15	Urban Development	Technical Assistance (Non-lending)		
Apr-14	Aug-15	Public sector gov	Technical Assistance (Non-lending)	Reviewed	
Apr-14	May-15	Rural Development	Investment Project Financing		
May-14	Jun-15	Public sector gov	Programmatic Approach	Reviewed	Shortlisted

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF017507	LCR	Analyzing The Role Of Credit Constraints In Tertiary Education Attainments	Colombia	Javier Botero Alvarez
TF018128	LCR	Public Health Spending: Towards An Evidence-Based Approach That Reaches The Poor	Haiti	Eleonora Del Valle Cavagnero
TF018316	LCR	Evaluation Of Non-Contributory Pensions	Panama	Edmundo Murrugarra
TF018621	LCR	Humantrafficking And Labor Explotation In The Southern Border Of Mexico	Mexico	Katherine M. Scott
TF099362	MNA	PSIA of Morocco's Climate Policy	Morocco	Andrea Liverani
TF099364	MNA	Youth Inclusion Study in Tunisia	Tunisia	Gloria La Cava
TF099363	MNA	PSIA of Jordan's Employment Policy	Jordan	Nandini Krishnan
TF011520	MNA	Political Economy Analysis of the Irrigation Sector Reform	Morocco	Julian A. Lampietti
TF011701	MNA	Egypt Labor Market Panel Survey 2012: Data for Informed Policy Making	Egypt, Arab Republic of	Tara Vishwanath
TF013161	MNA	Egypt Energy and Pricing Subsidy	Egypt, Arab Republic of	Husam Mohamed Beides
TF015508	MNA	Regional Subsidies in MNA	Middle East and North Africa	Paolo Verme
TF015509	MNA	Distributional Impact of Fiscal Consolidation Measures in Jordan	Jordan	Umar Serajuddin
TF016275	MNA	Strengthening Safety Nets in Djibouti	Djibouti	Stefanie Koettl - Brodmann
TF018302	MNA	Assessing The Impact Of The Syrian Refugee Crisis	Middle East and North Africa	Tara Vishwanath
TF018427	MNA	Electricity Distribution Reform And Investment Project (EDRIP)	Iraq	Simon J. Stolp
TF098163	PRMPR	Distribution Analysis of Fiscal Policies	World	Pedro Olinto
TF098560	PRMPR	Creation of High Frequency Poverty Data to Improve the Quality of PSIA Study	World	Nobuo Yoshida
TF011906	PRMPR	An Ex Ante Impact Evaluation of Decentralization Reforms in the Irrigation Sector in Pakistan	Pakistan	Ghazala Mansuri
TF014002	PRMPR	A New Way of Estimating the Poverty and Distributional Impacts of Infrastructure Using Market Accessibility Index	World	Nobuo Yoshida
TF014445	PRMPR	Distributional Impact of Fiscal Policy	World	Maria Gabriela Inchauste Comboni
TF018260	PRMPR	Prices and Welfare Study	Middle East and North Africa	Paolo Verme

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Jun-14	Jun-15	Human Development	Impact Evaluation		
Sep-14	Jun-15	Human Development	Economic and Sector Work		
Sep-14	Mar-15	Social Dev and Protection	Specific Investment Loan	Reviewed	
Nov-14	Apr-15	Social Dev and Protection	Programmatic Approach		
Dec-10	Jun-13	Environment and Natl Resources Mgmt	Economic and Sector Work	Reviewed	Shortlisted
Feb-11	Oct-13	Social Dev and Protection	Economic and Sector Work	Reviewed	Shortlisted
Feb-11	Dec-12	Financial and Pvt Sector Dev	Economic and Sector Work	Reviewed	
Dec-11	Dec-12	Rural Development	Development Policy Financing		
Jan-12	Jul-12	Financial and Pvt Sector Dev	Economic and Sector Work	Reviewed	
Jul-12	Sep-13	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)		
Aug-13	Nov-15	Environment and Natl Resources Mgmt	Knowledge Management Product	Reviewed	Shortlisted
Sep-13	Mar-15	Economic Mgmt	Programmatic Approach		
Nov-13	Dec-14	Social Dev and Protection	Technical Assistance (Non-lending)		
Oct-14	Nov-15	Social Dev and Protection	Economic and Sector Work		
Oct-14	Aug-15	Environment and Natl Resources Mgmt	Investment Project Financing	Reviewed	
Aug-10	Aug-14	Public Sector Gov	Knowledge Management Product		
Dec-10	Jun-12	Public Sector Gov	Knowledge Management Product		
Feb-12	Jun-14	Rural Development	Knowledge Management Product		
Jan-13	Sep-15	Public Sector Gov	Knowledge Management Product		
Feb-13	Jun-16	Public Sector Gov	Knowledge Management Product	Reviewed	Shortlisted
Oct-14	Jun-15	Other / Not Applicable	Knowledge Management Product	Reviewed	Shortlisted

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF098988	SAR	Improving Databases and Capacity for Poverty and Social Impact Analysis in Bangladesh	Bangladesh	Nobuo Yoshida
TF099356	SAR	Distributional Impact of Electricity Tariff Hikes in Bangladesh and Nepal	South Asia	Mohua Mukherjee
TF099748	SAR	Understanding Price Transmission in South Asia and Effectiveness of Price Stabilization Policies	South Asia	Elliot Wamboka Mghenyi
TF010002	SAR	Poverty and Employment in South Asia	South Asia	Reema Nayar
TF010283	SAR	PSIA of National Rural Employment Guarantee Act (NREGA) Program for Enabling Convergence	India	Suryanarayan Satish
TF011110	SAR	PSIA on the Freight Transport System Reform	Pakistan	Ernesto Sanchez-Triana
TF011782	SAR	PSIA on Himachal Pradesh Green Growth DPL	India	Pyush Dogra
TF011949	SAR	Delivering Public Services to the Bottom of the Pyramid (BOP) on the Mobile Phone in Bangladesh	Bangladesh	Tenzin Dolma Norbhu
TF011948	SAR	PSIA of Electricity Tariffs in India	India	Sheoli Pargal
TF011932	SAR	Improving Gender Equity in the Sri Lankan Labor Markets	Sri Lanka	Cem Mete
TF013076	SAR	PSIA for Afghanistan's Mining Sector	Afghanistan	Claudia Nassif
TF012213	SAR	Poverty and Social Impact Analysis of Heritage Reform in Bhutan	Bhutan	Stefania Abakerli
TF012757	SAR	PSIA of Targeting Reform of Electricity Subsidy and Health Insurance Schemes for Maldives	Maldives	Silvia Redaelli
TF013417	SAR	Poverty and Social Impacts of Climate Change in Coastal Areas of South Asia	South Asia	Anna C. O'Donnell
TF013249	SAR	Rural Road Development in India: Distribution of PMGSY Project Benefits Among Women, Youth, and Scheduled Caste and Tribes	India	Sangeeta Kumari
TF013572	SAR	Informing the Current Debate on Current Grain Procurement Policies for Better Food Security and Nutrition in Pakistan	Pakistan	Bekzod Shamsiev
TF015138	SAR	The Potential Impacts of Skills Development on Poverty in South Asia	South Asia	Cem Mete
TF015441	SAR	PSIA in Support of the Pakistan Country Partnership Strategy (CPS) Process	Pakistan	Amjad Zafar Khan
TF015442	SAR	Responding to PSIA Mainstreaming Challenges in South Asia: Using PSIA to Inform CPS Process and Policy Dialogue	Pakistan	Amjad Zafar Khan

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Feb-11	Jul-12	Economic Mgmt	Technical Assistance Loan		
Mar-11	Jun-12	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)	Reviewed	
May-11	Jun-13	Rural Development	Knowledge Management Product		
Jun-11	Jun-12	Economic Mgmt	Economic and Sector Work		
Jul-11	Apr-13	Rural Development	Specific Investment Loan		
Nov-11	Dec-14	Financial and Pvt Sector Dev	Knowledge Management Product	Reviewed	Shortlisted
Feb-12	Aug-14	Environment and Natl Resources Mgmt	Technical Assistance (Non-lending)	Reviewed	
Mar-12	Nov-12	Public Sector Gov	Specific Investment Loan		
Mar-12	Dec-12	Environment and Natl Resources Mgmt	Knowledge Management Product	Reviewed	
Mar-12	Jul-13	Social Dev and Protection	Economic and Sector Work		
Apr-12	Apr-14	Environment and Natl Resources Mgmt	Development Policy Financing	Reviewed	
Apr-12	Jun-14	Public Sector Gov	Technical Assistance (Non-lending)	Reviewed	Shortlisted
Jun-12	Jun-13	Social Dev and Protection	Technical Assistance (Non-lending)		
Aug-12	Jun-14	Environment and Natl Resources Mgmt	Knowledge Management Product		
Sep-12	Jun-15	Rural Development	Specific Investment Loan	Reviewed	Shortlisted
Oct-12	Jun-14	Rural Development	Technical Assistance (Non-lending)	Reviewed	
Jul-13	Aug-14	Human Development	Economic and Sector Work		
Aug-13	Nov-15	Public Sector Gov	Technical Assistance (Non-lending)		
Aug-13	Nov-15	Public Sector Gov	Technical Assistance (Non-lending)		

TABLE A.4: COMPLETE LIST OF PSIA MDTF GRANTS CONSIDERED FOR THE REVIEW *continued*

Grant Number	Region	Grant Name	Country	Grant Manager
TF018140	SAR	Implementation of the Heritage Sites Bill	Bhutan	Stefania B. Abakerli B
TF018215	SAR	Employment Programs in South Asia	South Asia	Jennifer Solotaroff
TF018646	SAR	Gender Assessment in the Maldives	Maldives	Janna El-Horr
TF019405	SAR	Bangladesh Labor	Bangladesh	Yoonyoung Cho
TF0A0288	SAR	Public Expenditure Tracking in Nepal – fertilizers and seed distribution programs	Nepal	Elliot Wamboka Mghenyi
TF0A0609	SAR	Gender implications for social safety nets in Afghanistan	Afghanistan	Matthew H. Morton

Start date	Closing Date	Theme	Linked to (Project Type)	Review	Shortlist
Sep-14	Aug-15	Public Sector Gov	Technical Assistance (Non-lending)		
Sep-14	Aug-15	Social Dev and Protection	Programmatic Approach		
Oct-14	Jun-15	Social Dev and Protection	Economic and Sector Work	Reviewed	
Apr-15	Nov-15	Human development	Technical Assistance (Non-lending)		
Apr-15	Aug-15	Public Sector Gov	Economic and Sector Work		
Jun-15	Aug-15	Social Dev and Protection	Impact Evaluation	Reviewed	