

# Creating Jobs in South Asia's Conflict Zones

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## Abstract

This paper describes the key challenges to job creation in conflict-affected environments in South Asia. It uses household survey data since the early 2000s for Afghanistan, India, Nepal, and Sri Lanka to document the characteristics of labor markets in conflict-affected areas, exploiting the spatial and time variation in armed conflict within countries. The analysis finds that, across countries, labor markets look very different in conflict-affected areas when compared with non-conflict or low-conflict areas. Employment rates are higher in large part because women participate more in the labor market, but work tends to be more vulnerable, with more self-

employment and unpaid family work. The authors show that these differences often pre-date the conflict but are also exacerbated by it. They also examine the constraints on the private sector activity in such areas, using firm surveys when possible. Finally, the paper reviews the existing literature and the policy experiences of several countries to draw some policy implications for job creation efforts in the conflict-affected areas of South Asia. It particularly highlights the role of the private sector and community initiatives, in conjunction with public policies, to improve the environment for successful job creation.

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# Creating Jobs in South Asia's Conflict Zones

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*“People want to work, not fight.”*

Nadir Ali, a male shopkeeper in a men’s discussion group in Kabul province, Afghanistan.  
Cited in World Bank (2010a)

## 1. INTRODUCTION

Armed conflict represents a major challenge to job creation. Conflict destroys communities, institutions, infrastructure and human capital. The affected population often experiences deterioration in the quantity and quality of jobs. More than 58,000 people worldwide died directly as a result of armed conflict in 2009; more than a third of them were in South Asia (IISS 2010). Most countries of South Asia have experienced internal conflict in the first decade of the new millennium.<sup>1</sup> Some of these conflicts have officially ended, but even in these cases sustainable peace is not guaranteed.

The creation of more and better jobs should be at the center of any recovery plan for conflict-afflicted areas, as the literature suggests that poor economic conditions and labor market prospects increase the likelihood of conflict. At the same time, a minimal level of security is essential to the economic recovery and to the success of policies and programs to encourage job creation. Jobs and sustainable peace can therefore positively reinforce each other, as long as programs and policies are inclusive and sensitive to the grievances that led to conflict in the first place. Household surveys and focus group discussions in conflict-affected areas in Afghanistan and Sri Lanka show that economic recovery and the restoration of livelihoods are people’s main priorities after the cessation of hostilities (World Bank 2010a). The fact that millions of new entrants will enter the South Asian labor force in the next two decades further increases pressure to create more and better jobs, especially in post-conflict environments and areas at risk of new or renewed violence.

This paper describes the key challenges to job creation in conflict-affected environments in South Asia and outlines what policymakers in the region can do to overcome them.<sup>2</sup> We highlight three key reasons why there can be shortfalls in private sector labor demand in conflict zones: a stability deficit resulting from pervasive lack of security of life and property, a governance deficit resulting in a poor regulatory framework and an infrastructure deficit. There are also constraints on the labor supply side: the lack of education and skills in conflict-affected areas and widespread population displacement pose significant problems to both public and private sector job creation. Firm-level surveys show that these factors are widely cited as major constraints on firm activity in South Asia as a whole, and significantly more so in conflict zones. It is important to note that all these factors are likely to pose greater challenges in cases of nationwide and/or ongoing conflict.

A major contribution of our paper is to document the characteristics of labor markets in conflict-affected areas, using household survey data and exploiting the spatial and time variation in conflict incidence within the countries of South Asia. We find that labor market participation is often higher in conflict-affected areas, particularly for women. However, the overall quality of jobs is lower in conflict zones: jobs are more likely to be in rural areas, in the agricultural sector, with a significantly higher share of workers engaged in unpaid family work. Education levels are also significantly lower in conflict-affected areas. While some of these characteristics might be factors which led to the conflict in the first place, it is still important to keep in mind these differences in characteristics when designing labor market policies for such areas. Further, our analysis shows that some of these factors are exacerbated by the experience of conflict.

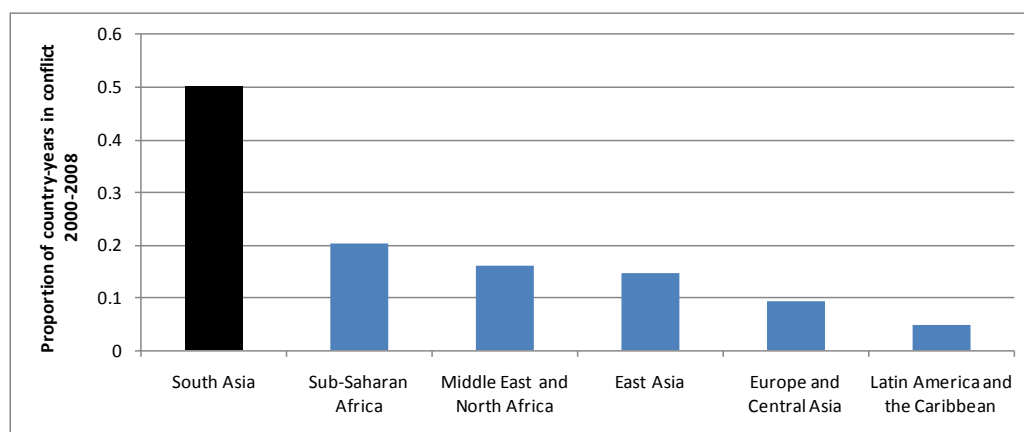
The second major contribution of our paper is to review the existing literature and the policy experiences of several different countries (both within and outside South Asia) to draw some policy implications for overcoming the key constraints to job creation in conflict-affected areas. In the initial stages, policy makers will likely have to play a role in directly creating jobs through disarmament, demobilization and rehabilitation (DDR) programs, or broader-based public works programs. However, policymakers should plan on a transition to make the private sector the major creator of jobs in the medium and longer term. This should be accompanied by transitions from agricultural and low-skilled jobs to non-agricultural and higher-skilled jobs. Several of our case studies highlight promising examples of private sector and community-based involvement at very early stages of the post-conflict recovery process.

The rest of the paper is structured as follows. Section 2 discusses the characteristics and intensity of armed conflict in South Asia, and Section 3 outlines the constraints to both labor demand and labor supply in conflict-affected areas. Section 4 documents the characteristics of labor markets in conflict affected areas, using household surveys from major South Asian countries. Section 5 focuses on strategies to address the key labor market constraints identified in Section 2: security, infrastructure, governance and education. Section 6 discusses the role of public policies in directly creating jobs and Section 7 concludes by summarizing some of the key transitions needed in conflict-affected areas if job creation is to be sustainable.

## 2. CHARACTERISTICS AND INTENSITY OF ARMED CONFLICT IN SOUTH ASIA

South Asia has experienced one of the highest levels of armed conflict in the world. On average, countries in the region experienced armed conflict for half of the years since 2000, as measured by the incidence of at least 25 battle-related deaths a year (Figure 1). This is the highest incidence of conflict in absolute terms and the second-highest proportion of deaths from armed conflict in the world. Among the top 10 countries in terms of direct deaths from armed conflict in 2008, four (Afghanistan, Pakistan, India, and Sri Lanka) were in South Asia (figure 2).<sup>3</sup>

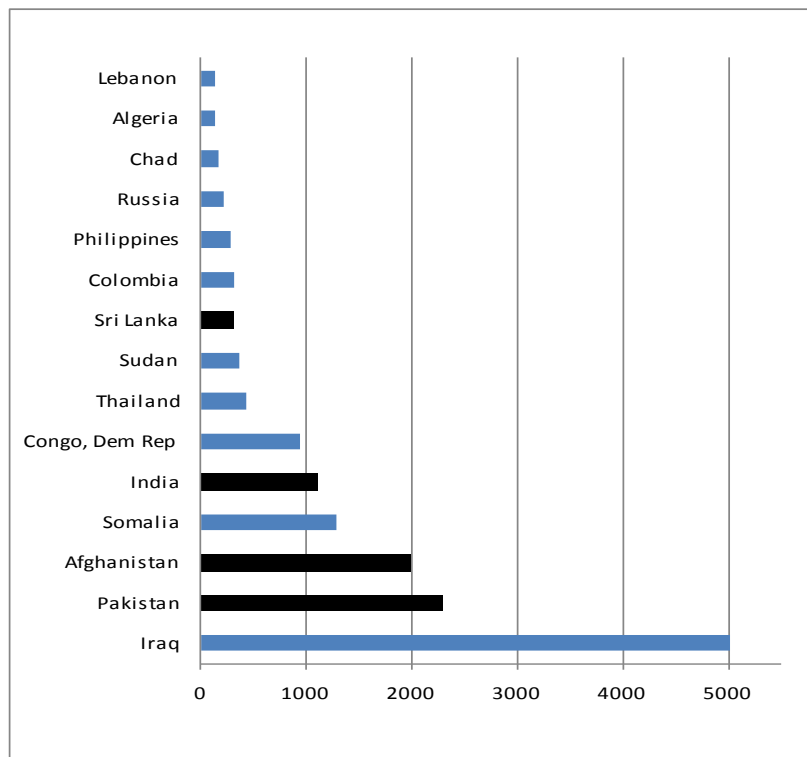
**Figure 1 Proportion of Country-Years in Armed Conflict, by Region, 2000–08**



Source: UCDP/PRIO Armed Conflict Dataset version 4-2009 (<http://www.prio.no/CSCW/Datasets/Armed-Conflict/UCDP-PRIO/Armed-Conflicts-Version-X-2009/>).

Note: Armed conflict refers to internal armed conflicts between the government of a state and one or more internal opposition groups that result in at least 25 battle-related deaths a year.

**Figure 2 Top 15 Countries in Number of Deaths from Armed Conflict, 2008**



*Source:* National Counterterrorism Center 2009, based on The Worldwide Incidents Tracking System (WITS) which contains details about incidents of violence against civilians and non-combatants from publicly available information.

This paper focuses on internal armed violence against the state i.e. violent incidents perpetrated by a relatively organized group of nonstate actors and directed against the apparatus of the state or with the intent of destabilizing the state. This definition of internal conflict is used in the Uppsala Conflict Data Program and Centre for the Study of Civil War at the International Peace Research Institute (PRIO-UCDP) conflict database. It is similar to the definition of *terrorism* adopted in most incident-level data sets dealing with internal conflict. The definition excludes interstate conflicts and violence between individuals.

The focus in this paper is on internal conflict against the state for two main reasons. First, internal armed conflict directed against the state arguably poses the greatest challenge to the ability of the state to implement policies and programs conducive to employment generation. Second, the majority of conflicts in the developing world, including South Asia, are internal conflicts. Since World War II, internal conflicts have resulted in three times as many deaths as interstate wars (Fearon and Laitin 2003).

The nature, duration, and intensity of internal armed conflicts vary across South Asian countries. Ongoing conflicts in the region include the conflicts in Afghanistan and Pakistan, the long-running insurgency movements in India's northeastern regions, and the escalating violent activities of left-leaning groups in the eastern and central parts of India. Table 1 provides information on the major internal armed conflicts in South Asia over the past decade (see Iyer 2009 for more in-depth discussion of the conflicts).

**Table 1 Major Internal Armed Conflicts in South Asia since 1978**

Country/region	Approximate start and end dates	Estimated number of fatalities (2000–09)	Outstanding number of internally displaced people
<i>Afghanistan</i>			
Nationwide	1978–	51,580	More than 235,000
<i>Bangladesh</i>			
Nationwide	2005–07	93	—
<i>India</i>			
Assam	1990–	3,838	257,000
Manipur	1982–2008	2,712	180,000
Nagaland	1992–2007	710	62,000
Tripura	1978–2006	1,708	—
Eastern and central states	1980–	5,290	60,000
<i>Nepal</i>			
Nationwide	1996–2006	13,592	60,000
<i>Pakistan</i>			
Baluchistan	2004–	1,294	80,000
North West Frontier Province (renamed Khyber Pakhtunkhwa in 2010) and the Federally Administered Tribal Areas	2002–	20,261	900,000
<i>Sri Lanka</i>			
Northern and Eastern Provinces	1980–2009	51,815	320,000

*Source:* Authors, based on start and end dates from the UCDP/PRIO Armed Conflict Dataset version 4-2009 (<http://www.prio.no/CSCW/Datasets/Armed-Conflict/UCDP-PRIO/Armed-Conflicts-Version-X-2009/>) and number of fatalities and displaced people from the Armed Conflict Database compiled by the International Institute for Strategic Studies, based on data from the Internal Displacement Monitoring Centre (<http://www.iiss.org/publications/armed-conflict-database/>).

The challenges posed by armed conflict vary significantly with the type of conflict. The focus here is on two dimensions of conflict of particular importance for job creation: the geographic scope and the stage of the internal conflict. Geographic scope refers to whether the conflict is nationwide or localized. The stage of the conflict refers to whether the conflict is ongoing or has ended. A conflict is classified as having ended if there has been a clear military victory or a peace agreement between the warring parties and the number of conflict-related deaths has significantly declined as a result.

The conflicts in South Asia over the period 2000–10 show considerable variation along both of these dimensions (Table 2). Armed conflicts in Afghanistan and Nepal were widespread in almost all parts of the country. In Afghanistan the conflict continues. In Nepal the conflict was formally brought to an end by a comprehensive peace agreement in 2006.

**Table 2 Armed Conflicts in South Asia, by Conflict Stage and Geographic Scope**

	Conflict stage		
		Ongoing	Postconflict
Geographic scope	Nationwide	Afghanistan (1.82)	Nepal (0.475)
	Localized	Pakistan (0.130) India (0.013)	Sri Lanka (2.57)

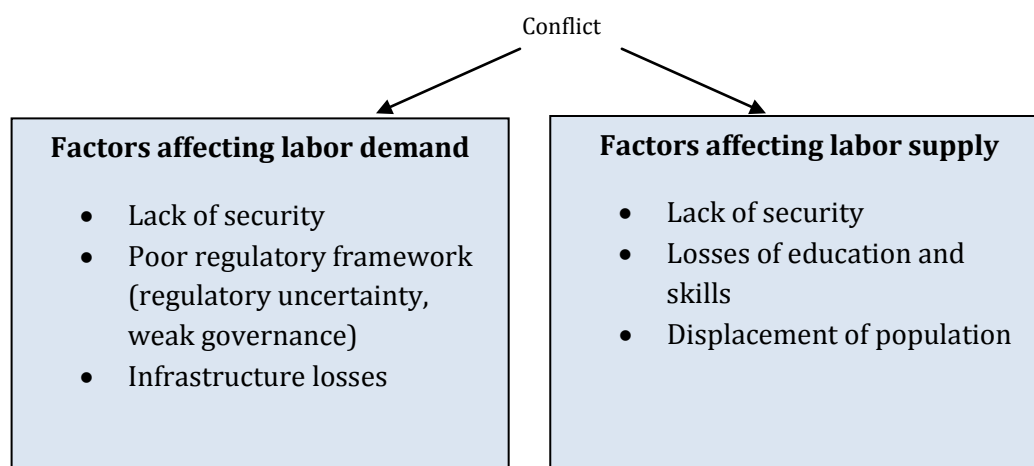
*Source:* Authors, based on data on casualties from the armed conflict database compiled by the International Institute for Strategic Studies (<http://www.iiss.org/publications/armed-conflict-database>); population data from World Development Indicators; and Afghanistan population estimate from the CIA Factbook.

*Note:* Figures in parentheses are estimates of casualties per 1,000 population over 2000–09. The classification of conflict stage is based on the status as of December 2010.

### 3. CONSTRAINTS TO JOB CREATION IN CONFLICT-AFFECTED AREAS

Armed conflict affects both the demand for and the supply of labor. Armed conflict affects the demand for labor, because firms and businesses are reluctant to invest in the face of significant threats to the security of life and property (Figure 3). Inadequate or confusing regulations and the poor quality of governance in affected areas also discourage private firms from investing. The presence of warring parties and fragile states adds to uncertainty regarding both what the regulations are and who is enforcing them. Infrastructure losses, unreliable access to key services such as electricity and transport, and the absence of functioning markets restrict the scale of firm activity. This often manifests itself in the form of significantly higher input prices: at the height of the armed conflict in northern Sri Lanka in 2007, for example, the price of a bag of cement was more than four times higher in Jaffna than in other parts of the country (World Bank 2010c).

**Figure 3 Effects of Conflict on Demand for and Supply of Labor**



*Source:* Authors.

Conflict also affects the capacity of the population to supply labor, as well as the quality and composition of the workforce. Security concerns in traveling to work can be a major constraint to labor supply. Disruptions to education and the loss of job-related skills and training reduce the quality of the workforce in conflict areas, with potentially long-term effects. Population displacement and migration, as well as the challenges posed by the reintegration of returnees after



the end of conflict, place further restrictions on the availability of skilled labor. These factors often change labor supply decisions of affected populations. For example, women often increase their labor supply to supplement the family's income in the absence of male family members who join the fighting or migrate in response to conflict.

Although all of these constraints apply in some degree to all conflict situations, poor governance and inadequate infrastructure are more likely to be severe constraints in areas of nationwide conflict, because regional conflict typically coexists with a functioning state in the rest of the country. This means that the government has a tax base on which to draw, the ability to provide public services and infrastructure, and functioning institutions (army, police forces, bureaucracy, judicial system), which can be extended to the conflict-affected region when the conflict ends.

In contrast, nationwide conflicts often involve the building up or complete reform of state institutions when the conflict ends. As discussed in the *World Development Report 2011*, building institutions is a long-term affair that generally takes a generation. Policymakers in countries emerging from nationwide conflict face the additional challenge of re-establishing connectivity with the rest of the world or neighboring countries, in addition to rebuilding internal connectivity. The lack of such external connectivity can significantly affect access to foreign goods and capital, access to foreign markets, and the ability of international agencies to deliver humanitarian and other assistance.

Internal migration to safer parts of the country is likely to be significant in cases of localized conflict. In Pakistan, for example, an estimated 60 percent of workers in the Federally Administered Tribal Areas (FATA) leave their tribal area to find employment (World Bank and ADB 2010).<sup>4</sup> Migration can help households access more and better jobs and send home money that could be used for human capital investments or business start-ups. The presence of large numbers of internal migrants and displaced populations raises an important policy question related to job creation, however: should jobs be created for internal migrants in their current areas of residence, or should the focus be primarily on creating jobs in conflict-affected areas, thereby providing incentives for the displaced to return?

When the conflict is ongoing, it may not pay to rebuild infrastructure, which could be damaged during fighting. In postconflict situations, the intensity of violence has decreased, allowing better planning and decreasing uncertainty in investment and resource allocation decisions. But violence also characterizes many postconflict situations. Peace is very fragile: historically, 40 percent of postconflict situations have reverted to conflict within a decade (Collier, Hoeffler, and Söderbom 2008).

## 4. LABOR MARKET CHARACTERISTICS IN SOUTH ASIA'S CONFLICT ZONES

Labor market indicators (such as lack of jobs for young people and low wage growth) are important predictors of the likelihood of conflict (Collier, Hoeffler and Sambanis 2005; Hoeffler 2012; Smith 2004; World Bank 2011a). But, how does conflict change labor markets in conflict zones?

This section begins by briefly discussing the impact of armed conflict on aggregate economic growth and unemployment. It then analyzes the impact of conflict on employment, unemployment,

sectoral occupation and the vulnerability of jobs, using national household and labor force surveys. Multiple rounds of household data were used to compare time trends in high-conflict and low-conflict areas in India, Nepal and Sri Lanka (see Annex A for definitions of high high-and low-conflict areas). We exploit the within-country variation in the intensity of armed conflict to better understand the relationship between conflict and labor markets.

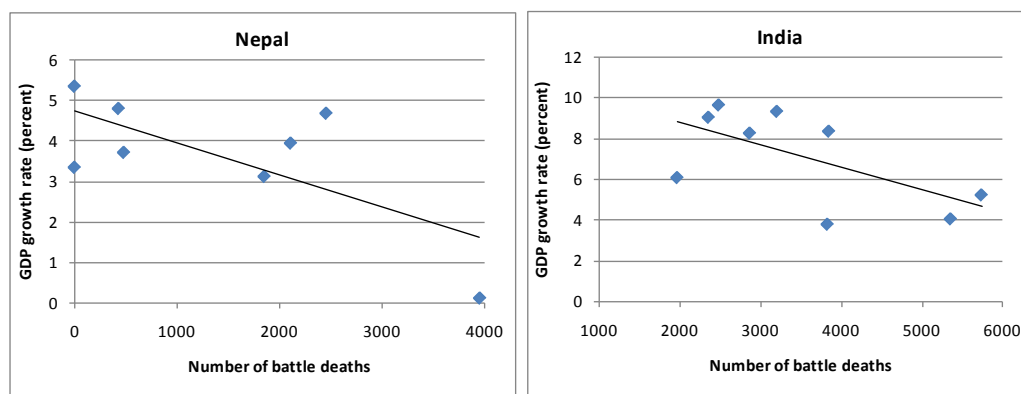
Two caveats should be heeded in interpreting the results. The first refers to interpreting results as causal. Labor market characteristics may be different in conflict areas because of the conflict itself or because of preexisting conditions. Where information for more than one point in time is available, the data could be interpreted as causal if one assumes that high- and low-conflict areas would have followed similar trends in the indicators of interest in the absence of the armed conflict.<sup>5</sup> For Afghanistan, since we only use household data for one year, results should be interpreted with more care. The second caveat refers to the potential bias in the sample composition, as areas affected by conflict are often underrepresented in household surveys. If these areas were included in the surveys, it is quite possible that labor market conditions in conflict-affected areas would look even worse, as the worst-affected areas are the ones being omitted.<sup>6</sup>

### A. CONFLICT, GROWTH AND THE PEACE DIVIDEND

Conflict can have aggregate effects on economic growth and therefore on the quantity and quality of jobs the economy is able to generate.<sup>7</sup> Assessing the economic costs of armed conflict is empirically complicated, because it is difficult to specify an appropriate counterfactual, data are not available from conflict-affected countries or regions, and different methodologies often yield widely varying results (Gardeazabal 2010). For example, in 1998 the macroeconomic impact of the civil war in Sri Lanka was officially estimated at 2–3 percent of GDP growth a year since its start (Central Bank of Sri Lanka 1998); more recent estimates, for the period 1984–96, put the annual cost at 10.8–15.8 percent of 1996 GDP (Arunatilake, Jayasuriya, and Kelegama 2001).

Cross-country estimates find that countries that experienced civil war between 1960 and 1999 saw their annual GDP growth rate reduced by 2.4 percentage points on average (Hoeffler and Reynal-Querol 2003). Even for countries with some conflict during 1980–2008, growth was 1.2 percentage points higher, on average, in years of peace than in years of conflict. In South Asia as well, periods with more conflict have usually been periods of slow growth (Figure 4).

**Figure 4 Annual growth in GDP and Number of Battle Deaths in India and Nepal, 2000–08**



Source: Authors, based on data from World Bank (2011b).

Note: Each data point represents a single year.

This evidence suggests that the peace dividend for growth and job creation is potentially large. Chen, Loayza, and Reynal-Querol (2007) analyze 41 countries that experienced civil war between 1960 and 2003. They find that once the war ended, recovery in economic performance, health, education, and political development was significant. Similarly, once violence ceased, conflict-affected communities also experienced a faster reduction in poverty than communities less directly exposed to the conflict within the same country. For example, poverty reduction was particularly high in Sri Lanka, where poverty fell 40 percent in conflict-affected areas and 34 percent elsewhere in the country (World Bank 2010a).<sup>8</sup> During the ceasefire that lasted from 2002 to 2004, unemployment fell from 13.0 percent to 9.2 percent in the Northern Province and from 15.9 percent to 10.5 percent in the Eastern Province – the two conflict-affected regions, at a time when the national unemployment rate decreased only slightly, from 8.8 percent to 8.3 percent (Figure 5).

**Figure 5 Unemployment Rates in Sri Lanka, by Province, 1997–2001 and 2002–04**



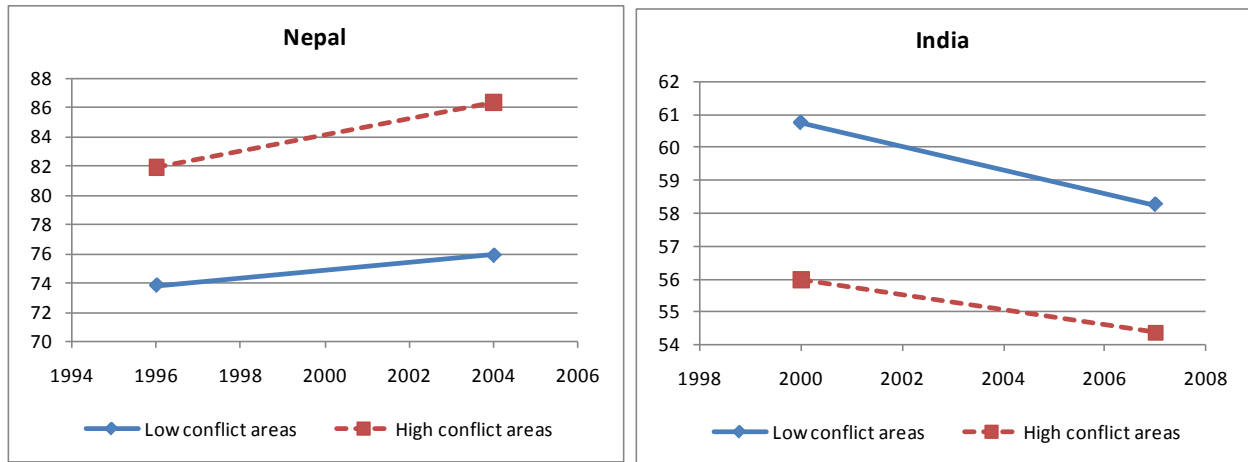
Source: Annual Reports of the Central Bank of Sri Lanka.

## B. EMPLOYMENT

The following sections rely on analysis of household surveys from Afghanistan, India, Nepal and Sri Lanka. Comparisons are made across areas of high conflict and low conflict *within* each country (see Annex A for exact definitions of high-conflict and low-conflict regions in each country). Here we highlight some of the key results; full numerical results for each country, including disaggregation of employment characteristics by gender, are provided in Annex B.

Armed conflict seems to be associated with an increase (or a smaller reduction) in high-conflict areas in the share of the working-age population that is economically active and employed.<sup>9</sup> In Afghanistan, the share of the working-age population that was employed was 55.6 percent in low-conflict provinces and 68.3 percent in high-conflict areas. In India, employment rates in conflict-affected areas fell less than in peaceful areas. In Nepal the proportion of the working-age population that was employed increased by about 2 percentage points between 1996 (pre-conflict) and 2004 in low-conflict areas and by more than 4 percentage points in high-conflict areas (Figure 6). This evidence suggests that conflict could increase labor supply even in the face of decreased demand.<sup>10</sup> Together, these forces are likely to reduce equilibrium wages in conflict areas over time, leading to a decline in living standards.

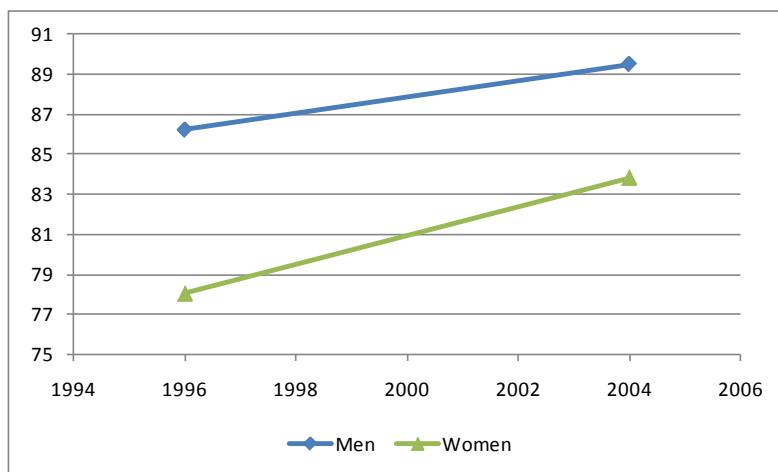
**Figure 6 Percent of Working-Age Population Employed in High-Conflict and Low-Conflict Areas of India and Nepal**



Source: Authors, based on Nepal Living Standard Measurement Study Surveys and India NSSO surveys.

Increased labor force participation and employment in conflict zones seems to arise primarily from the increase (or smaller reduction) in employment of women. In Afghanistan, for example, the proportion of men employed is 4 percentage points higher in high-conflict areas, but the proportion of working-age women employed is 19 percentage points higher. The difference in employment patterns over time is statistically insignificant for men in India and Nepal; among women, however, the likelihood of being employed increases with the intensity of the conflict in both countries. In high-conflict areas of Nepal, for example, the proportion of working-age men increased by about 3 percentage points between 1996 (pre-conflict) and 2004, whereas the proportion of women increased almost 6 percentage points (Figure 7).

**Figure 7 Percent of Working-Age Population Employed, in High-Conflict Areas of Nepal, by Gender, 1996-2004**



Source: Authors, based on data from Nepal Living Standard Measurement Study Surveys.

There are two potential reasons for the increased participation of women. One is the “added-worker” effect, whereby additional members of the household enter the labor force in response to economic necessity or the absence of key earning members. Both of these conditions are likely to apply in conflict-affected areas, given that men often leave to fight and economic conditions in the household usually worsen as a result of the conflict.

A rise in employment among women during difficult economic times, caused by conflict or otherwise, has been documented in cross-country settings (Bhalotra and M. Umana-Aponte 2010); during the Asian crisis (Jones and others 2009); and in Nepal during the armed conflict (Menon and van der Meulen 2010). Several researchers have also documented increased female labor force participation where men are absent because of war (see Finegan and Margo 1994, who document this phenomenon for advanced economies during World War II, and Schweitzer 1980). Another possible reason for the increased labor force participation of women in conflict-affected areas could be the higher prevalence of agricultural employment in these areas, an activity where women traditionally participate.

### C. UNEMPLOYMENT

Unemployment, particularly of youth, is often associated with a higher risk of conflict. Two complementary theories try to explain the relationship between (male) youth unemployment and armed conflict. The first, the youth bulge theory, states that when a large proportion of the population consists of young men that are marginalized from political and economic opportunities, countries are more vulnerable to instability, and violence becomes a rational option for engaging the system and making demands. The second hypothesis is that youth unemployment and poverty correlate with the onset of armed conflict because the opportunity cost of joining rebel organizations is lower. In Peshawar, Pakistan, for example, a militant recruit can earn PRs 15,000–20,000 (\$176–\$235) a month—nearly twice the remuneration for unskilled work in the area (World Bank and ADB 2010). The higher unemployment among people aged 15–24 (close to 10 percent in India, Bangladesh and Pakistan, 16 percent in Maldives, and almost 20 percent in Sri Lanka) bodes ill for the possibility of conflict.

Some cross-country empirical evidence suggests a positive correlation between the likelihood of armed conflict on the one hand and youth unemployment and other indicators of economic opportunities on the other (Collier, Hoeffler and Sambanis 2005; Urdal 2006). A similar result is obtained across states in India, especially when combined with slower wage growth in rural areas (Urdal 2008). There is also evidence that young adolescents are the optimal target of rebel forces (Beber and Blattman 2010).

However, other work has failed to find econometric evidence of a relationship between youth unemployment and armed conflict. The evidence overall remains mixed, as discussed in the *World Development Report 2011*.

In South Asia, we find some, albeit limited, evidence supportive of the hypothesis that male youth unemployment could be a risk factor for conflict. In Nepal, where labor market information before the violence started is available, pre-conflict unemployment rates among men aged 15–35 were 2.4 percentage points higher (almost twice as high) in districts where the conflict started (in the midwestern hills) than in the rest of the country, even after accounting for differences in poverty, location (urban or rural), and education levels.<sup>11</sup> In the case of South Asia, however, the more

important question is likely to be on the relationship between the quality of jobs available to youth and conflict, since open unemployment is generally low.

In terms of impact of conflict on overall unemployment, the evidence from South Asia is mixed. In Nepal, the conflict seems to have been associated with a reduction in the unemployment rate in high-conflict areas. In contrast, in India and Sri Lanka, the difference is not statistically significant (see Annex B). There is also no clear pattern across countries in relative unemployment rates before the start of the conflict (see Annex B).<sup>12</sup>

#### D. EMPLOYMENT PATTERNS BY LOCATION AND SECTOR

Conflict-affected countries tend to be less urbanized, in part because the mountainous and forested terrain is usually favorable for rebellion (see Collier, Hoeffler and Sambanis 2005; Do and Iyer 2010). At the global level, 58 percent of the population in conflict-affected countries lives in rural areas —11 percentage points higher than the average in non-conflict countries (World Bank 2011b). Jobs in conflict areas are, therefore, more likely to be in rural areas and in the agricultural sector.

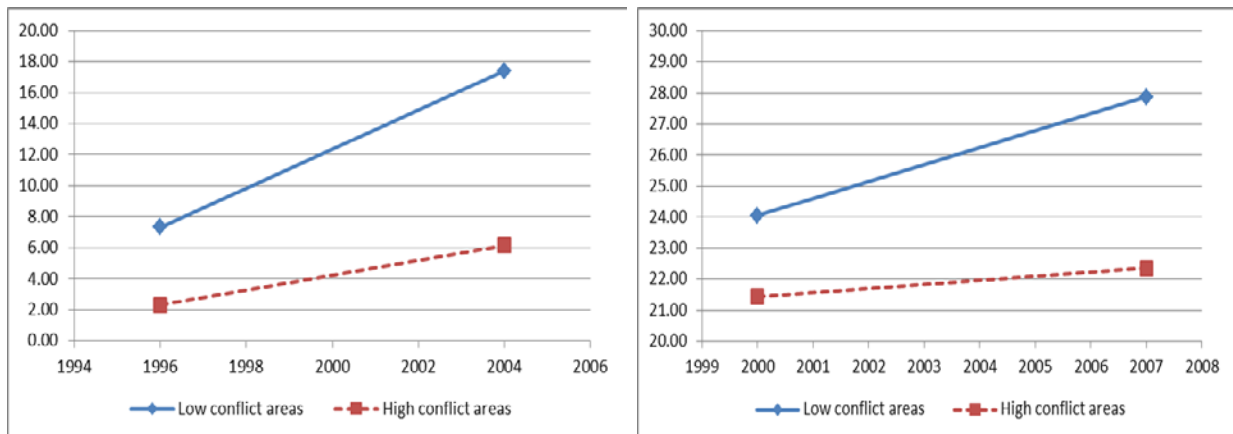
Within South Asian countries too, the workforce in high-conflict areas is also significantly more likely to be in rural areas. In Afghanistan, for instance, 22 percent of the working-age population lives in urban areas in low-conflict areas; the corresponding number for high-conflict areas is 5 percent. Work is primarily in agriculture: 71 percent of workers in high-conflict areas work in this sector, compared with 52 percent in the rest of Afghanistan. Similarly, in India, the share of employment in agriculture was 61 and 58 percent in high and low-conflict, respectively. In Nepal, the corresponding numbers were 87 percent in high-conflict areas and 78 percent in the rest of the country.

There is also evidence that conflict itself delays urbanization and the structural transformation of the economy. The proportion of the workforce located in urban areas increased by 10 percentage points in low-conflict areas of Nepal between 1996 (pre-conflict) and 2004 but by only 4 percentage points in the high-conflict areas (Figure 8). To the extent that urban areas are able to provide better jobs and better access to public services, this pattern reflects a slowdown in the improvement of household welfare. The same pattern is evident in India (annex B).

In both India and Nepal, the armed conflict seems also to have delayed the transition of the workforce out of agriculture. In India, for example, the share of workers employed in agriculture fell throughout the country between 2000 and 2007, but the decline was 3 percentage points lower in conflict-affected areas. In Nepal, agriculture fell in all districts between 1996 and 2004, but the average decline was 2 percentage points lower in high-conflict areas (see annex B). These results echo findings in other settings, including Mozambique, Rwanda, and Uganda (Brueck 2004; Deininger 2003; McKay and Loveridge 2005).

Economic activities outside of agriculture are very limited in conflict-affected areas in South Asia, as evidenced by the smaller share of the workforce employed by a third party and the limited presence of manufacturing, construction, and commercial activities (Annex B). This finding is important, because the international evidence shows that diversified economies experience less conflict than those that rely on a few sectors (Collier, Hoeffler and Sambanis 2005). It is especially relevant for countries like Afghanistan and Nepal, which remain overwhelmingly agrarian. Fostering small and medium-size nonfarm enterprises in conflict-affected areas can contribute to the economic development of those areas and may also contribute to peace.

**Figure 8 Urban Workers as Share of All Workers in India and Nepal, 1996–2004**



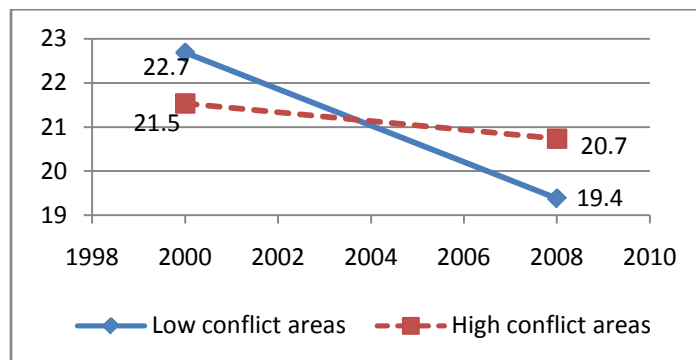
Source: Authors, based on data from Nepal Living Standard Measurement Study Surveys.

### E. VULNERABILITY OF JOBS

Jobs in high-conflict areas are more likely to remain vulnerable as a result of the conflict for two main reasons. First, the dearth of employers in high-conflict areas means that people are significantly less likely to become regular wage or salaried employees. In Nepal, the share of regular wage and salaried workers increased by 1.2 percentage points between 1996 and 2004 in low conflict districts but dropped in high-conflict districts. In India, the share of workers in regular wage and salaried jobs increased by 3 percentage points in low-conflict areas, but the increase was only 1 percentage point in high conflict areas (see Annex B).<sup>13</sup>

Second, a relatively large proportion of workers in conflict areas remain dependent on unpaid family work. The share of workers engaged in unpaid family labor declined sharply in low-conflict areas of India; high-conflict areas saw a much smaller decline (Figure 9). In Sri Lanka, similarly, the armed conflict was associated with an increase of 7 percentage points in the likelihood of being an unpaid family worker. This pattern partly reflects the higher concentration of employment in agriculture, but it is also evident in urban areas.

**Figure 9 Percent of Workforce Employed in Unpaid Family Labor in India, 2000–2008**



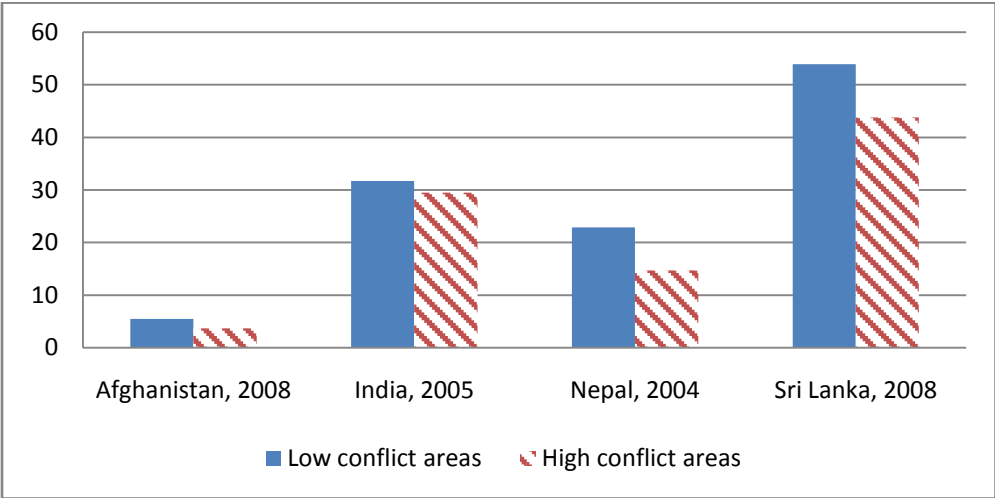
Source: Authors, based on India National Sample Surveys

The pattern on casual wage work is mixed, however, with conflict associated with lower shares of wage work in casual activities in Afghanistan and Nepal, higher shares in Sri Lanka (possibly because of the sizable expansion of the construction sector), and no apparent association in India. A similarly mixed picture emerges for informal work. It is perhaps not surprising that the evidence on vulnerability of jobs is stronger in the context of unpaid family workers than for casual wage work as the latter typically requires third party employers.

F. EDUCATION

Levels of education are significantly lower in the areas of South Asia most affected by conflict. In Afghanistan in 2008, for instance, the share of the working age population with no education was 68 percent in low-conflict areas and 82 percent in high-conflict areas. In every South Asian country, a smaller proportion of the workforce had completed secondary education in conflict-affected areas than in low-conflict or peaceful areas, with the differences both pre-dating the conflict and resulting from the conflict (Figure 10). A breakdown of the working age population by education level is presented in annex B. The difference in education levels is not merely related to lower urbanization: differences are smaller but remain when urban and rural areas are analyzed separately.

**Figure 10 Percentage of Working Age Population 15-64 with Completed Lower-Secondary Education in Low- and High-Conflict Areas of Selected South Asian Countries**



Source: Authors, based on data from national household surveys.

These effects take place through the impacts of conflict on supply and demand factors that affect schooling decisions. On the supply side, armed conflict may lead to the destruction of schools or complementary infrastructure and the absence or death of teachers. In Nepal, for example, of the 11,891 war victims that have been identified (including rebels and members of the military and police), almost 5 percent were teachers or students (INSEC 2010). In Pakistan’s North West Frontier Province, 8 percent of schools were destroyed between 2002 and 2009 (World Bank 2009b). This destruction can be expected to have ripple effects on education quality since the availability and quality of school facilities has been associated with student attendance and achievement (Glewwe 2002).



Several factors could lead to reduced demand for schooling in conflict areas. First, increased pressure to supplement household income (or join the conflict) could lead to children dropping out of school.<sup>14</sup> Second, the lack of security means that it is more difficult for students to reach schools, and schools themselves may be attacked. In Afghanistan, for instance, threats of sexual violence reportedly keep many girls at home (Amnesty International 2003). Third, conflict potentially reduces the expected returns to education, by reducing job opportunities for educated people. Between 2000 and 2008, emigration rates among South Asians with tertiary education were 4.7 percent in non-conflict-affected countries and 14.8 percent in conflict-affected ones (World Bank 2011b). Finally, population displacement also makes it difficult to continue schooling.

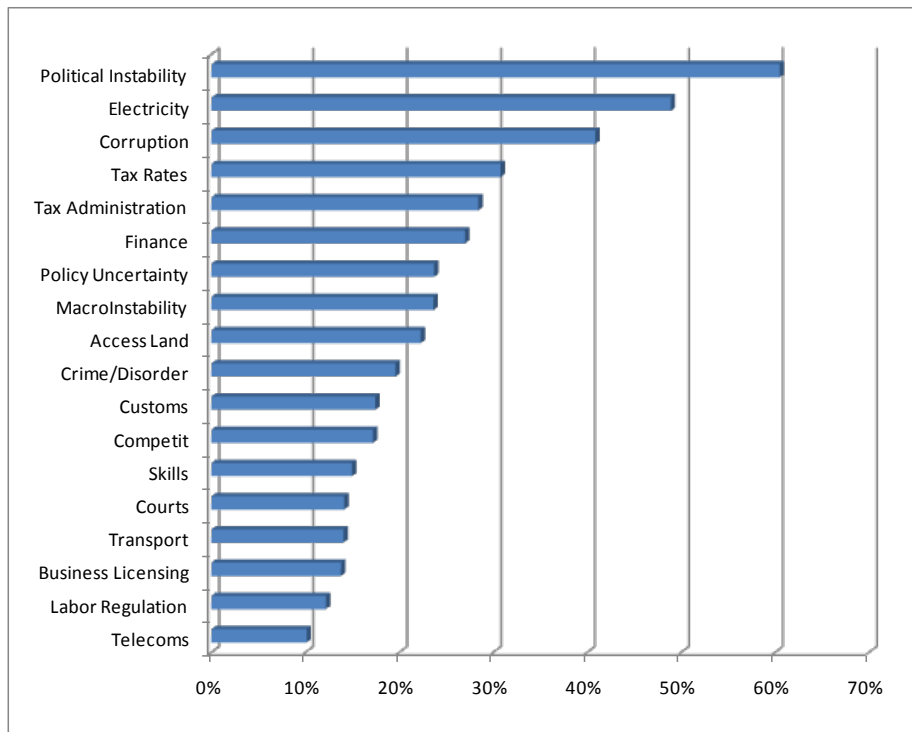
The literature reveals mixed results on the direction in which conflict has a causal effect on schooling and skill acquisition. Using detailed household and individual surveys, several researchers have found a significant loss of years of education and experience for children and youth exposed to conflict (see Verwimp and Van Bavel 2010 on Burundi; Akresh and de Walque 2008 on Rwanda; Shemyakina 2011 on Tajikistan; and Blattman and Annan 2010 on Uganda). Research by Stewart, Huang, and Wang (2001), however, suggests that countries with favorable institutions are able to maintain enrollment rates during armed conflict or recover quickly to their pre-conflict enrollment levels once the conflict is over. In particular, they find that primary school enrollment fell in only 3 of 18 African countries affected by internal conflict and actually improved in 5, though it is important to note that the authors lacked appropriate counterfactuals in their exercise. Lopez and Wodon (2005) find that in Rwanda, where the conflict was short but intense, school enrollment rates returned to their preconflict levels within five years of the end of the violence. In Nepal, as discussed later in this paper, important progress in education was made in conflict-affected areas during the civil war.

In summary, labor markets in conflict-affected areas present unique features. Overall, conflict-affected areas tend to be more rural and more dependent on agriculture, rely less on regular wage employment and more on unpaid family work, and have workforces that are significantly less educated. In most cases, these characteristics reflect both the conflict and conditions predating it. These characteristics of the labor markets in conflict-affected areas mean that job creation efforts need to initially focus on agriculture or other low-skilled sectors, such as construction. Additionally, providing inputs such as finance, infrastructure, and training, needs to be tailored to the informal and casual sector, in addition to the formal sector.

## 5. FACILITATING PRIVATE SECTOR JOB CREATION

Armed conflict, even conflict that has ended, is a serious obstacle to job creation in South Asia. Political instability is one of the three most common binding constraints for formal urban and rural nonfarm firms in South Asia, with almost 60 percent of formal firms in South Asia included in the World Bank's enterprise surveys ranking political instability as a major or severe constraint to doing business (see Figure 11). In Afghanistan and Nepal, respondents identified political instability as the leading constraint; in Bangladesh and Pakistan, they ranked it among the top three constraints. Only in Bhutan was it a negligible concern.<sup>15</sup>

**Figure 11 Major constraints on private sector firms (% of firms ranking the constraint as major or severe, regional average)**

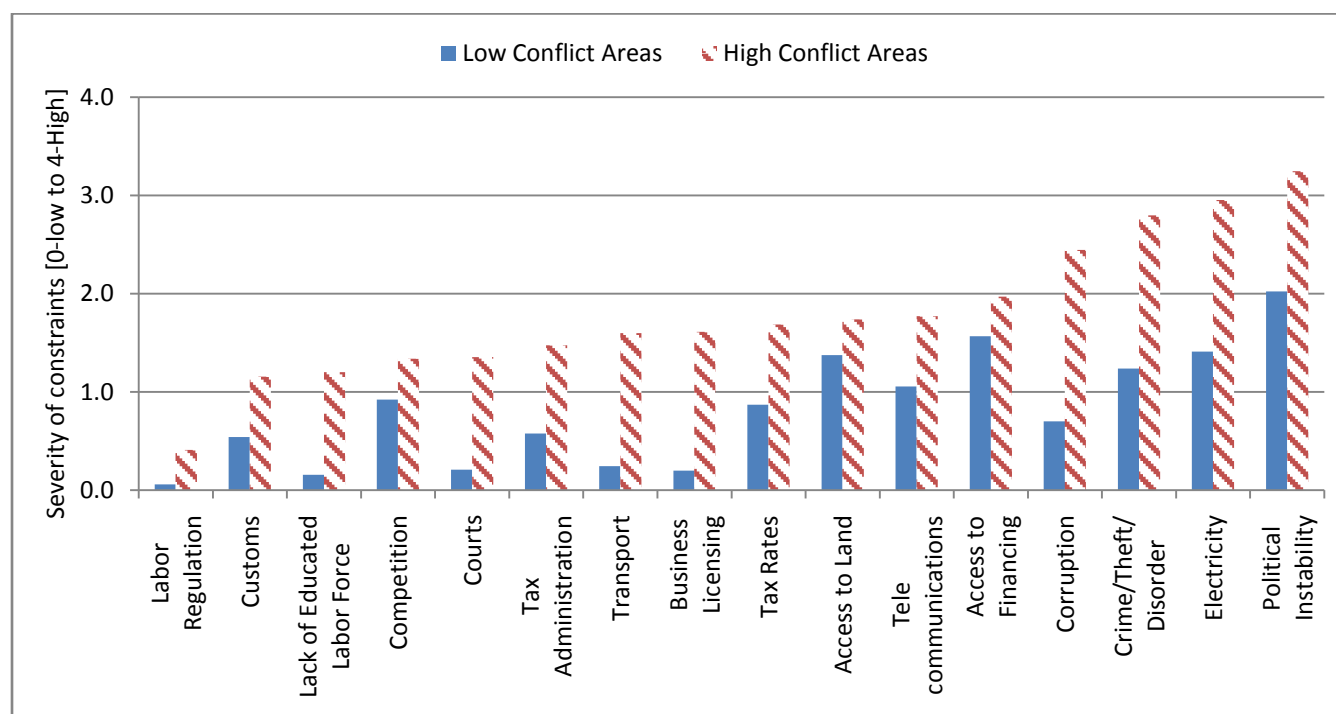


*Notes:* Averages are based on formal urban firms in enterprise surveys, and do not include firm controls.

The second most important constraint to firm activities is the provision of electricity. Key governance (corruption) and regulatory issues are also cited as major constraints. These issues—insecurity, inadequate infrastructure, and a poor regulatory and governance framework—are precisely the factors that are likely to be exacerbated in conflict situations.

In Afghanistan’s 2008 enterprise survey, for example, firms located in areas where conflict was most violent reported that they were more severely constrained than firms in more peaceful areas in most aspects of the business environment. The biggest differences between high- and low-conflict areas were reported in infrastructure (electricity and transport); the governance and regulatory environment (corruption, business licensing, courts, land); security (crime and political instability); and skills (Figure 12). The data on other South Asian countries do not allow for a similar analysis, because too few firms operating in conflict-affected areas were included in the enterprise surveys. The rest of this section discusses each of these constraints to job creation in conflict-affected areas, focusing on ways in which different actors—the state, international donors, nongovernmental organizations (NGOs), local communities—can address them.

**Figure 12 Average Severity of Business Environment Constraints Reported by Firms in Low-Conflict and High-Conflict Areas of Afghanistan, 2008**



Source: Authors, based on data from the 2008 Afghanistan enterprise survey.

Note: See Annex A for a definition of high- and low-conflict areas in Afghanistan. Only differences that are statistically significant at least the 5 percent level in an ordinary least squares regression including firm size and industry fixed effects are shown.

## A. IMPROVING SECURITY

Security risks, which affect the economic returns to investment, persist even after armed conflict officially ends, putting both facilities and workers at risk. As a result, firms need additional funds to ensure security, by hiring private security or paying off the warring sides in a conflict, for example. Firms also experience difficulties in getting supplies for production. Farmers do not plant crops or go fishing when they live in fear. The lack of security may also manifest itself in the hesitation of the local community to take part in economic activities led by the private sector (or the government for that matter).

Even after a conflict has officially ended, considerable risks to security remain. Nepal, for instance, witnessed 514 deaths attributed to groups other than the Maoists and the government in 2007, after the peace agreement had been signed, an increase over the 327 such deaths in 2006 (INSEC 2008). Continued violence is attributable largely to the inability of a fragile state to provide effective security to all parts of the country; it highlights the risk that armed conflict can transform itself into other forms of violence or instability, as discussed in the 2011 *World Development Report*. Critically, once firms leave, they often do not come back. In Assam (India), and Sri Lanka, for example, communities affected by armed conflict report that factories and plantations that shut down during conflict did not reopen when security improved (World Bank 2010a).

Governments can manage some of the security risks in conflict situations, by, for instance, implementing disarmament, demobilization, and reintegration (DDR) programs (discussed later in this paper) and creating “safe” economic zones. Together with the private sector, the government can also involve local communities in security arrangements. The first two options are more likely to be successful when violence has been significantly reduced and an end to the conflict is in sight.

#### *SPECIAL ECONOMIC SAFE ZONES*

Special economic safe zones are modeled after special economic zones (SEZs) <sup>16</sup>. These typically provide duty-free imports and good infrastructure, with a view to encouraging exports. In addition to easing the regulatory system or providing direct incentives, such as tax breaks and loan guarantees, safe zones provide targeted security and other public services.

SEZs have been established in several postconflict countries, including Cambodia and Mozambique, where they have helped attract foreign investors and spur job creation. In Cambodia, for example, export processing zones have been associated with the country’s impressive job creation performance after the war, especially among women (female employment in industry grew 20 percent a year compared with 7 percent for men) (McLeod and Davalos 2008).

In Sri Lanka, the government has been planning to establish economic zones in conflict-affected areas (Indian Express 2009). Policy makers should think of these zones as an interim step in providing a good business environment, gradually extending benefits such as better regulation and infrastructure to firms throughout the country.

SEZs could be further complemented with “resource corridors,” which would more directly link local communities, farmers, and workers to areas with high concentration of natural resources (by, for example, strengthening logistics and infrastructure). Afghanistan’s mining sector, for example, has potential; although not labor intensive in itself, it could be better linked to already existing economic activities and livelihoods. This approach has been tested predominantly in non-conflict environments but could also be a promising path in countries recovering from conflict.

#### *PRIVATE SECTOR AND LOCAL COMMUNITY INITIATIVES*

The private sector has found innovative ways of alleviating some of the challenges stemming from lack of security in conflict-affected areas by partnering with local entrepreneurs. Firms in conflict areas often hire private security firms or strike deals with warring parties. Foreign firms also take political risk insurance to cover some of the risks, through, for example, the World Bank’s Multilateral Investment Guarantee Agency (MIGA) or the U.S. government’s Overseas Private Investment Corporation (OPIC). Respondents to a recent survey of firms in conflict-affected countries cited engagement with government in the host country and joint venture/alliance with local companies as the two main tools they use to mitigate political risks in these countries (MIGA 2011).

Another option is to involve local communities in security arrangements, as Roshan, a telecommunications provider in Afghanistan, has done (Box 1). The community-based strategy resulted in better security for Roshan’s facilities, at a significantly lower cost than the alternative of hiring an international private security agency. In addition, it provided important benefits for the local community.

### **Box 1 Private Sector Solutions to the Security Constraint: Lessons from Afghanistan**

Roshan is the largest mobile phone company in Afghanistan. Since beginning operations in 2003 in six major cities, the company has expanded operations to all 34 provinces and more than 230 cities and towns. By 2009 it had more than 3.5 million active subscribers.

Since 2003, the company has invested more than \$390 million all over the country. Employing more than 1,000 people directly (and more than 25,000 indirectly, as dealers, distributors, contractors, and suppliers), Roshan is the largest private employer in Afghanistan. One-fifth of its labor force is women, in contrast to a women's workforce participation of 1 percent in Afghanistan. Roshan is also the largest taxpayer in Afghanistan, accounting for about 6 percent of government revenues.

In 2008, Roshan faced a surge in attacks on its cell network towers. These attacks strained Roshan's operating budget, given that the company was already paying \$14 million a year to a private company to provide security. In response, Roshan decided to implement a new community-based security model. The first step was to consult with more than 1,000 local *shuras* (local councils) regarding their views of Roshan. The primary complaint was that Roshan was not providing jobs for locals; communities therefore had no interest in supporting the company.

In response, Roshan signed explicit contracts with each community. The company paid a leasing fee to the community for the use of the tower site, and the local community was required to ensure that the installations were not attacked. Roshan also introduced other incentives, such as bonus payments if the tower remained safe for a given number of months, and it made significant investments in local infrastructure, based on the community's wishes (in some communities, Roshan provided funds for a local well; in others, it funded solar electricity for the local mosque).

Taking this bold experiment a step farther, Roshan implemented it in Kandahar, one of Afghanistan's most conflict-affected regions. Within a few months, the company saw dramatic positive results and soon expanded this program to all areas of the country. The program is very popular in local communities, where it has generated jobs for local youth and provided much need infrastructure in a war-torn country. The initiative also reduced the company's security bill for its cell towers from \$14 million to \$7.5 million.

Roshan's experience highlights three major issues in conflict zones. First, there is a high demand for jobs. Roshan reported receiving 10,000 applications for every job it filled in the early stages of the firm. Second, private sector companies can overcome the disadvantages of operating in a high-risk environment, including security-related ones. Third, the private sector can be a useful source of funding for local infrastructure, without compromising profitability (Roshan has been profitable since its second quarter of operation).

Is Roshan's experience replicable? One key to success appears to be the company's orientation toward social development in addition to making profits. This orientation probably reflects the fact that Roshan's majority shareholder is the Aga Khan Fund for Economic Development, which has a longer-term outlook and a commitment to building sound businesses in the developing world. Ninety percent of Roshan's employees are Afghan, and the expatriate component is being further reduced. As CEO Karim Khoja says, "My proudest moment will be to transfer the company to an Afghan CEO."

*Source:* Authors, based on Herman and Dhanani 2010; remarks by CEO Karim Khoja at HBS Social Enterprise Conference, March 2010 and personal communication with Karim Khoja, July 2010; and Roshan web site (<http://www.roshan.af>).

## B. REBUILDING INFRASTRUCTURE

Armed conflict destroys or inflicts heavy damage to physical infrastructure instrumental to providing basic services and connecting communities and firms to markets. Electricity and water supplies, roads, rail networks, bridges, communication systems, and sanitation systems are often destroyed or rendered unusable. Based on the limited evidence from the investment climate surveys, lack of access to electricity and transport seem particularly important from the perspective of job creation in conflict affected areas. In Afghanistan, for example, more than three decades of war left the country largely in ruins: in 2004, only 16 percent of households in rural Afghanistan had access to electricity, and three-quarters of the population had no access to public transportation in their communities (World Bank 2005). After two decades of violence in Sri Lanka, in 2003, only 64 percent of households in the Northern and Eastern provinces had access to electricity, compared with a national average of 73 percent.<sup>17</sup> Road networks were also considerably inferior in conflict-affected provinces (those located in the north and the east of the island).

Infrastructure limitations make it more expensive to do business and create jobs in conflict-affected areas. In Afghanistan, for example, 87 percent of firms have to operate with a private generator, according to firms' surveys. In Sri Lanka, the end of the conflict in the Northern Province in 2009 provided an opportunity to assess some of the economic benefits associated with improved infrastructure and access to markets, as the A9 highway that connects the north with the rest of the country was reopened. Improved connectivity allowed for more fluid mobility of people and goods, resulting in the rapid convergence of prices. The average price premium in Jaffna compared with Colombo on 10 selected items was 48 percent in May–July 2008; one year later, the price premium on the same products had declined to 24 percent (World Bank 2010c).

Rebuilding much needed infrastructure in the aftermath of violent conflict faces significant challenges, however. Financing requirements are great, renewed violence could destroy the rebuilt infrastructure, and the vast scale of needs makes it difficult to prioritize. Private, public, nongovernmental and international actors have found ways to address some of these challenges. Three complementary approaches are often adopted:

- (i) *Providing infrastructure on a limited basis, possibly in SEZs, which are geographically limited and managed separately from the rest of the economy.* SEZs could also help address some of the regulatory and security concerns associated with job creation in conflict-affected areas.
- (ii) *In the medium term, tapping into innovative forms of financing.* Conflict-affected countries can use some innovative financing mechanisms—such as diaspora bonds, future-flow securitization, and performance-indexed bonds—to alleviate financing constraints (Ketkar and Ratha 2009). These mechanisms are likely to be available, however, as they can be very complex and often require a stronger financial and regulatory framework than exists immediately after conflict.
- (iii) *Supporting the community-based/decentralized building of infrastructure and service provision.* An innovative experiment in progress in Afghanistan is the National Solidarity Program, which uses a decentralized community-driven mechanism coupled with international funds to execute local infrastructure projects (box 2). A similar program in Nepal—the Poverty Alleviation Fund—is a rural development program focused on developing rural community infrastructure linked to communities' priorities. In both programs, local communities identify, plan, build, operate, and maintain infrastructure. Community-based infrastructure development and service provision could help alleviate

some security risks and help policy makers prioritize in an environment of tight fiscal constraints and vast needs. This type of intervention is less relevant, however, for large infrastructure projects with cross-regional spillovers (ports, airports, highways), which are better addressed by higher-level government administrations.<sup>18</sup>

### **Box 2 Community-Led Infrastructure Provision: Afghanistan's National Solidarity Program**

Afghanistan's National Solidarity Program (NSP), launched in 2003, is a community-led rural development initiative focused mainly on reconstruction and rural infrastructure. The program provides block grants (averaging \$32,800 per community) to local governance bodies known as community development councils (CDCs) for infrastructure projects selected by beneficiaries. Grants are disbursed directly to the councils and managed through a bank account with a public bank. The participation of women in the CDCs is mandatory, although they sometimes participate in women-only councils. Communities are also required to contribute 10 percent of the cost of each project, with funds in the form of cash donations, work hours, or construction materials. The program is implemented by Afghanistan's Ministry of Rural Rehabilitation and Development and financed by a consortium of international donors.

The NSP is the only program to have reached all provinces in Afghanistan, affecting the lives of more than 17 million people. As of 2009, some 22,000 communities had successfully elected CDCs, and more than 50,000 community projects had been partially or fully financed (about 31,000 had been completed). Most projects focus on building or restoring irrigation facilities, power supply, roads, and bridges and bringing drinking water to communities. The program is estimated to have employed some 4,000 Afghan nationals; it has also developed the skills of 600,000 local council members in areas such as conflict resolution, accounting and bookkeeping. Average economic rates of return across four sampled sectors (irrigation, power, water supply, and roads) have been estimated at 18.9 percent. An early randomized evaluation shows that the program has led to the creation of functional local councils, thereby decreasing the power of traditional elites. The program has led to greater engagement of women in community life and improved the perception of government figures. The impact of the program on access to services, infrastructure and utilities, economic activities, communities' trust, or the likelihood of violence, however, has been mixed so far (Beath and others 2010).

The successful roll-out of the NSP shows that community-driven development initiatives can be an important instrument amid conflict, when governments may be in too feeble a position to implement programs. In addition to direct economic benefits, these schemes can serve to foster cohesion and develop local capacities. However, significant challenges remain. Can coverage be extended to the 9,000 communities most affected by conflict, which are currently not part of the scheme? Will the NSP be sustainable without international donor funding? Can these small projects be scaled up? Will the CDCs continue to represent their communities, or will they be captured by the traditional elites over time?

*Source:* Authors, based on Beath and others 2010; World Bank 2009a; and World Bank Afghanistan National Solidarity Program website

(<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21166174~pagePK:146736~piPK:146830~theSitePK:223547,00.html>).

## C. STRENGTHENING THE REGULATORY FRAMEWORK AND GOVERNANCE

In enterprise surveys, private businesses in South Asia cite lack of effective regulation and governance as a major constraint, especially in conflict-affected areas. According to firms' surveys, almost 40 percent of firms in the region cite corruption as a major or severe constraint, the third-most cited obstacle to business after political instability and electricity. Tax administration and policy uncertainty are also among the top constraints. There is some variation across countries in the importance of different elements of regulation and governance, but average severity appears higher in all dimensions of regulations and governance in conflict-affected areas in South Asia (Figure 11). This is consistent with findings from other conflict-affected countries outside the region, where political risk—mainly in the form of potential adverse regulatory changes, which are significantly more likely than in other developing countries—are a main concern of investors (MIGA 2011).

Regulatory issues, related to land for instance, can be at the heart of the armed conflicts. In India, for example, the Maoist insurgency is heavily concentrated in forest areas, where land rights are at the center of the dispute. The Indian government has taken steps to address this constraint and source of grievance, enacting, for example, the Scheduled Tribes and Other Traditional Forest Dwellers Act in 2006 (Box 3). Although it is probably too early to assess the effects of this law, the act is a very positive sign. Land issues also appear to be an important constraint in Afghanistan, where 68 percent of the companies that tried to obtain additional land between 2005 and 2008 reported being unable to do so, according to the country's 2008 enterprise survey.

### **Box 3 Improving the Land Rights Framework in India**

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006 represents a departure from past forestry policy in India. The act seeks to address forest dwellers' demands for land rights by granting both individual and communal rights to people living and cultivating land in forested areas. The Ministry of Tribal Affairs, in conjunction with state governments and village councils, is required to verify occupancy and grant titles to forest dwellers that meet the requirements of the law.

Production in forest areas in India is a combination of timber, agriculture, and collection of nontimber forest produce (NTFP). Forestry and logging accounted for around 1 percent of GDP in 2009. Collection of fuelwood employed an estimated 11 million people, generating revenue of about \$17 billion in 2001. Although data on forest production are limited, the Ministry of Environment and Forests estimates that 200 million people rely on timber and NTFPs for part or all of their livelihoods.

The Forest Rights Act is therefore expected to have a significant impact on the livelihoods of forest dwelling communities. Increased tenure security should provide incentives for investments in improvements to the land. Granting communities rights and responsibility over nonagricultural land should lead to more efficient forest management and sustainable collection of NTFPs. Livelihoods in forest areas are severely constrained by a lack of infrastructure and government services. By providing for the administrative transformation of forest villages into revenue villages, the Forest Rights Act should increase the supply of roads, electricity, schools and other government services to forest dwelling communities.



Because of slow and partial implementation, many of the benefits of the Forest Rights Act have yet to be realized. According to the Ministry of Tribal Affairs, which periodically publishes data on the status of the implementation of the act, implementation varies widely from state to state. As of September 2010, Chhattisgarh had received more than 16 times the number of claims as Jharkhand and distributed more than 11 times as many titles. Orissa had issued titles for more than half of all claims submitted, whereas Gujarat had issued titles for less than 10 percent of claims. No state had accepted claims or issued titles for a significant number of communal claims. Instead, the focus has been on implementing the individual titles that represent part of the rights granted to forest dwellers under the act. The coming years should prove critical to the success of this act and the livelihoods of the populations dependent on forestry.

*Source:* Authors, based on World Bank 2006; Government of India 2007, 2010. The full text of the act is available at <http://forestrights.nic.in>;

Improving the regulatory environment is key to encouraging private sector job creation in conflict situations. To attract investment, governments can focus on “soft measures,” such as reducing barriers to firm registration and operations and cleaning up at least the most blatant pockets of corruption. There is significant room for improvement. Afghanistan, for example, ranks 160th in the world on the overall ease of doing business and last in the world on protecting investors, trading across borders, and closing a business. But some of the top performers in improving their *Doing Business* rankings in recent years are post-conflict countries, such as Liberia (box 5) and Rwanda. Given the limited upfront costs, simplification of business regulations is a key first step to attracting the private sector. Other components of the regulatory framework, such as tackling pervasive corruption, are likely to take more time to show significant improvement.

#### **Box 4 Improving the Regulatory Framework in a Post-conflict Situation: Lessons from Liberia**

Liberia is still recovering from the ravages of 14 years of conflict (1989–2003), during which it experienced one of the largest economic collapses in the world since World War II, with GDP decreasing by more than 90 percent during the war. More than 6 percent of Liberia’s population was killed, an estimated 500,000–1million people were internally displaced (IDMC 2011), and an estimated 70 percent of schools and government buildings were destroyed. Apart from privately owned generators, there was no electricity in most of Liberia from 1991 to 2006 (Radelet 2007).

After the restoration of peace in 2003, and the election of Ellen Johnson Sirleaf in 2005, Liberia pursued a private sector–driven growth strategy (World Bank 2008b). A cabinet-level working group was created to think about the nature and sequencing of the reforms needed to attract the private sector. As a first step, the committee identified areas where “quick wins” could be obtained, in the form of simplifications to the business registration process and the establishment of a one-stop-shop to advise potential entrepreneurs of opportunities and provide them with technical support. As a second step, the committee focused on longer-term reforms that required legislative changes, such as the investment and revenue legal codes. In 2007 the Liberia Better Business Forum was established to facilitate public-private dialogue for further proposals to improve the business environment.

After debuting in the *Doing Business* ranking at number 170 in 2007, Liberia moved up to 155th place by 2010. The number of days needed to open a business was reduced from 68 in 2008 to 20 in 2010. Obtaining construction permits was made easier by abolishing the requirement to obtain a tax waiver certificate before submitting documents. As a result, the number of days needed to

obtain a permit dropped from 398 in 2008 to 77 in 2010. The trade process was expedited by creating a one-stop shop bringing together various ministries and agencies and streamlining the inspection regime. In 2009 Liberia also committed to the Extractive Industry Transparency Initiative, under which it must comply with the global standard for transparent management of revenues from its extractive industries (iron, ore, diamonds, gold, timber and rubber).

These reforms appear to be paying off: net inflows of foreign direct investment increased from \$21 million in 2002 to \$83 million in 2005 and \$144 million in 2008. GDP per capita growth was 9.4 percent in 2007 and 7.1 percent in 2008, despite the global financial crisis.

*Source:* Radelet 2007; Doing Business Indicators; World Development Indicators.

Three broad lessons for the development of the private sector in conflict-affected areas emerge from the success stories described in this section. First, the state plays an important role as an enabler for private sector activity by rebuilding infrastructure, strengthening the regulatory environment and the legitimacy of institutions like the judiciary, and providing security for the labor force. Second, communities can play a vital role in the success of private companies, sometimes by becoming stakeholders in these firms. Third, in their own interest, successful firms take a holistic approach to business, investing in their core economic activities (by creating jobs and developing human resources), contributing to their communities (by supporting education and health programs) and conducting policy dialogue with and supporting the reforms of the government. Community development initiatives are a way for firms to ensure local ownership, enhance their reputations, and improve security and the profitability and sustainability of their activities.

Although constraints to job creation in conflict-affected areas are severe, there are ways around some of them. Developing a vibrant private sector will take a long time, however. In Afghanistan, for example, 10 years after the start of the latest armed conflict, domestic firms still primarily produce for the small domestic market, foreign companies account for less than 2 percent of total firms (World Bank 2008a), and the quality of jobs remains low. The public sector is therefore called on to play a more active role through labor market programs in conflict-affected areas during the initial phase of the recovery, before the private sector is able to absorb workers and generate jobs.

#### D. PROVIDING EDUCATION AND SKILLS

Conflict usually forces people to miss out on years of education and training. In South Asia, conflict-affected areas start from a very low skill base, with illiteracy rampant among the workforce. Improving educational attainment and skills of the future workforce is fundamental if workers are to access more and better jobs; moreover, in conflict areas, the education system can also play a critical role in addressing some of the societal divisions associated with violence (World Bank 2011c).

Skills provision in conflict situations requires innovative delivery mechanisms. Security concerns and the lack of physical (schools) and human (teachers) infrastructure are three important challenges. Furthermore, the difficulty of providing education and training in conflict-affected areas is compounded by extensive migration and displacement.

Although the public sector is likely to take the lead, the nongovernmental sector, international aid organizations, private companies and community themselves can also be active in providing trained

personnel or funds to rebuild, building infrastructure and improving security and access. The diaspora could play a vital role, as its members have the knowledge, ideas and market experience obtained while working abroad as well as local knowledge—and possibly still relevant socioeconomic ties—that may increase their chances of success.

Educational services such as “school in a box” kits and mobile educational programming could be useful in camps and settlements for internally displaced people. In the wake of the 2010 earthquake in Haiti, for example, schooling was provided inside buses that moved from community to community or camp to camp.<sup>19</sup> In areas with significant numbers of internally displaced people, temporary suspension of any documentation requirements could ease some of the constraints they face when enrolling in school and allow them to register for school without having to return to their areas of origin.<sup>20</sup> Other alternatives, such as community delivery of educational services, could be helpful in addressing security issues. Community- and home-based education initiatives are two ways to get around security constraints, especially during the transitional stage. Community-level schemes could be useful by having women, for example, organize themselves to accompany children and women to educational centers. In Afghanistan, many of these programs have been supported by NGOs, both before and after the ousting of the Taliban in 2001. The Ministry of Education has also participated as an official partner (Sigsgaard 2009).

Community- and home-based education initiatives can also facilitate the expansion of educational services into places affected by conflict, which are often difficult to reach and cut off from population centers. The experience of Nepal’s community schools can provide some lessons for the delivery of educational services amidst armed conflict (Box 5).

#### **Box 5 Improving Schooling despite Armed Conflict through Community Schools in Nepal**

The government of Nepal had managed schools in the country since 1971—with poor educational results on average and wide inequalities across wealth categories. In 2001, the nationwide literacy rate was 54 percent, and gross enrollment in primary schools ranged from 22 percent among the poorest fifth of households to 90 percent among the top fifth.

In 2001, the government amended the Education Act, renaming all government-funded schools as community schools. Communities were empowered to take over the management of public schools by applying formally to the government and putting together a school management committee consisting of parents and influential local citizens. The school management transfer option was available to all communities, and the transfer process was voluntary.

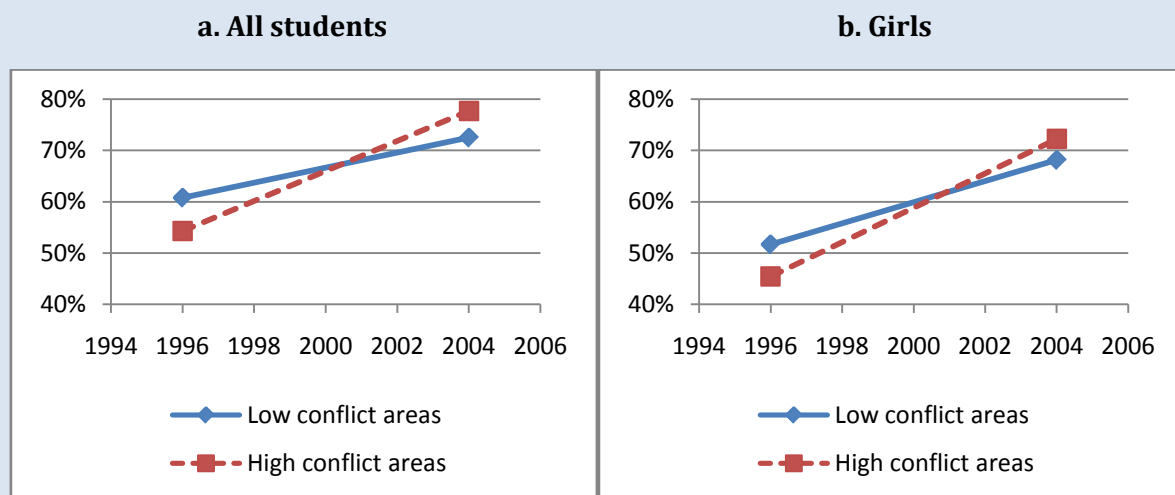
The process of transferring the management of schools to communities began in 2002. It accelerated after 2003, when the World Bank provided financial and technical support through the Community School Support Program (CSSP). The CSSP had four main components: incentive grants of \$1,500 in the year of transfer and performance grants for increasing enrollment and promotion rates; scholarships for children who were disadvantaged or had never been enrolled in school; training programs for teachers, community members, and supporting organizations; and monitoring and evaluation of strategies and interventions in recently transferred schools.

As of July 2010, more than 10,000 of Nepal’s 25,000 public schools had been transferred to community management. A rigorous randomized control trial compared a set of 40 treatment schools that had been encouraged to apply for a transfer of management with another 40 control schools that were not given any such encouragement. Communities whose schools came under community management as a result of this promotion scheme were found to have a smaller share of

out-of-school children, particularly among disadvantaged groups. These schools also had better grade progression rates and enhanced community participation and parental involvement. There were no significant differences in teacher absenteeism or student learning levels within the timeframe of the evaluation, however.

The experience in Nepal provides an example of an alternative service delivery mechanism that could be helpful in times of armed conflict. Community ownership (and the corresponding autonomy from the government) means that schools, students, teachers, and school management are in a better position to avoid altercations with the groups fighting in the war. In fact, progress in school enrollment in conflict-affected areas, where community schools were most prevalent, was more rapid than in the rest of the country. As a result, high-conflict areas had higher primary school enrollment rates than low-conflict areas by 2004. The increase in enrollment rates was particularly pronounced for girls, among whom enrollment rates increased 27 percentage points in high-conflict areas (Box figure 5.1).

**Box figure 5.1 Primary School Enrollment in Nepal among Children aged 6–10 (percent)**



Can Nepal’s experiment be generalized to other areas? Nepal’s government decided to transfer schools to community management not on the basis of objective data but because such management was already prevalent in many other areas, such as forestry conservation and small irrigation. Many schools already had functioning school management committees; it is not clear whether their functioning changed as a result of this new initiative. This history of community management may be absent in other settings, making Nepal’s experience more difficult to replicate.

*Source:* Chaudhury and Parajuli 2009; World Bank 2001, 2010b.

Distance education through television, video, and particularly radio is another way of working around security problems. According to the British Broadcasting Corporation (BBC), almost half of the Afghan population listens to its radio dramas every week, suggesting great potential to use this medium as an educational tool, raise awareness, and promote social cohesion.

## 6. THE ROLE OF THE PUBLIC SECTOR IN JOB CREATION

Because reforms to improve the business environment take time to bear fruit, labor market institutions, policies, and programs have an important role to play at the early post-conflict stage. DDR programs, public works, training programs, and policies to support self-employment and the informal sector play both an activation (promotion) and a safety net (protection) role. As discussed below, however, the design of these programs is more complex in conflict situations.

### A. DISARMAMENT, DEMOBILIZATION, AND REINTEGRATION PROGRAMS

The Disarmament, Demobilization, and Re-integration (DDR) of ex-combatants has become a key element of peace building in conflict-affected countries. DDR programs usually target ex-combatants, in three broad phases: disarmament (collecting and disposing of weapons); demobilization (disbanding military structures); and reintegration (the process of facilitating the return of former combatants to civilian life, the armed forces, or the police). The last phase is essentially an activation program. Reintegration packages—including vocational training, formal education, physical and mental health services, incentives for entrepreneurship, employment services, public works, and cash transfers—are at the heart of this phase (United Nations 2010).

DDR programs are underway in Afghanistan and Nepal. Afghanistan's \$141 million demobilization program, which ran from 2003 to 2005, demobilized 63,000 professional soldiers and 7,500 child soldiers. In the reintegration phase, 46 percent of ex-combatants attended vocational or small business training; 43 percent of ex-combatants opted to go into agriculture. The reintegration phase was to be completed in 2006 but was extended an additional two years after it was revealed that 56 percent of the total demobilized ex-combatants were earning less than a dollar a day (Carames and Sanz 2009). A new reintegration program directed at the entire affected community (not only the ex-combatants), the Afghanistan Peace and Reintegration Program, is now in place. No formal evaluation exists, but by mid-June 2011, 1700 former fighters had publically joined the program (ISAF, 2011). In Nepal nearly 20,000 members of the People's Liberation Army (PLA) have been demobilized, at a cost of about \$50 million.<sup>21</sup> These ex-combatants were to be gradually reintegrated into the national armed forces, but political disagreements have prevented this phase from being completed.<sup>22</sup>

DDR programs can be costly. In a global survey of programs in 19 countries, researchers found that the average cost per demobilized person was \$1,434—about 3.5 times per capita income in these countries (Carames and Sanz 2008). In Afghanistan and Nepal, programs have been more expensive, with costs per demobilized person of \$2,278 in Afghanistan and \$2,500 in Nepal. The disarmament and demobilization stages usually represent a small share of the budget (less than 10 percent); most of the spending goes toward reinsertion and reintegration. In this phase, ex-combatants who participate in the reintegration program often receive economic compensation to substitute for some of the income they would have earned by participating in violent activities. Afghanistan paid ex-combatants a total of \$990, on average, to participate (\$180-\$480 a month over a period of two to four months)—the second-highest payment in the world after Colombia (\$2,750). Nepal pays \$46 a month (the duration of the payments is not clear). DDRs may be unaffordable for many countries, especially when the conflict is nationwide.

Reintegration is the most difficult part of the DDR process. Providing relevant training and helping people find economic opportunities in or following a conflict is always difficult. This task is even harder in the case of ex-combatants. Reintegration is often about more than just finding new

income sources, as ex-combatants have also lost physical security, political influence, social networks, and prestige with the end of the conflict (Willibald 2006). Failure to address these losses may jeopardize the DDR process and peace more generally (box 6).

### **Box 6 Lessons from Efforts to Reintegrate Ugandan Youth**

In Uganda, a country affected by more than two decades of civil conflict, a group of researchers put together a program in the northern part of the country aimed at reintegrating youth. The program—the Survey of War Affected Youth (SWAY)—included an analysis of the needs and difficulties experienced by youth returning from the Lord Resistance Army (LRA), one of the main rebel groups in the country. It surveyed more than 1,000 households and 741 young men in 2005 and 2006 and 619 young women in 2007. The program focused on youth who lived in the areas of interest before the escalation of the violence in 1996 and who had recently returned after having been part of the LRA. As the LRA abducted/selected members randomly, outcomes for these youth could be compared with those of youth who were not selected or abducted to serve in LRA. The idea was to use the results of the survey to inform policy makers who were about to design a full DDR program for ex-combatants.

Assistance to youth in Northern Uganda took two main forms: reinsertion assistance and longer-term reintegration and development services. Reinsertion assistance included interim counseling, vocational training, basic health care, and a reinsertion package that comprised household items, agricultural tools, seeds, and an unconditional cash payment. Cash payments were provided not only to returnees but also to other families living in affected areas. Interventions included vocational training, cash, and assistance in starting small enterprises and psychosocial care.

Some of the lessons drawn by the team could be helpful in the design of other DDR programs in other parts of the world. Three findings deserve special attention:

- Catching up on missed education is a pressing need, requiring a strong focus on secondary school and adult literacy. There is a need to go beyond the usual focus on primary education.
- In part as a consequence of lost education and work experience, ex-combatants were less than half as likely as noncombatant peers to be engaged in a skilled trade or a business. Their earnings were about a third of those of youth who had not served in the LRA. The evidence suggests that cash was one of the most crucial inputs needed for new income-generating activities; even modest amounts of cash associated with the reinsertion package helped ex-combatants regenerate livelihoods. Interventions such as facilitation or business skills training could have important impacts on the effectiveness of these funds.
- Reinsertion packages for ex-combatants should be introduced in tandem with larger programs of support for all youth. The researchers in SWAY identified increased resentment and stigmatization on the part of people not receiving these benefits, making reintegration more difficult. Where cash disbursements are paid, it is crucial that they be designed to minimize the risks of stigmatization, resentment, misuse, and theft.

*Source: Annan and others 2007.*

The extensive use of cash transfers in the reintegration process illustrates some of the risks of such interventions. The effectiveness of the cash transfers is unclear a priori. On the one hand, to the extent that financing is the binding constraint, transfers could encourage compliance with

disarmament commitments and help restore livelihoods. On the other hand, transfers, especially in cash, could exacerbate the illicit arms markets and generate resentment in the community. The effectiveness of transfer programs is therefore likely to depend on available economic opportunities and the details of the implementation of the program, such as payment location, eligibility criteria, and targeting mechanisms.

Despite the prevalence of DDR programs in post-conflict environments, the individual and country-specific factors that lead to successful reintegration are still not well understood. In their study of the highly regarded DDR program in Sierra Leone, Humphreys and Weinstein (2007), find that it was of limited effectiveness in reintegrating more educated people, higher-ranking members of the rebel forces, and people who had been part of military units that had been most abusive of civilians. The fact that the effects of the program varied depending on the characteristics of the individuals calls for more detailed evaluations of DDR programs, allowing for heterogeneous effects across individuals.

International experience with DDR does suggest some lessons for improving the chances of successful reintegration or activation: (i) because DDR is a long process, a strong commitment to peace from all parties and sufficient financing—often from international donors—is crucial<sup>23</sup>; (ii) a strong training component seems to be critical. Such training is especially relevant in a country like Nepal, where the military is already large and there are few prospects for absorbing all of the demobilized ex-combatants into it or the police forces; (iii) public employment is likely to play an important role for ex-combatants, who often lack employable skills and are cut off from social networks; (iv) in certain cases, the private sector can also be a useful partner, as it has been in Colombia, where public-private partnerships have created more than 1,800 jobs for internally displaced people (Box 7). This experience can be extended to ex-combatants.<sup>24</sup>

#### **Box 7 Training and Employing Displaced Populations: The Case of Asocolflores in Colombia**

Colombia has suffered from violence for more than two decades. The primary sources of violence are conflicts among the government; right-wing paramilitary groups, such as the Revolutionary Armed Forces of Colombia (FARC); and left-leaning guerillas. By 2008, 2.65–4.36 million people had been displaced by the conflict, the second-largest population of displaced people in the world (after Sudan). A disproportionate number of the displaced are Afro-Colombians or members of indigenous tribal groups, who have low levels of literacy and numeracy.

Colombia is also the second-largest exporter of cut flowers in the world. In 2006, 70 percent of all roses and 97 percent of the carnations sold in the United States came from Colombia. In 2003, the Colombian Association of Flower Exporters (Asocolflores) established a school of floriculture to enable people displaced by the conflict to find work. It developed a nine-month training course, focused on cultivating, harvesting, grading, and packing flowers. This course was followed by a four-month work period on flower farms, after which participants found permanent employment in the fast-growing flower industry. The program was funded by Asocolflores and flower farmers; it also received funds and technical support from the U.S. Agency for International Development (USAID) and the Pan-American Development Fund (PADF). Participants were provided with a stipend, lodging, and psychological support to help them recover from displacement. By 2008, with an investment of \$1.8 million, the school had benefited more than 1,631 families.

A key lesson from the Colombian experience is that the private sector, supported by public funds, can be a useful source of training and jobs for displaced populations. This is especially true of fast-growing industries that employ unskilled labor.

Source: Caycedo and Mendoza 2008; IDMC 2009; PADF 2008; USAID 2006.

## B. PUBLIC WORKS PROGRAMS

Public works programs are often implemented in non-conflict situations.<sup>25</sup> In an analysis of 102 communities in countries affected by conflict in 2005, researchers found that 44 percent of conflict-affected communities had at least one public works project (World Bank 2010a). These programs have many features that make them well-suited for conflict situations:<sup>26</sup>

- (i) The workforce in conflict and post-conflict areas are more likely to be in rural areas, where agriculture is the primary source of income. Most workfare programs target rural areas and involve the building or rehabilitating of community infrastructure, which is likely to increase the productivity of the agricultural sector and rural nonfarm activities.
- (ii) People in conflict areas have lower levels of education than people in non-conflict areas. Workfare programs are useful in these conditions, because they provide work for unskilled workers (some programs also provide additional vocational training).
- (iii) People in conflict and post-conflict areas are more likely to work in informal jobs, which provide little or no social protection. By instituting a workfare program, governments can provide de facto unemployment insurance.
- (iv) Conflict and post-conflict areas are characterized by mobile populations. Workfare programs, along with a traditional resettlement campaign, can help ease the transition of internally displaced people to their places of origin by providing them with temporary employment and guaranteed income for a period of time.

Implementing a public work program in conflict and post-conflict situations poses certain challenges, however:

- (i) Security is a major concern. In most cases, workfare programs can proceed only when there is sufficient order to provide a secure work environment and transportation to work sites, especially for women. Land mines and other conflict-induced hazards must be removed before a workfare program can begin.
- (ii) Most workfare programs use the wage rate as a targeting device, setting it at a level that is high enough to induce people to participate in the program and low enough to attract only the very poor. In conflict-affected areas, setting an appropriate wage can be difficult if private labor markets have not functioned for some time. In such situations, practitioners must be creative. In Sierra Leone, for example, pre-conflict household survey data, along with monthly price data on staple foods and fish, were used to come up with a wage estimate.
- (iii) Some communities may be so destroyed that the scope of public works may be broader than usual. In such communities, it could be desirable to include the rebuilding of private homes as part of the workfare program, as was done in Sri Lanka.
- (iv) Ex-combatants may not be able to work with other members of society, given the animosities generated during the conflict. Fearing reprisals, many ex-combatants in Sierra Leone did not wish to return to their villages, where a workfare program had been established. The solution was to allow such people to work in the workfare program set up in the capital.

Sri Lanka's public works program overcame some of these problems (see Box 8 for details).



### **Box 8 Implementing Public Works in a Post-conflict Environment: Sri Lanka's Northern Emergency Recovery Project**

The decades-long conflict between the Liberation Tigers of Tamil Eelam (LTTE) and the Sri Lanka government ended in May 2009. The conflict had led to the destruction of social and economic infrastructure and the displacement of hundreds of thousands of people from the five northern districts of Jaffna, Kilinochchi, Mannar, Mullaitivu, and Vavuniya. As part of its resettlement plan, the government established a cash-for-work program to repair community infrastructure and provide returning internally displaced populations with short-term income support.

Community leaders and project officers of the five districts identified projects. Community members mobilized returning households to form community cash-for-work committees, which identified projects of immediate need for the communities. Projects included debris removal and land clearance, well restoration and construction, small-scale irrigation, canal rehabilitation, small road rehabilitation and repairs, classroom rehabilitation, health clinic repairs and rehabilitation, and repair and construction of community drinking water facilities. A maximum of three adults (including the head of household) from each returning household were eligible to participate in the program, with only one member allowed to participate on a given day. This feature of the program was included to encourage participants to seek other work.

In order to encourage only the very poor to self-select into the program, the wage rate was set at 15 percent below the market rate for unskilled labor for the district. The market wage was established by a (district) wage-fixing committee that included representatives of the government (who consulted the private sector), NGOs, and donors.

Participants could work for a total of 50 days. Given that the vast majority of internally displaced people returned to homesteads that had been severely damaged during the conflict, participants were allowed to work on their own homes during the first 10 days. The rationale was that they would not be able to work well in the workfare program or in any other job if their homes remained in disrepair. Repairing one's own home also increased the sense of revival and confidence in the future.

By 2010, about 275,000 internally displaced people had returned to their villages; participants in the program worked more than 380,000 person-days, repairing 1,500 kilometers of roads and 145 wells, and cleaning more than 900 hectares of public spaces.

*Source:* Government of Sri Lanka 2010.

## **C. TRAINING**

The considerably lower skills base of the workforce in conflict affected areas means that reskilling of the workforce—with an emphasis on promoting literacy, noncognitive skills, and practical skills—is key for postconflict recovery. Given the large informal sectors in conflict affected areas, a discussion on training programs for informal workers is also relevant here.

Public work and DDR programs often include training components, which attempt to cater to the diverse training needs of the target groups. In the Afghanistan Peace and Reintegration Program, for instance, training includes not only literacy skills but also practical training in farming, farm equipment maintenance, nursery establishment and management, watershed management, road building and maintenance, and basic electrical work and plumbing.

Initially the government takes the lead, often in partnership with international aid organizations and non-government organizations. Over time, the private sector can play an important role, particularly as it is more likely to provide job-related training and an employment pathway for trained workers (Box 7).

The difficulty of providing education and training in conflict-affected areas is compounded by extensive migration and displacement. The usual approach is to wait for people to come back to their homes, as evidenced by the common reallocation packages offered in post-conflict situations. Sometimes, however, people do not have the right opportunities at home. Following the ceasefire in Sri Lanka, for example, unemployment rates increased significantly for the most educated (especially people had recently moved back) in the Northern and Eastern provinces. With unemployment at 29 percent, this group became the most likely to be unemployed in the conflict-affected areas—a change from conflict times (World Bank 2007).

#### D. SUPPORTING SELF-EMPLOYMENT AND THE INFORMAL SECTOR

Another important policy area refers to interventions that seek to support self-employment and microenterprise development to help informal sector workers improve their potential for generating income. Particularly relevant are microfinance, the strengthening of business supply chains, and business training in fostering entrepreneurship in the informal sector (World Bank 2011a). It is important to recognize, however, that the presence of a large mobile population, security risks, malfunctioning product and input markets, and the erosion of trust in the community make microcredit and related operations particularly challenging in conflict-affected areas.

One example of a program that tries to tackle these issues in a post-conflict environment is the Nepal Poverty Alleviation Fund (PAF), which seeks to promote entrepreneurship through its income-generating component. PAF provides loans, complemented with funds for infrastructure needed to better link products to markets.<sup>27</sup>

Initiatives directed at bringing producers and markets together—such as initiatives in Kosovo and Rwanda in the tourism, coffee, and dairy industries—could also bring early results (World Bank 2011a). As with other interventions, programs directed at supporting self-employment need to be further evaluated in order to allow more specific lessons to be drawn on what works, when, and where.<sup>28</sup>

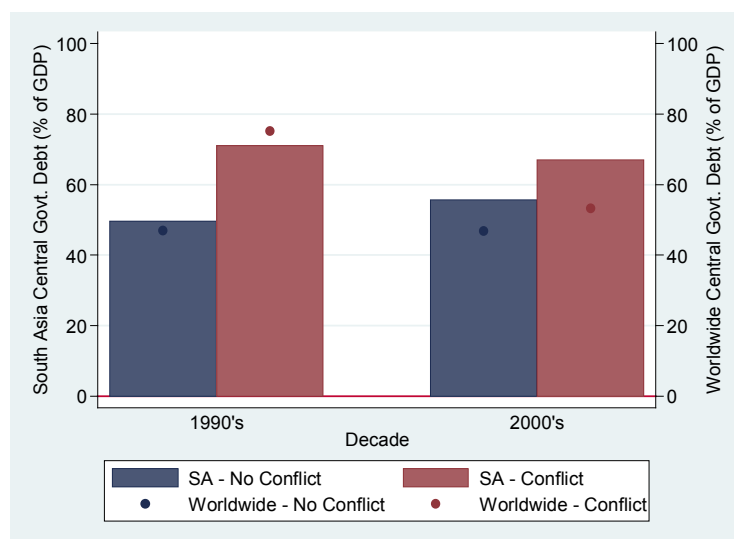
#### E. FISCAL AND CAPACITY CONSTRAINTS TO PUBLIC EMPLOYMENT PROGRAMS

Employment policies programs can be costly – a reflection of the design needs as well as the scale of the interventions. The potential for providing public jobs and implementing employment programs will be limited by the considerably higher fiscal and capacity constraints in conflict environments. Most conflict-affected areas lack governments with sufficient fiscal resources or capacity to administer large bureaucracies or public employment programs. Both of these constraints are likely to be particularly severe in cases of nationwide conflict.

Conflict-affected countries often have high levels of indebtedness (Figure 13), low tax revenues, and high dependency on foreign aid. Tax revenues are low across South Asia, especially in Afghanistan

(6 percent of GDP) and Pakistan (10 percent of GDP) (World Bank 2011b). Moreover, the military takes up a large share of central government expenditures in South Asia, estimated at 10 percent in Afghanistan and Bangladesh, 15 percent in India and Sri Lanka, and 18 percent in Pakistan, compared with 3.2 percent of GDP in conflict-affected countries worldwide (World Bank 2011b).

**Figure 13 Central Government Debt as a Percent of GDP in Conflict and Non-Conflict Countries, 1990–2009**



*Source:* Authors, based on data from World Bank 2011b and PRIO-UCDP conflict database.

*Note:* Differences between conflict and non-conflict are significant at the 5 percent level. A country is considered to be in conflict in a given year if it experienced 25 or more battle deaths from confrontations between the military forces of two parties, at least one of which is the government of a state. Results do not change if India is excluded from the analysis.

These fiscal constraints and the considerable capacity constraints in conflict environments suggest an important role for international organizations and foreign governments in funding and capacity building. A risk, however, is that post-conflict countries become highly dependent on foreign aid, especially when the conflict is nationwide. In Afghanistan, for example, official development assistance represented 45.8 percent of gross national income in 2008 (World Bank 2011b). This dependency on foreign aid may pose risks to post-conflict recovery by crowding out domestic resource mobilization, making unsustainable expenditure commitments, and raising the exchange rate (Boyce 2007). Moreover, international aid declines significantly after the initial post-conflict period (Chen, Loayza, and Reynal-Querol 2007), before local revenue sources have recovered sufficiently. Some post-conflict areas also depend heavily on international organizations and NGOs for well-paid jobs, which could further distort labor markets.<sup>29</sup>

Despite these caveats, international organizations have an important role to play— especially in the short term, by ensuring that local firms have the opportunity to participate in aid-financed tenders (in the logistics and construction sectors, for example). The “Afghan First” initiative by the North Atlantic Treaty Organization (NATO) is a promising example of how to build capacity and increase participation of local firms in conflict-affected areas.<sup>30</sup>

## 7. A JOBS TRANSITION PATH IN CONFLICT ZONES

Job-related interventions need to be sequenced depending on the stage and the type of the conflict. The constraints to job creation vary depending on whether the conflict is ongoing or over, nationwide or localized. These constraints will determine the design of all labor market programs discussed in this paper, from public works and microcredit programs to changes in regulation and the provision of basic services, including education and infrastructure.

Security is a key determinant of the sustainability and desirability of investment in conflict-affected areas. Insecurity is a continuum: even post-conflict situations experience a certain degree of violence. A minimum level of security is needed before certain investments can be made in conflict-affected areas; achieving security is likely to drive the sequencing of interventions.<sup>31</sup> There is little private investment in conflict-affected areas, and opportunities for wage employment are restricted. Large infrastructure projects or other fixed investments may not be feasible in areas where violence and insecurity are still rampant; innovative interventions that try to maintain human capital may represent a better investment.

Once a minimum level of security is achieved, job creation efforts in conflict zones need to undergo three major types of transitions: from the public sector as the key provider of jobs to a greater role for the private sector, from low-skilled agricultural jobs to higher-productivity nonfarm jobs, and from targeted programs to broad-based job creation. Table 3 summarizes these transitions.

**Table 3 Labor Market Transitions in Post-conflict Zones**

<i>Key question</i>	<i>Constraints/concerns</i>	<i>Job transition path</i>	
		<i>From</i>	<i>To</i>
Who creates jobs?	Security, infrastructure, poor regulations, fiscal constraints	Public sector, international organizations	Private sector, public-private partnerships
What jobs are created?	Security, rural, unskilled work force	Agricultural, unskilled, casual	Nonfarm, skilled, regular wage
For whom to create jobs?	Vulnerable populations (ex-combatants, youth at risk, war victims)	Targeted programs	Broad-based job creation

Source: Authors.

### A. WHO CREATES JOBS?

Given the constraints on private business, the public sector is often the main creator of jobs initially after conflict. However, direct public employment should be only a transition strategy. Fiscal conditions, efficiency considerations, and potential unintended adverse effects of public employment (such as corruption and politicization of jobs) all caution against maintaining the state

as a long-term provider of jobs. Given these concerns, policy makers need to develop a strategy for transitioning to a greater role for the private sector.

## B. WHAT JOBS TO CREATE?

In the initial stages, it is natural that jobs be created in the agricultural sector, where the bulk of workforce is already involved in conflict-affected areas, as well as in other unskilled sectors. Sectors such as construction, which have the potential to employ local unskilled labor and help in post-conflict rebuilding, should be encouraged through public works and training in needed skills. The Pakistan postcrisis needs assessment identified construction as the sector with the greatest immediate potential for job generation in the conflict-affected areas. Yet, key sectors are often not prioritized, especially in view of the need for quick gains. In the worldwide community surveys conducted as part of the *Moving out of Poverty* series (World Bank 2010a), for example, only 16 percent of the conflict-affected communities reported receiving assistance with agriculture and only 7 percent benefited from a finance/credit project.

The transition plan should seek to move workers toward higher-productivity jobs, which will pay more and result in greater welfare improvements. Initial steps toward doing so can include making the agricultural sector more productive, by, for example, providing better inputs, such as improved seeds and fertilizer; storage facilities; creating functioning local markets; and rebuilding transport and communication networks to access more distant markets. Longer-term transition plans could include retraining the workforce to participate in manufacturing or services, as well as facilitating the growth of firms in nonfarm sectors. These measures are likely to create more jobs that pay regular wages or salaries. The private sector can be involved through public-private partnerships, for example.

## C. FOR WHOM TO CREATE JOBS?

In the early stages of the conflict, policy interventions should be directed at managing the risks of renewed conflict and addressing the lack economic opportunities for the vulnerable. Without offering credible economic alternatives to people involved in the fighting, an end to the violence is unlikely. Job creation can play an important role in helping address the concerns and grievances that led to the conflict, which is fundamental in buttressing confidence in the peace process.<sup>32</sup> The case of Nepal holds important lessons and illustrates the important of addressing such concerns: persisting disagreements in terms of how to integrate ex-combatants have left the country political unstable almost five years after the peace agreement.

Job creation efforts in conflict-affected areas have to deal with three types of populations with special needs. The first is ex-combatants, who need to be integrated into the civilian or military workforce and be given incentives to refrain from violence. The second is at-risk youth and war victims. This group includes families who have lost some of their members; people with physical or mental disabilities; and households that are extremely vulnerable because they have no steady streams of income. The third is people displaced by the conflict, who may wish to return to their homes but need to be able to find jobs and feel secure there.

Targeting is difficult in conflict-affected areas. Identifying beneficiaries and locating them often proves difficult. One way to overcome these problems can be target programs for specific areas rather than specific people, thereby allowing self-selection to determine who receives the benefits. This is the approach followed in Afghanistan, for example, under the Peace and Reintegration

Program, the current (Islamic Republic of Afghanistan 2010). Over the longer term, broad-based job creation is needed in these areas. To work toward this goal, government can operate targeted programs for a limited time while encouraging the growth of other activities and firms to provide a broader set of jobs. Table 4 summarizes some policies that can be implemented at each step of this transition process.

**Table 4 Policy Interventions in the Initial Post-conflict Stages**

<i>Goal</i>	<i>Possible interventions</i>
Create some jobs quickly	Set up labor-intensive public works, especially in rural areas
	Create employment agencies where needed
	Respond to the needs of the displaced and internally mobile by creating job opportunities outside the areas directly affected by conflict
	Distribute tools and inputs for farming and construction, starting with rehabilitation of people's own houses
Promote agriculture and other informal sector activities, such as construction and self-employment	Rehabilitate complementary infrastructure needed not for production and getting products to market. This intervention should be combined with appropriate business services.
	Provide credit, funds, and training to foster entrepreneurship (microcredit, cash transfers to start businesses, business development training).
Create the base for better jobs by improving workers' skills	Focus on progressively getting children back to school and providing practical training and literacy courses for youth and adults using existing networks, community initiatives, and NGOs when available
	Address security concerns related to accessing schools or training, especially for girls (through mobile schools, community involvement in security).
	Focus on the needs of displaced people and internal migrants, allowing for reskilling outside of the areas directly affected by conflict.
Improve the investment climate	Create "safe" zones that provide better regulation, services, and security.
	Tap into innovative source of financing, such as diaspora bonds, as well as innovative forms of guarantees for foreign direct investment.
	Establish investment information centers that match interested foreign investors with potential local partners.
	Create links between firms and local communities to ensure sustainability and profitability of enterprises.
	Improve the overall business environment by simplifying regulations and facilitating required processes for business' entry and exit.

Source: Authors.

Because of the violent nature of conflict, the impacts of policy interventions in conflict or postconflict environments have rarely been rigorously analyzed. As a result, there is no large body of evidence for policy makers to draw upon.<sup>33</sup> Some evidence on World Bank projects suggests that urban development projects are most likely to succeed in post-conflict environments, whereas private sector development projects need a longer time horizon for success (Chauvet, Collier, and Duponchel 2010). The quality of supervision is also an important determinant of project success (Chauvet, Collier, and Duponchel 2010), but the evidence remains limited. Piloting some interventions and progressively expanding programs could help shed light on program

effectiveness. In many conflicts, governments do not regain control of all conflict areas at the same time. Starting the piloting of labor market programs and policies in areas where control has been restored and then scaling up to the rest of the conflict-affected areas can improve policy results. The National Solidarity Program in Afghanistan is a case in point: the program was piloted in locations where violence was less pronounced before being progressively extended to the rest of the country. In Sri Lanka, many of the labor market and development programs the government is planning for the Northern Province were first piloted in the Eastern Province.

In short, the employment challenge in conflict-affected areas is larger than just creating jobs. It concerns the fundamental problem of establishing functioning economies, creating occupations different from those that existed in the war economy, promoting growth, generating government revenue, and addressing some of the underlying economic and social grievances that may have led to the armed conflict in the first place and could reinitiate violence if not addressed. There are examples of promising interventions, but achieving these goals is likely to take a long time.

## **Annex A Definitions of High-Conflict and Low-Conflict Regions in South Asian Countries**

### ***Afghanistan***

Classification is at the province level. High-conflict provinces are defined as provinces in which the number of deaths per 1,000 population caused by terrorist incidents in 2007 was greater than 0.1. By this definition, among Afghanistan's provinces, 15 are in high-conflict areas (Baghlan, Ghazni, Farah, Helmand, Kandahar, Khost, Kunarha, Nimroz, Paktika, Paktya, Panjsher, Takhar, Urozgan, Wardak and Zabul) areas. (Data on terrorism deaths was obtained from the National Counterterrorism Center 2008.)

### ***India***

Classification is at the state level. Low-conflict states are those that recorded no conflict-related fatalities in 2000 or 2007. High-conflict states are those that transitioned to a state of conflict within this period—that is, states that recorded no casualties in 2000 but did record conflict-related casualties in 2007. This means that states that did have conflict at the start in 2000 for the sake of comparison are excluded in this analysis. By this definition, 10 states are in high-conflict areas (Bihar, Chhattisgarh, Jharkhand, Karnataka, Maharashtra, Meghalaya, Nagaland, Orissa, Uttar Pradesh, and West Bengal). Conflict-related fatalities are based on data from the RAND-MIPT Terrorism Database, collected by the National Memorial Institute for the Prevention of Terrorism (MIPT), in collaboration with the National Counterterrorism Center (NCTC). Data is available for the period January 1998–April 2007.

### ***Nepal***

Classification is at the district level. High-conflict districts are those in which the number of conflict deaths per 1,000 population in 2004 is greater than the median; low-conflict districts are those in which the number of conflict deaths per 1,000 population is less than the median level of 0.67. The time period considered was the duration of the Nepal conflict (1996–2004, two years before the end of the conflict). By this definition, half of Nepal's 36 districts are classified as high-conflict areas (Achham, Arghakhanchi, Bajura, Banke, Bardiya, Bhojpur, Dadeldhura, Dailekh, Dang, Dhading, Dolakha, Dolpa, Doti, Gorkha, Humla, Jajarkot, Jumla, Kailali, Kalikot, Kanchanpur, Kavrepalanchok, Lamjung, Mugu, Myagdi, Nuwakot, Okhaldhunga, Ramechhap, Rolpa, Rukum, Salyan, Sankhuwasabha, Sindhuli, Sindhupalchok, Solukhumbu, Surkhet and Taplejung). Data on conflict deaths were obtained from the annual *Human Rights Yearbooks* published by the Informal Sector Service Centre (INSEC), an NGO based in Kathmandu.

### ***Sri Lanka***

Classification is at the province level. The Northern Province was not included in the analysis because of lack of data. The Eastern Province is classified as high conflict; all other provinces are classified as low conflict. The analysis for Sri Lanka should be interpreted with caution, however, as the data reflect almost two decades of conflict. In addition, the analysis for Sri Lanka differs from that of other countries in that conflict-affected regions are moving from conflict to peace.



## Annex B Labor Market Characteristics and Educational Attainment in High-Conflict and Low-Conflict Areas in South Asia

**Table B.1 Labor Market Characteristics in High-Conflict and Low-Conflict Areas of South Asia**

AFGHANISTAN	2008			
	Low-conflict areas	High-conflict areas	Difference-in-difference	Difference-in-difference (rural)
Percent working age population employed	55.67	68.37	12.705***	9.192***
Male	76.09	81.08	4.984***	
Female	35.49	54.76	19.273***	
Unemployment rate	1.96	0.66	-1.305***	-1.008***
Male	2.82	0.83	-1.989***	
Female	1.12	0.47	-0.644***	
Labor Force Participation Rate	57.63	69.03	11.400***	8.184***
Male	78.91	81.90	2.995***	
Female	36.60	55.23	18.629***	
Percent workers in urban areas	21.77	5.29	-16.481***	
Percent workers by sector of employment				
Agriculture	51.46	70.50	19.038***	9.698***
Manufacturing	6.62	1.43	-5.191***	-4.742***
Construction	9.43	4.90	-4.532***	-4.469***
Commerce	12.65	8.45	-4.195***	-0.502*
Transportation	3.13	2.94	-0.183	0.902***
Public Administration	4.87	2.21	-2.664***	-0.440***
Percent workers by type of employment				
Regular Wage and Salaried	11.92	4.24	-7.673***	-2.966***
Casual	16.05	10.33	-5.719***	-7.371***
Informal	89.09	96.26	7.170***	1.872***
Employer	0.56	0.39	-0.176**	-0.230***
Self-employment	42.98	44.97	1.986***	3.346***
Unpaid family worker	28.46	40.05	11.590***	7.232***

*Note:* The “difference” column indicates the difference in 2008 labor market characteristics between households residing in high-conflict areas and those in low-conflict areas, as defined in Annex 1. The “difference (rural)” columns computes the same difference, but excluding households in urban areas.

\*\*\*, \*\* and \* indicate that the differences are statistically significant at 1%, 5% and 10% levels respectively.

INDIA	2000		2007		Difference-in-difference	Difference-in-difference (rural)
	Low-conflict areas	High-conflict areas	Low-conflict areas	High-conflict areas		
Percent working age population employed	60.75	55.98	58.25	54.37	0.896**	1.118**
Male	81.00	81.17	80.74	80.88	-0.033	
Female	40.01	29.81	35.36	27.17	2.011***	
Unemployment rate	2.23	2.24	2.11	2.09	-0.024***	0.034***
Male	3.10	3.59	3.09	3.31	-0.260***	
Female	1.34	0.85	1.11	0.83	0.228***	
Labor Force Participation Rate	62.99	58.22	60.352	56.46	0.871***	1.153***
Male	84.11	84.76	83.83	84.19	-0.293***	
Female	41.35	30.65	36.467	28.00	2.238***	
Percent workers in urban areas	24.05	21.45	27.87	22.36	-2.902***	
Percent workers by sector of employment						
Agriculture	58.18	61.35	50.18	56.38	3.027***	2.327***
Manufacturing	11.20	10.65	13.79	11.27	-1.960***	-0.525
Construction	5.71	4.08	8.81	6.46	-0.717***	-1.133***
Commerce	10.77	10.62	11.19	10.66	-0.381	0.061
Transportation	3.84	3.69	4.95	4.40	-0.397*	-0.516**
Public Administration	2.79	2.38	1.86	1.97	0.515***	0.010
Percent workers by type of employment						
Regular Wage and Salaried	15.94	13.70	18.94	14.83	-1.865***	-1.312***
Casual	30.73	31.45	29.34	30.55	0.491***	-0.259
Informal	86.37	87.94	91.27	92.07	-0.762**	-1.033***
Employer	1.03	0.60	1.44	0.96	-0.053	-0.265**
Self-employment	29.61	32.71	30.90	32.92	-1.086**	-1.010*
Unpaid family worker	22.69	21.53	19.38	20.73	2.514***	2.846***

Note: The “difference-in-difference” column indicates the difference in labor market trends between households residing in high-conflict areas and those in low-conflict areas between 2000 (where there was no conflict in any of the areas considered here) and 2007 (where only the conflict group was in conflict). This is computed as: (Outcome in high-conflict areas in 2007 – Outcome in high-conflict areas in 2000) – (Outcome in low-conflict areas in 2007 – Outcome in low-conflict areas in 2000). High-conflict and low-conflict areas are defined in Annex 1. The “difference-in-difference (rural)” columns computes the same difference in trends, but excluding households in urban areas.

\*\*\*, \*\* and \* indicate that the differences are statistically significant at 1%, 5% and 10% levels respectively.

NEPAL	1996		2004		Difference-in-difference	Difference-in-difference (rural)
	Low-conflict areas	High-conflict areas	Low-conflict areas	High-conflict areas		
Percent working age population employed	73.84	81.92	75.91	86.34	2.352*	0.588
Male	79.16	86.26	83.41	89.50	-1.010	
Female	69.07	78.09	69.59	83.83	5.222***	
Unemployment rate	1.68	1.71	2.32	1.17	-1.181***	-0.788**
Male	2.68	2.23	3.16	1.89	-0.819	
Female	0.79	1.25	1.62	0.59	-1.484***	
Labor Force Participation Rate	75.52	83.62	78.24	87.51	1.172	-0.200
Male	81.84	88.49	86.56	91.39	-1.829	
Female	69.87	79.34	71.21	84.42	3.738**	
Percent workers in urban areas	7.34	2.31	17.40	6.16	-6.213***	
Percent workers by sector of employment						
Agriculture	77.79	87.16	72.67	84.76	2.726**	-1.946
Manufacturing	4.52	2.65	7.56	3.08	-2.619***	-1.151*
Construction	2.47	2.57	2.99	2.84	-0.247	0.265
Commerce	7.45	3.00	7.30	3.02	0.161	1.267*
Transportation	1.21	0.58	1.64	0.49	-0.521*	-0.530*
Public Administration	0.62	0.21	0.76	0.23	-0.121	0.183
Percent workers by type of employment						
Regular Wage & salaried	7.66	4.80	8.91	3.89	-2.167***	0.485
Casual	17.86	11.66	16.30	7.02	-3.084***	-3.835***
Informal Unpaid family worker	92.25	95.75	90.79	95.98	1.685**	-0.831
worker	49.35	57.22	47.78	60.08	4.420**	3.048*

*Note:* The “difference-in-difference” column indicates the difference in labor market trends between households residing in high-conflict areas and those in low-conflict areas between 1996 (before the conflict) and 2004 (in conflict). This is computed as: (Outcome in high-conflict areas in 2004 – Outcome in high-conflict areas in 1996) – (Outcome in low-conflict areas in 2004 – Outcome in low-conflict areas in 1996). High-conflict and low-conflict areas are defined in Annex 1. The “difference-in-difference (rural)” columns computes the same difference in trends, but excluding households in urban areas.

\*\*\*, \*\* and \* indicate that the differences are statistically significant at 1%, 5% and 10% levels respectively.

SRI LANKA		2004		2008		Difference-in-difference	Difference-in-difference (rural)
		Low-conflict areas	High-conflict areas	Low-conflict areas	High-conflict areas		
Percent working age population employed		54.70	45.92	56.51	45.95	1.787	1.655
	Male	75.55	75.52	77.80	76.27	1.504	
	Female	34.96	19.74	37.60	18.99	3.384**	
Unemployment rate		4.73	5.35	3.32	4.03	-0.083	-0.084
	Male	4.79	5.68	3.15	4.01	0.032	
	Female	4.67	5.06	3.48	4.05	-0.180	
Labor Force Participation Rate		59.43	51.27	59.84	49.98	1.704	1.571
	Male	80.33	81.20	80.95	80.28	1.536	
	Female	39.64	24.80	41.08	23.03	3.204**	
Percent workers in urban areas		12.13	22.75	10.24	21.42	-0.558	
Percent workers by sector of employment							
	Agriculture	31.66	27.39	30.85	24.03	2.545	3.362*
	Manufacturing	18.58	11.75	19.21	12.66	-0.273	-1.876
	Construction	5.36	4.42	6.32	10.52	-5.148***	-5.303***
	Commerce	14.66	24.55	15.38	19.91	5.362***	5.024***
	Transportation	5.82	5.87	6.11	4.63	1.537*	1.750*
	Public Administration	7.38	9.34	6.78	10.80	-2.059*	-2.340*
Percent workers by type of employment							
	Regular Wage & salaried	37.64	26.59	27.18	20.27	-4.138**	-5.741***
	Casual	23.00	28.54	29.84	43.15	-7.758***	-9.203***
	Informal	81.24	79.10	71.13	75.99	-6.992***	-6.556***
	Employer	2.79	2.91	2.95	2.11	0.964	1.025
	Self-employment	27.27	31.50	29.25	29.42	4.065**	6.078***
	Unpaid family worker	9.31	10.45	10.78	5.05	6.868***	7.842***

*Note:* The “difference-in-difference” column indicates the difference in labor market trends between households residing in high-conflict areas and those in low-conflict areas between 2008 (after additional years of conflict, post-cease fire) and 2004 (during the cease fire).. This is computed as: (Outcome in high-conflict areas in 2004 – Outcome in high-conflict areas in 2008) – (Outcome in low-conflict areas in 2004 – Outcome in low-conflict areas in 2008).. High-conflict and low-conflict areas are defined in Annex 1. The “difference-in-difference (rural)” columns computes the same difference in trends, but excluding households in urban areas.

\*\*\*, \*\* and \* indicate that the differences are statistically significant at 1%, 5% and 10% levels respectively.

**Table B.2 Educational Attainment in High-Conflict and Low-Conflict Areas of South Asia, by Country**

(percent of working-age population)

<b>AFGHANISTAN</b>	<b>2008</b>		Difference	Difference (rural)		
	Low conflict areas	High conflict areas				
% working age population with						
No education	67.87	82.19	14.320***		4.500***	
Some primary school	8.74	4.32	-4.418***		-3.450***	
Completed primary school	10.04	6.73	-3.315***		-0.906***	
Lower secondary schooling	5.45	3.67	-1.786***		0.433***	
Upper secondary schooling	5.94	2.59	-3.340***		-0.346**	
Tertiary education	1.96	0.50	-1.460***		-0.231***	
<b>INDIA</b>	<b>2000</b>		<b>2007</b>		Difference-in-difference	Difference-in-difference (rural)
	Low conflict areas	High conflict areas	Low conflict areas	High conflict areas		
% working age population with						
No education	37.48	45.51	28.79	35.80	-1.017***	-1.563***
Some primary school	9.23	8.37	8.36	7.66	0.162	0.405
Completed primary school	13.92	10.06	15.30	13.53	2.094***	2.144***
Lower secondary schooling	28.08	25.67	31.70	29.49	0.202	0.500
Upper secondary schooling	10.85	9.90	8.96	7.54	-0.464*	-1.072***
Tertiary education	0.43	0.49	6.90	5.98	-0.975***	-0.414***
<b>NEPAL</b>	<b>1996</b>		<b>2004</b>		Difference-in-difference	Difference-in-difference (rural)
	Low conflict areas	High conflict areas	Low conflict areas	High conflict areas		
% working age population with						
No education	61.27	69.90	48.22	57.94	1.092	-2.343
Some primary school	7.90	10.49	9.46	11.71	-0.340	0.237
Completed primary school	12.69	10.25	13.98	13.93	2.387**	1.923*
Lower secondary schooling	15.58	8.43	22.89	14.69	-1.053	0.029
Upper secondary schooling	1.63	0.58	3.46	1.21	-1.214***	0.104
Tertiary education	0.93	0.34	1.99	0.53	-0.873***	0.051

SRI LANKA	2004		2008		Difference-in-difference	Difference-in-difference (rural)
	Low conflict areas	High conflict areas	Low conflict areas	High conflict areas		
% working age population with						
No education	4.79	7.56	3.13	5.28	0.626	0.145
Some primary school	14.99	22.73	8.36	13.24	2.853***	2.543**
Completed primary school	23.02	26.10	19.61	25.95	-3.260***	-4.847***
Lower secondary schooling	43.39	35.58	53.89	43.77	2.307*	2.833*
Upper secondary schooling	11.64	6.04	12.34	9.30	-2.549***	-0.381
Tertiary education	2.17	1.97	2.69	2.46	0.024	-0.293

*Source:* Authors' calculations based on household surveys and conflict data as described in Annex A.

*Note:* The "difference" column indicates the difference in labor market characteristics between households residing in high-conflict areas and households residing in low-conflict areas, as defined in annex A. The "difference (rural)" column computes the same difference in rural areas only. The "difference-in-difference" column is calculated as in Annex B, Table B.1. The "difference-in-difference (rural)" column computes the same difference in trends in rural areas only. n.a. Not applicable (only one year of data is available for Afghanistan). \*\*\* Significant at the 1% level; \*\* significant at the 5% level; \* significant at the 10% level.

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## Notes

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1. This paper focuses on internal armed conflict against the state. Although the civil wars in Nepal and Sri Lanka recently ended, both countries are included in the analysis, because many of the challenges addressed—and the policy options discussed—refer to postconflict areas. Moreover, a better understanding of the impact of conflict in these countries can provide insights for the rest of South Asia. With this in mind, throughout this paper the term *conflict-affected* is used to characterize areas that are either experiencing violence from internal armed conflict or recovering from armed conflict.
2. Many of the issues discussed in this paper could also be relevant for other types of disruptions, such as natural disasters.
3. Measuring the intensity of armed conflict is, of course, very difficult. Due to data limitations and for comparability reasons, the indicator of intensity used here is the number of direct deaths from armed conflict. Data sources and methodology are discussed in Annex 1.
4. External migration in all cases can also play an important role as a source of jobs for skilled and unskilled workers from conflict-affected countries, both during and after conflicts (World Bank 2011c).
5. This assumption is probably stronger in some cases than in others given that often times there were important differences in labor market indicators between conflict and non-conflict areas that pre-dated the conflict. Lack of appropriate data, however, prevented us from analyzing pre-conflict trends.
6. For India and Nepal, the earlier year is a year of peace; during the later year, there was conflict in certain areas of the countries. For Sri Lanka, the year of conflict is 2008; 2004 was a year of relative peace (the middle of a cease fire). The effect of a few additional years of violence is measured. In Afghanistan, where only one round of household survey data is available, the simple difference in outcomes for high-conflict and low-conflict areas are compared. In Pakistan household surveys do not provide good enough coverage of conflict-affected areas. The analysis therefore relies, when possible, on information from the recent postcrisis needs assessment report prepared for the FATA and NWFP (K-P) provinces in 2010.
7. Although establishing causality is difficult, there is also some evidence that lower economic growth and poor economic performance increase the likelihood of armed conflict. A very robust result in the cross-country literature on conflict is that poorer countries and countries with slower growth are at higher risk of experiencing civil war (Collier and Hoeffler 2004; Fearon and Laitin 2003). Using rainfall as an exogenous determinant of economic growth in Sub-Saharan Africa yields a similar result, suggesting that there is a causal relationship between a lack of economic growth and the incidence of conflict (Miguel, Satyanath, and Sergenti 2004). Within-country analyses also find a strong link between poverty and economic shocks on the one hand and the subsequent emergence of conflict on the other (see Dube and Vargas 2008 on Colombia; Do and Iyer 2010 on Nepal; and Iyer 2009 on South Asia).
8. In this study, definitions of poverty are based on subjective measures and a locally defined poverty line for each community. A “ladder of life” was used to determine who in the community qualifies as poor. During the ladder of life exercise the focus groups described the relevant steps or levels of overall well-being of households in their villages and identified those steps on the ladder on which households were in poverty. These focus groups then ranked up to 150 households in their village/neighborhood according to their step on the ladder of life, both now and in the past. The results of this ranking exercise produce a Community Mobility Matrix for each village that can be used to estimate the evolution of prosperity in the village, including the fraction of households

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that moved out of poverty, the fraction of households that had upward mobility of any kind, and the degree of all mobility (either up or down).

9. Smuggling and other illegal activities (such as poppy cultivation in Afghanistan) are also a major source of employment in many of the conflict-affected areas in the region. They are difficult to quantify. In 2005, for example, illegal opium revenues were estimated to reach nearly \$3 billion, equivalent to half of the legal economy of Afghanistan (UNODC 2005). Households in Afghanistan that cultivate poppy are significantly less likely to be poor (World Bank 2005).

10. Of course, the effects of conflict on the employment rate – as in other labor market indicators – is likely to vary depending on the context and the sub-groups of the population considered.

Similarly, the effects may also vary in the years following conflict. For example, a 2010 survey in North West Frontier Province (renamed Khyber Pakhtunkhwa in 2010) in Pakistan revealed that after the first wave of the militancy crisis in the areas receiving displaced populations (IDPs), women's movements were severely limited after IDPs arrived and they became actually less likely to work.

11. In India the difference in preconflict youth unemployment rates is not statistically significant.

12. Of course, with the possible exception of Sri Lanka, unemployment is not a very strong indicator of labor market conditions in South Asia, where few people can afford to be unemployed, making these trends difficult to interpret.

13. What look like worse labor market outcomes in conflict environments do not necessarily translate into lower average labor incomes. In Nepal the median household labor income per capita in low-conflict areas was already 1.5 times that of conflict-affected areas before the conflict; the conflict increased this gap to 1.7 by 2004. In contrast, in Afghanistan and Sri Lanka, labor incomes were higher in conflict-affected areas.

14. Following natural disasters, children's school enrollment often falls significantly as children join the labor force (Jacoby and Skoufias 1997; Jensen 2000; Santos 2007).

15. In India, Maldives, and Sri Lanka, firms were not asked about political instability. Surveys there referred to "government policy instability," which includes both macroeconomic and political instability. In Sri Lanka, however, government policy instability is the second most severe constraint; in the other countries, it is not among the top five constraints.

16. SEZs have become increasingly popular in the developing world: as of 2008 an estimated 3,000 SEZs in more than 130 countries had created more than 68 million direct jobs (FIAS 2008). In South Asia, Bangladesh, India, Nepal, Pakistan, and Sri Lanka all have SEZs. Afghanistan has no duty-free import zones or ports. It is considering establishing trade facilitation zones, export processing zones, or both to enhance export potential. Legislation before the U.S. Congress would establish special import tax status for certain categories of goods made in reconstruction opportunity zones (<http://www.state.gov/e/eeb/rls/othr/ics/2010/138776.htm>).

17. Even this figure for the north is likely to be an overestimate, as the survey could not cover the remote districts of Kilinochchi, Mannar, and Mullaitivu, where estimates suggest that up to 90 percent the households may not have power (World Bank 2007).

18. For more information on community-driven development projects in postconflict environments, see Barron (2010).

19. [http://www.clintonfoundation.org/haiti\\_longstanding/haiti\\_fact\\_sheet.php](http://www.clintonfoundation.org/haiti_longstanding/haiti_fact_sheet.php)

20. For a discussion of interventions to provide educational services to displaced populations, see Mooney and French (2005).

21. The program is not officially a DDR program but rather a "campment, UN monitoring, and reintegration" (CMR) program. In the long term, The goals of both programs are essentially the same (Gurung 2006)

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22. The Nepal Peace Project also includes activation programs to assist families.
  23. The review of DDR programs by Carames and Sanz (2009) finds that the disarmament and demobilization stages take about 16 months on average, ranging from 4 months in Angola to 27 months in Sierra Leone. The reintegration phase usually takes considerably longer, lasting two years, on average.
  24. For a more detailed discussion on the lessons learned from DDR programs, see Meek and Malan (2004).
  25. For a review of experiences with public work programs around the world, see Del Ninno, Subbarao, and Milazzo (2009).
  26. The authors are grateful to Ernest Sergenti (World Bank) for his contributions to this section.
  27. Poverty Alleviation Fund website ([www.pafnepal.org.np/index.php](http://www.pafnepal.org.np/index.php)).
  28. For a more detailed discussion of microfinance, cooperatives, and self-help groups in postconflict situations, see ILO (2003).
  29. In conflict-affected communities in Afghanistan, for example, employment by NGOs was rated as highly desirable, and households with NGO employee were rates as best off (World Bank 2010a).
  30. This program has not been rigorously evaluated but initial data from a capacity building project for local enterprises suggests that over the years Afghan companies (the ones supported by the project) were increasingly winning contracts. The increase has become steeper since the introduction of Afghan First in 2009. For more information, see: [http://www.nato.int/cps/en/SID-BF6A3963-402643FF/natolive/official\\_texts\\_62851.htm?mode=pressrelease](http://www.nato.int/cps/en/SID-BF6A3963-402643FF/natolive/official_texts_62851.htm?mode=pressrelease).
  31. Of course, the security situation itself can be influenced by policy—not only by direct security measures like policing but also by other interventions discussed in this paper.
  32. For instance, in countries in which ethnic differences were at the heart of the conflict, postconflict public work programs need to be careful not to favor one group over others. In cases where the conflict arose as a result of issues in the management and distribution of natural resources, such as forests, any postconflict job creation strategy needs to ensure that property rights are strengthened and that the rules of the game for the exploitation of the resources are clear and fair.
  33. Some notable exceptions are the ongoing impact evaluation of the National Solidarity Program in Afghanistan (Beath and others 2010) and ongoing work evaluating DDR programs and employment interventions in Uganda (Blattman and Fiala 2009).