

Moving and communicating across borders

chapter 8

Young people today live in a world integrated by faster movements across borders—movements of goods, capital, information, technology, ideas, and people. This chapter focuses on the two international movements in which youth play the most major roles: international migration and the spread of information and ideas through information and communication technologies (ICTs). Youth involvement in these two global movements can enhance growth and alleviate poverty. It can also broaden their opportunities, enhance their capabilities, and give them second chances when things go wrong in their many transitions.

Young people's opportunities widen when they can migrate to work abroad or use today's technologies to acquire new skills and get better jobs at home. More developing-country students are studying overseas and at home through online education programs. New interactive technologies are providing unprecedented amounts of information to youth, allowing them to become more informed decision makers and to communicate more with youth in other countries.

One problem is that young people in many developing countries have few legal options to migrate, leading to illegal migration and trafficking. A second is that the rapid expansion in mobile phone and ICT use has yet to reach many young workers. The challenge for policy is to extend the benefits of migration and ICTs to more developing country youth—and to enhance their development impact while mitigating the new risks.

Receiving countries can do more for poverty reduction and development by providing more opportunities for less-skilled young migrants—through seasonal and

temporary worker programs and by letting the youth who do migrate use and build their human capital. Sending countries can also do more to increase the development impact of youth migration. The benefits from existing young migrants can be increased—by lowering the costs of sending remittances and facilitating return migration. They can also expand the opportunities for other youth to migrate by avoiding hefty passport costs and restrictive legal conditions on emigration—and setting up more agreements for labor migration. And they can mitigate trafficking and illegality by providing more information on the risks of moving and living abroad and by implementing policies that foster more domestic opportunities for work.

A youth lens on ICTs suggests that governments need to pay more attention to particular types of regulations, in addition to their broad regulatory and competition policies. Communal access to new ICTs is more important for younger individuals than older, so regulations that allow easy entry for prepaid phone card operators, Internet cafés, and village phones can have large payoffs for youth. Policy makers should do more to use ICTs to communicate and interact with youth on government policy and to promote local language content. Policy makers also need to experiment with helping the first generation of youth using these new technologies to do so in a responsible and safe way, mitigating the risks of child pornography, cyber bullying, and other such dangers.

Youth and international migration

In 2005, an estimated 190 million of the world's people lived outside their country

of birth, 49.6 percent of them women, 50.4 percent men.¹ Of the world's migrants, 82 percent come from developing countries, with Bangladesh, China, India, Mexico, Russia, and Ukraine sending the largest numbers.² Small island countries have the largest proportions of migrants (box 8.1).

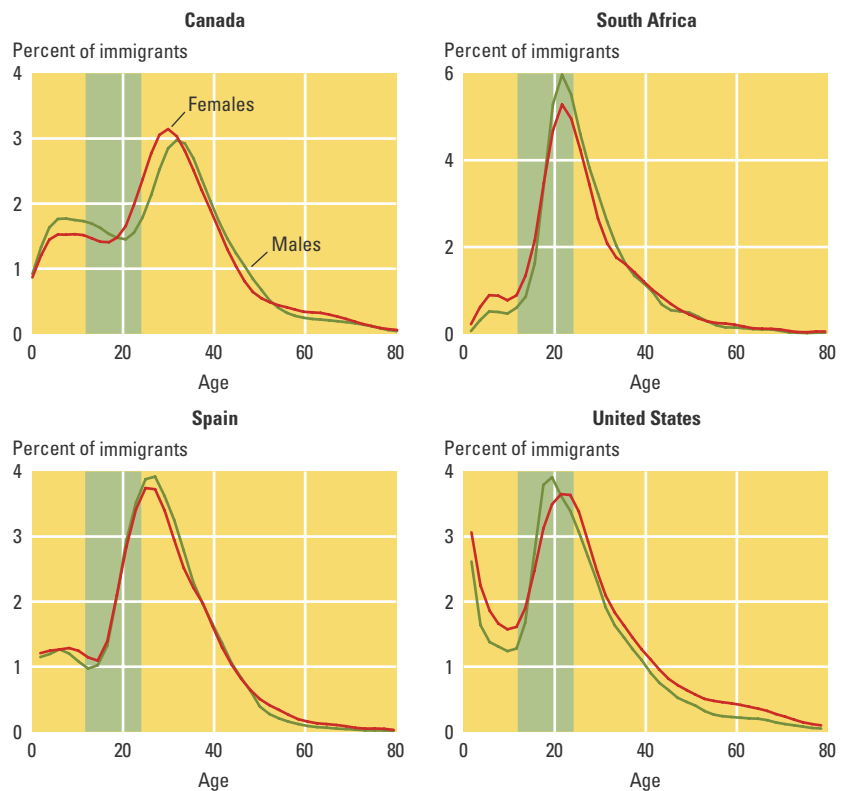
New analysis for this Report shows the propensity to migrate increasing over the teenage years, peaking in the early twenties in many destination countries, such as Spain and the United States (figure 8.1). Migrants to developing countries, such as South Africa, are more heavily concentrated among youth. Countries with very skill-intensive immigration criteria, such as Canada, receive fewer youth migrants. Twelve- to fourteen-year-olds are less likely to migrate to developed countries than younger children, who are more likely to be accompanying their parents.

Young people make up a higher proportion of the flow of international migrants than the stock (table 8.1). Thus, the average youth immigrant is much more likely to have recently arrived in the host country than older migrants. The proportion of youth migrants varies across destination countries, ranging from a low of 17–20 percent of the flow into Canada and Russia to a high of 50 percent of Nicaraguans migrating to Costa Rica and women migrating to Côte d'Ivoire. Less age-specific information is available on refugees, but youth are also a large share of asylum seekers in some countries.³ Overall, about a third of the migrants from developing countries are youths, perhaps 20–25 percent of the stock. Broadening the definition of youth to also include 25- to 29-year-olds gives them half the migrant flow and a third of the stock. Based on these patterns, 32–39 million youth migrants are from developing countries.

Youths are more likely to migrate because of individual, family, and community factors

Why are people most likely to migrate when young? The classic economic explanation is that migration is an investment, requiring individuals to incur costs to generate the

Figure 8.1 Young people add disproportionately to the flow of developing country migrants



Source: McKenzie (2006a).

Note: Shaded portions indicate the 12–24 age range. Height of each curve represents percent of the flow of total migrants into the country who are of a given age.

return from higher incomes.⁴ Young people are likely to face lower costs in moving and have higher lifetime returns. Expected returns can be higher because they have more of their human capital in education than in job-specific skills than do older workers—and longer working lives. The forgone earnings from migrating are also likely to be lower for youth, especially in countries with high levels of youth unemployment and strict seniority rules that reduce wages more for the young.

While the motive for migrating for work may be greater for the young, policy conditions and personal circumstances determine the ability to act on it. When the only legal options for migration are through high-skilled immigration categories—requiring tertiary education or substantial job experience—migrants are less likely to be youth. Only 17 percent of the flow of Chinese immigrants to the United States are ages

“[I]mmigration by youth should be viewed as resourceful and not as opportunistic.”

Young person, Kenya
November 2005

BOX 8.1 *Small islands, large migrations*

Youths growing up in small island states have among the highest likelihood of migrating of youth in any country. The average island country with a population under 1.5 million has 17 percent of its citizens overseas, though several have more than 30 percent abroad (table 1). Migration is even more dramatic from some of the smallest islands. Niue has a resident population of 1,761, with 5,328 Niue-born living in New Zealand. Comparison of the 1997 and 2001 Niue censuses suggests that 28 percent of all 15- to 24-year-olds left the country in these four years.

Many of these small islands have high rates of youth unemployment that, together with the need to obtain tertiary education abroad, drive migration. Many of the wage jobs are in the public sector, which often places a premium on seniority, limiting entry positions for young people.

Other aspects of living in a small country can also spur youth migration. A 2005 survey of Tongans asked about the importance of different reasons for choosing to apply (or not) to a special immigration quota that New Zealand reserves for 18- to 45-year-old Tongans each year (table 2). Youth who applied to migrate gave better public services in New Zealand as the most important reason for migrating, along with joining family networks and earning higher wages. However, 82 percent of youth also reported that the chance for a better social life in New Zealand was an important or somewhat important reason for applying.

Whereas paying for education is an important motive, fewer youth are interested in migrating to overcome credit constraints associated with buying a house or starting a business. Of youth who did not apply to migrate, 100 percent say that a lack of information was the main reason, while concerns about the cost of airfares and English language abilities are also important. Broadening the opportunity for youth to migrate therefore requires better quality English language education in schools—and perhaps loan programs. And providing them with more information on migration opportunities can enhance their ability to choose.

Many of these small island states benefit heavily from the remittances sent by international migrants: 31 percent of GDP in Tonga, 12 percent in Samoa, and 11 percent in Kiribati. But there are fears that many of these young migrants will never return, and that countries will lose many of their most dynamic workers. Recent developments in information and communication technologies may increase options at home through distance education and access to job opportunities across borders.

Sources: McKenzie (2006b) and World Bank (2005i).

Table 1 Migrants living abroad

	Population (thousands)	Percent migrants		Population (thousands)	Percent migrants
Africa			Pacific Islands		
Cape Verde	470	18.7	Fiji	835	13.5
Comoros	600	3.2	Kiribati	96	2.4
Mauritius	1,222	6.9	Marshall Islands	53	13.0
São Tomé and Príncipe	157	8.5	Micronesia, Federated States of	125	12.2
Seychelles	84	8.7	Palau	20	20.2
Caribbean			Samoa	178	35.1
Antigua and Barbuda	79	28.9	Solomon Islands	457	0.5
Dominica	71	32.0	Tonga	102	31.1
Grenada	106	23.8	Vanuatu	210	1.0
St. Kitts and Nevis	47	38.5	<i>South Asia</i>		
St. Lucia	161	17.5	Maldives	293	0.8
St. Vincent and Grenadines	109	31.1			
Trinidad and Tobago	1,313	18.8			

Source: McKenzie (2006b).

Table 2 Reasons for Tongan youth to apply, or not apply, to migrate to New Zealand

	Percent saying reason is very important	Percent saying reason is somewhat important
Main reasons given for applying to migrate		
Better public services such as health care in New Zealand	71	25
To be with family members already in New Zealand	68	21
To earn higher wages in New Zealand	43	50
Better social life	43	39
To earn money for school fees in Tonga	11	64
To earn money to build a better house in Tonga	7	25
To earn money to start a business in Tonga	7	7
Main reasons given for not applying to migrate		
Did not know the requirements	100	0
Do not want to move away from family members	22	17
Cannot afford the cost of an airfare to New Zealand	22	11
Do not feel my English is good enough	17	39

Source: Pacific-Island New Zealand Migration Survey, Tonga.

Note: Applicant results for 18- to 24-year-olds, nonapplicant results for 18- to 30-year-olds due to small sample size.



Table 8.1 Youth make up a large share of developing country migrants

Destination	From ^a	Source	Age range	Proportion of migrants who are youth				Proportion of youth migrants who are female	
				Migrant flow		Migrant stock		Flow	Stock
				Males	Females	Males	Females		
Argentina	Developing	c	12 to 24	31.7	41.9	8.4	9.6	65.3	57.3
Brazil	All	c	10 to 24	20.7	29.8	5.8	6.7	56.8	50.3
Canada	Developing	c	12 to 24	19.7	20.0	15.9	14.3	51.1	49.2
Chile	All	c	10 to 24	32.9	31.6	31.5	29.9	51.4	50.9
Costa Rica	Nicaragua	c	10 to 24	50.1	49.4	34.6	34.5	53.6	50.0
Côte d'Ivoire	All	c	12 to 24	34.2	50.2	17.2	27.1	48.3	46.4
Oman	All	c	10 to 24	—	—	9.5	19.7	—	42.4
Russian Federation	All	l	14 to 24	18.7	16.7	—	—	33.5	—
South Africa	Developing	c	12 to 24	46.0	44.8	20.4	23.3	38.8	41.4
Spain	Developing	c	12 to 24	26.7	26.9	46.7	45.5	47.9	48.1
United Kingdom	Developing	c	12 to 24	30.9	34.5	14.7	14.4	55.1	50.2
United States	Developing	c	12 to 24	36.7	31.1	19.5	16.6	41.6	45.4

Source: McKenzie (2006a).

Note: — = Not available, c = census or survey-based measure, l = legal flow of permanent residents.

a. "Developing" indicates developing country migrants only. "All" indicates all immigrants to this country.

12–24, compared with more than 40 percent from Mexico, Honduras, Guatemala, and El Salvador, for whom family migration and illegal channels are more important.⁵

Family factors. The decision to migrate is often a decision of the family, not just an individual, particularly in developing countries, where imperfect credit and insurance markets create a rationale for migrating to diversify risk and finance costly household investment activities. Households can send one of their members and count on remittances to help them cope with financial crises and natural disasters. They will select the member not just based on who has the greatest individual gains from migrating—but also consider the household functions the member performs and the likelihood of remitting money. In many societies parents exhibit greater control over daughters than sons, so young women may be especially likely to be sent for family reasons.

Community factors. Once some young people have migrated, community factors make it more likely that other youth will migrate too. One reason is the migrant

social network, which lowers the costs and increases the benefits of migrating. Because youth are more likely to migrate, a young potential migrant is more likely to have a recent migrant in his or her peer network than an older individual, and so may be more likely to benefit from the migrant network. Over time, a culture of migration can develop in a community, with migration becoming a rite of passage for youth, and with those not migrating considered lazy and unenterprising.⁶

Why is youth migration a development issue?

This Report argues that investing in youth is crucial for a country's long-run development. Migration offers a way for young people to earn a higher return on these investments, and to gain more skills through education and work experience abroad. However, while migration usually results in large increases in income for the individual,⁷ governments may be concerned that many of the externalities associated with having a more educated and skilled population will be lost if youth

migrate. The degree of concern depends on whether young migrants ever return, the age at which they return, and the skills they bring with them.

Many migrants do return. Studies of legal migrants to the United States, West Germany, and Switzerland in the 1960s and 1970s found that between half and four-fifths of migrants returned to their country of origin. A more recent study of Mexican migrants to the United States estimated that half the migrants returned within two years and almost 70 percent within 10 years.⁸ Moreover, new research for this Report shows that migrants tend to return at relatively young ages (figure 8.2), giving them long periods of productive life in their home countries to use the skills and wealth acquired abroad. For example, the average youth migrant from Mexico returns at age 24 after spending three years abroad, while the average youth migrant from Albania returns at age 25 after seven months abroad. Although return migrants may migrate again, the likelihood of further migration falls after age 25—leading many return migrants to work for most of their lives in their home countries.

This temporary migration of youth can have large impacts on poverty reduction and development. The World Bank's *Global Economic Prospects 2006* estimated that a 3 percent increase in the global stock of migrants by 2025 would boost global income by \$356 billion and developing country incomes by 1.8 percent a year.⁹ This is more than the gains from removing all remaining barriers

to free trade. Because many of these new migrants would be young people, much of this aggregate impact will be the result of youth migration. The return of young migrants with education, skills, and income acquired abroad is likely to have a larger impact on development than the return of older individuals, because young migrants will still have most of their working lives ahead of them in their home countries.

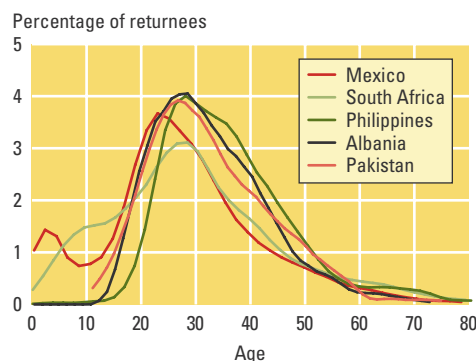
Even migrants who do not return can continue to have sizable impacts on the development of their home countries. Remittances sent back to developing countries amounted to \$167 billion in 2005,¹⁰ with a large share coming from young migrants. One recent review concluded that remittances are especially likely to be higher when migrants are young but married, with family behind at home.¹¹ Over longer periods young migrants who stay in their destination countries can continue to support development at home through involvement in diaspora networks that facilitate trade and technology transfers.

Even so, some migrants will not return. If they are highly skilled, this gives rise to fears of brain drain in the sending countries. This is most evident in the health sector, where the migration of nurses and doctors has had large impacts in some countries. For example, in 2002 at least 11,000 Sub-Saharan physicians were licensed and practicing in Canada, the United Kingdom, and the United States.¹² As a result, the public health sectors in several countries have large vacancy rates, hampering efforts to scale up health interventions. The fear of brain drain is much lower for youth migration, because the majority of youth migrants are not highly skilled. Governments may still be concerned, however, if the state has financed expensive tertiary education, only to see students leave after graduation. Where higher education is mostly financed privately, as in the Philippines, this is not as much of a concern.

How does international migration affect youth transitions?

Youth migration also matters for development because it provides new opportunities—and new risks—for the youth

Figure 8.2 Migrants from developing countries tend to return home at a relatively young age



Source: McKenzie (2006a).

Note: Height of each curve represents percent of the flow of total migrants into the country who are of a given age.

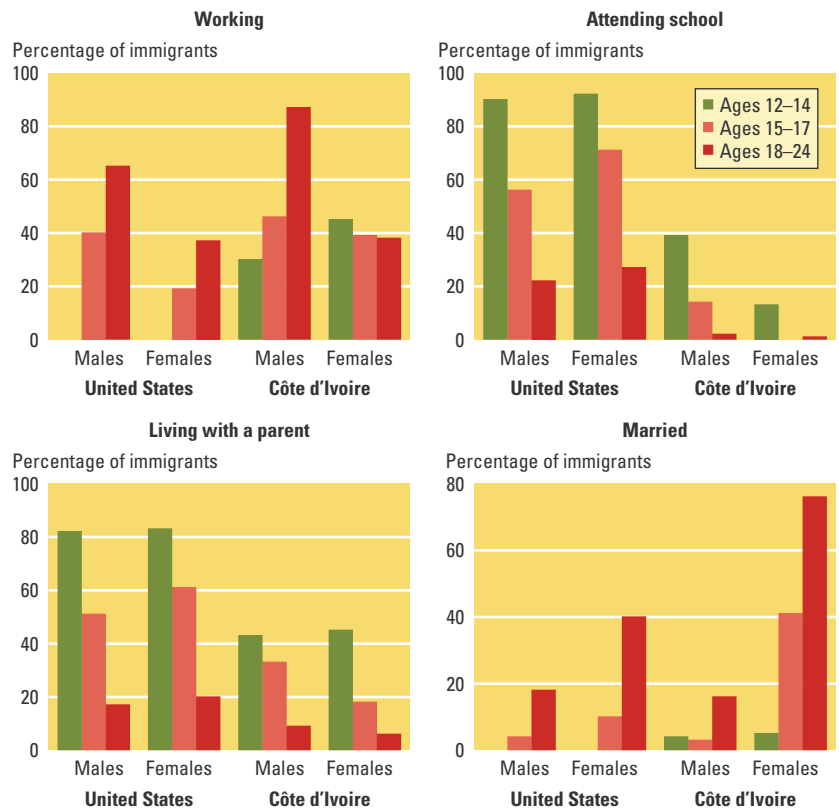
transitions. Young people may migrate to work, to attend school in another country, to get married or follow a spouse, or to become a citizen of another country. The prospect and process of migration may, in turn, affect decisions about schooling in the potential migrant's home country. It may also affect the health knowledge, fertility decisions, and health behavior of the migrant. It may affect the transition to work of young people who do not migrate. It may also affect the degree of civic engagement.

The exact interactions between migration and youth transitions vary according to the age and gender of the migrant and to the circumstances in the sending and receiving countries (figure 8.3). The likelihood of working and being married increases with age, while younger migrants are more likely to be attending school and accompanied by parents. Female migrants are less likely to be working and more likely to be married than males of the same age.

Migrant youths tend to work in a small number of occupations and not use all their skills. Migration broadens the opportunity to work but only in certain occupations. The most frequent jobs for young men are physically intensive, as construction laborers and agricultural workers. Young migrant women are most likely to work as domestics, cashiers, sales clerks, and waitresses and cooks. While many of these jobs are stereotypically immigrant jobs in some countries, youth are more likely to be working in many of these jobs than older migrants. For example, young female migrants to the United States are 2.7 times more likely to be a waitress as recent female migrants ages 35 to 50 and 3.4 times more likely to be a cashier.

The few occupations that young migrants tend to cluster in have low barriers to entry and require little previous experience and education. Many of these jobs, considered of low status in developed countries, offer little career advancement. Such jobs were traditionally filled by teenagers in developed countries, whose declining labor-force participation creates additional demand for immigrant youth to fill them. The native-born youth who do work in receiving countries are much less inclined to engage in

Figure 8.3 Patterns of migration and youth transitions vary according to age, gender, and circumstance



Source: McKenzie (2006a).

Note: Work and marriage rates were not asked of 12- to 14-year-olds in the United States, and are presumed to be close to zero.

some of these occupations than are migrant youth. In Spain, 35 percent of recent female youth migrants do domestic work, compared to less than 5 percent of native female youth workers. In Argentina, 25 percent of male migrant youth work in construction and building, compared to less than 7 percent of native male youth.¹³

Many developing country youth migrants have less education than the average in the country they are moving to, but even youth who migrate with high levels of education may have difficulty obtaining jobs in the fields in which they are trained. The probability of a migrant with a bachelor's degree finding a skilled job varies considerably by country of origin, reflecting in part the quality and language of education in the home country.¹⁴ Thus, educated Indians have much higher probabilities of being employed in skilled jobs in the United States than educated Mexicans.



A further barrier is widespread occupational licensing, which makes it illegal for anyone without a license to perform the job. Such restrictions are estimated to cover 18 percent of American workers and many occupations in the European Union. They cover not only professional occupations such as medicine and law, which youth are less likely to be trained in, but also less skilled occupations such as hairdressing and cosmetology.¹⁵ The difficulties young skilled migrants face in transferring qualifications across countries can push even highly skilled migrant youth to work in many of the same occupations as their less skilled counterparts.

Migration by some young people can improve the labor market prospects of other youth in sending countries, a safety valve in times of high unemployment. Albania, Algeria, El Salvador, Jamaica, Mexico, the Philippines, and Turkey all have more than 10 percent of their labor force abroad, and evidence indicates that these large outflows increase the wages and employment prospects of those left behind. One study found that a 10 percent reduction through emigration in the number of male Mexican workers in a skill group increased the average wage of remaining workers in that skill group by 4 percent.¹⁶ However, because individuals with more education were more likely to migrate, emigration increased the wages of remaining workers more for individuals with higher levels of education, increasing wage inequality among remaining workers.

Migrating for education—and educating to migrate. The chance to obtain an education in another country is one of the main motives for youth migration. Parents who migrate with their children often consider schooling to be one of the most important reasons for their decision. A recent survey of Tongan migrants to New Zealand found that 87 percent of parents reported the desire to have their children educated in New Zealand as a very important motive for migrating, even more than the 76 percent viewing the opportunity to earn higher wages as very important.¹⁷ Parental migration can also broaden the opportunities for

educating the children remaining at home. Studies in El Salvador and the Philippines have found remittances to lower the probability of children dropping out of school.¹⁸

Although older migrant youth are more likely to be working than in school, tertiary study abroad is a large and growing industry. It often serves as one of the only legal ways for youth from developing countries to enter developed countries—and provides opportunities to turn migration for education into that for work. The number of non-OECD students studying in OECD countries shot up by 59 percent between 2000 and 2002.¹⁹ Although only a small number of developing countries send a large number of students abroad, opportunities to migrate to obtain a tertiary education are very important for individuals in countries with limited domestic tertiary education systems. An extreme example is Niger, which has more tertiary students in France than in its seven domestic tertiary institutions. The number of students abroad from Albania, Cameroon, Jamaica, Kenya, and Malaysia exceeds 20 percent of the number of tertiary students at home.²⁰

The prospect of migration may also affect the incentives to become educated at home. Recent literature suggests the possibility of a “brain gain,” in which migration improves the incentives to acquire education for the pool of workers considering migrating. Because some of these individuals will not migrate, the average human capital level in a country may, in theory, be higher than in a situation where no one migrates. In some contexts, education decisions do seem to be very closely geared to the requirements of the global labor market. An example is the Philippines, with high rates of private education in fields that shift in response to international demand.²¹ The prospect of migration is also driving part of the demand for learning global languages in many countries.

Conversely, when legal channels for migration are limited and domestic education is poorly rewarded in overseas labor markets, potential migrants may choose less education. There is evidence for this among Mexican migrants. A survey of students in the state of Zacatecas revealed that students

with migrants in their families expressed less desire for continuing their education to university.²² This appears to outweigh any remittance effect on the education of 16- to 18-year-olds, so the net effect of having a migrant parent is to lower the education of their children.²³

Young migrants are especially vulnerable to HIV/AIDS, but migration to developed countries also offers possibilities for greater health knowledge. Migration has been identified as a key factor in the spread and prevalence of HIV/AIDS in Southern and Western Africa. Migrants also have higher incidence rates than the general population in other parts of the world. It is estimated that returned migrant workers accounted for 41 percent of all diagnosed HIV/AIDS cases in Bangladesh, 32 percent in the Philippines, and 25 percent in Sri Lanka in 2004.²⁴ Major reasons for the greater vulnerability of migrants are their tendency to engage in risky sexual behavior and their lower access to information and prevention services.

Migration for many young migrants involves prolonged periods of separation from their spouses and the watchful eyes of family. For example, more than 90 percent of African migrant mine workers in South Africa live in single-sex hostels, with easy access to commercial sex workers.²⁵ Loneliness, separation, and the anonymity of being a foreigner can increase the chance of risky sexual activities. Trafficking victims in the sex industry are also at high risk of HIV/AIDS. But because of cultural and language barriers and a lack of financial resources, they have little access to information and prevention services. Undocumented migrants are especially vulnerable because they may avoid contact with any official government services for fear of deportation.

Although the circumstances accompanying migration often have the potential to increase health risks, migration to countries with good infrastructure can lead migrants to acquire more health knowledge. Research shows a strong effect of Mexican migration to the United States on the acquisition of knowledge about different contraceptive practices. Women in households with a

migrant member knew more about methods of contraception than women in non-migrant households, with the effect stronger if the household had a female migrant. This greater health knowledge, coupled with the higher household income from migration, improved birth outcomes. Children born to mothers in migrant households had higher birth weights and were less likely to die in their first year of life.²⁶

Migration and civic engagement—uncertain identities, but potential exists for engagement and positive change. Migration can disrupt the process of becoming an active citizen in one's home country. Young people who plan to migrate permanently or for long periods face conflicting desires to assimilate and to maintain their culture and national identities, while youth migrating for shorter periods may find themselves isolated from opportunities to take part in society in either country. Even so, there are avenues for migrant youth to take part in community organizations and civil society. Governments are also providing more options for formal participation in home country politics through absentee voting and dual citizenship.

Many formal immigrant groups, such as Latino hometown associations in the United States, tend to be led by older and more established migrants, with youth less likely to be involved unless their parents are around. But such societies can offer social opportunities and a sense of community for recent arrivals. They may be particularly important for young women working as domestic workers or in other occupations that offer little contact with the outside world. Like youth at home, immigrant youth are often more inclined to participate in less structured community activities. A study of Haitian youth in Miami found that the most common activities were helping non-English speakers or senior citizens in their neighborhoods, and helping peers through counseling or tutoring.²⁷ However, many admitted ignorance of both the opportunities for civic participation and how to take advantage of them.

While public opinion and news coverage often focus more on the minority of

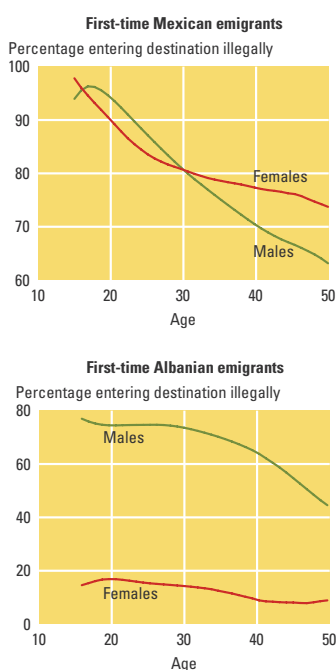
“Here in New Zealand there’s heaps of places where you can smoke and drink, whereas if you were in Samoa and you drink and smoke and one person knows you, then the whole village will know that you smoke, because everyone knows each other really well.”

Ann, 20, Samoan migrant
August 2005

“Illegal immigrants can get injured or even die when trying to cross the American border. If they make it, they might improve their lot a bit, but over time and due to the little communication with them, they don’t feel close to their families anymore. I don’t know if that’s worth it in the end.”

Guadalupe, 18, Honduras
January 2006

Figure 8.4 Youth are more likely than older people to migrate illegally



Note: Calculated from the Mexican Encuesta Nacional de la Dinámica Demográfica 1997 and the Albanian Living Standards Measurement Survey 2005.

immigrant youth who join gangs, a review of empirical evidence from the United States found immigrants to be generally less involved in crime than similarly situated groups of natives.²⁸ This was attributed to the greater likelihood of immigrants to be employed than poor native workers living in similar areas. Immigrants may also face high costs of being caught, such as being deported, making them less likely to commit crimes. However, some sending countries have faced a rise in gang activity because of the deportation of young migrants. An example is the emergence in El Salvador of the Mara Salvatrucha gang, founded by Salvadoran immigrants in the United States, many of whom were deported back to El Salvador after committing crimes in the United States.

Enhancing the opportunity for youth migrants to participate formally as citizens in their home countries is the increase in absentee voting rights and dual citizenship in many countries. In 1998, at least 43 countries allowed their citizens to vote from abroad, although many migrants face logistical and informational obstacles in exercising this right.²⁹ A number of developing countries have decided to allow their emigrants to vote since then, including Mexico, Mozambique, and the Philippines. The votes of migrants can push for institutional change in their home countries. Analysis of the votes cast by Czech and Polish migrants in their recent national elections found evidence that migrants’ voting behavior was influenced by the institutional environment in their host country, with those living in western democracies more likely to favor center-right parties.³⁰ This could be even more so for youth, who may be less invested in the institutions of their home countries.

Youth migration can also be riskier

The strong motives for youth to migrate result in a demand to migrate that exceeds the supply of legal opportunities. Therefore, youth may consciously choose to migrate illegally, seen in the higher probabilities of younger migrants being undocumented in data from both Mexico and Albania (figure 8.4). Young women are

less likely to migrate illegally than men in Albania. Even in Mexico, when women do migrate illegally, they do it in a safer way than men, traveling with others and using a paid guide.³¹ Less systematic recent evidence comes from newspaper stories of young African men trying to cross into Europe through the cities of Melilla and Ceuta in October 2005. Such illegal migration brings the risk of arrest, robbery, and death. In 2005 at least 460 people died crossing the border from Mexico to the United States, 75 percent of them male, 35 percent ages 12 to 24.³²

Young people also constitute the majority of victims of human trafficking.³³ Measurement is difficult because of the clandestine nature of trafficking, but it is estimated that between 600,000 and 800,000 people are trafficked across borders each year.³⁴ The majority of victims are female, although an increasing number of males are also affected. Data on victims assisted by the International Organization for Migration indicate that 81 percent between 2001 and 2005 were female, and 71 percent ages 14 to 25. A study in South Eastern Europe found that the vast majority of girls are recruited by personal contacts or newspaper advertisements, offering them work. Younger victims may be volunteered by parents in exchange for a monthly allowance, without the parents necessarily understanding the conditions in which their child will be working. Many victims ending up in the sex industry are recruited under false promises of employment in other industries.³⁵

With the demand for youth migration growing, how can policies enhance the development impact?

A large number of youth in many developing countries express a strong desire to migrate, especially for short durations: 91 percent of Albanians, 88 percent of Romanians, 80 percent of Ethiopians, 78 percent of Bangladeshis, 76 percent of Iraqis, 60 percent of Tajiks, and 57 percent of Malaysians say they would migrate if they had the legal opportunity, but fewer than 23 percent would move permanently (figure 8.5). The pressure is reflected in long

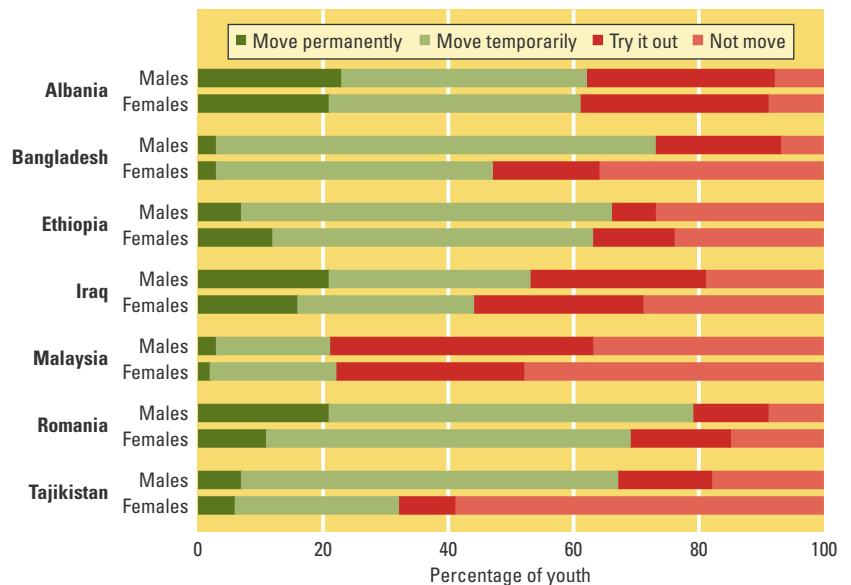
wait lists for some of the legal opportunities available. In October 2005, brothers and sisters of migrants from China, India, Mexico, and the Philippines all had waits in excess of 10 years to be able to enter the United States through the family reunification category.³⁶ Given limited legal options, some of this pressure spills into illegal immigration.

The youth bulge in many developing countries (see spotlight on differing demographics following chapter 1) and aging in most developed countries is likely to increase the demand for international migration over the coming years. Without further migration the labor forces in Europe, Russia, and high-income East Asia and the Pacific is projected to fall by 43 million between 2005 and 2025, while it is projected to rise by 19 million in China, 77 million in Latin America and the Caribbean, 82 million in the Middle East, North Africa, and Turkey, 93 million in low- and middle-income East Asian and Pacific countries, 211 million in Sub-Saharan Africa, and 292 million in South and Central Asia.³⁷

This will increase demand for international youth migration for three main reasons. First, because youth have the highest propensity to migrate, the rising number of youth in developing countries will increase the number of potential migrants. Second, a larger youth cohort can increase unemployment and lower wages in developing countries, while the smaller youth cohort in developed countries can push up wages (chapter 4). So the economic gains from migration will rise, increasing the likelihood of migrating for each youth. Third, as more youth migrate, the size of the migrant network will increase, further increasing the motive for other youth to migrate.

History provides support for the predictions that a larger youth cohort results in more outmigration. Migration patterns from Western Europe to the New World between 1820 and 1913 show a large and positive effect of youth cohort size on emigration, with almost half the additional births ultimately emigrating. Similar size effects have been calculated for intra-Africa migration in the late 20th century. The effect

Figure 8.5 Leave a light on for them—most young people wish to migrate temporarily



Source: WDR 2007 InterMedia surveys. In the survey, youth ages 15–24 were asked “If it were possible for you legally to move to another country to work, would you?”

of cohort size is lower when policies restrict migration, but a study of migration into the United States over 1971–98 reveals that the share of the sending-country population in the 15–29 year age group is a significant predictor of migration, raising emigration rates from Latin America by 11 percent over those from Western Europe.³⁸ Based on these historical estimates and demographic projections, it is predicted that the annual flow of emigrants out of Sub-Saharan Africa will rise by between 1.5 million and 2.1 million by 2025.³⁹

Receiving countries can increase the benefits by providing more opportunities for youth to migrate, perhaps through temporary worker programs—and by letting migrants develop and use their human capital. Many developed countries have targeted their immigration systems at highly skilled workers, providing developing country youth with few options for legal migration. With aging societies and rising incomes fueling demand for the services that young, less-skilled migrants typically perform, developed countries stand to gain from more youth migration. However, receiving countries typically worry that an influx of migrants reduces employment or lowers wages for native workers.



“For the third time in one year, I have been denied [a] visa by the U.S. embassy in Nigeria. I was meant to attend the inaugural meeting of the UNFPA [United Nations Population Fund] youth advisory panel as a member of the panel. My visa application was denied... it is sad to know that even if you are to attend a UN meeting either as a speaker or participant with all your arrangement[s] made by the UN, you might still be denied visas.”

Young person, Nigeria
June 2006

A very large literature tries to measure the effect of immigration on the wages of natives. A recent meta-analysis of 344 estimates concluded the average effect on the wages of natives is significant but small, with a 1 percent increase in immigrants lowering wages of native workers by 0.11 percent.⁴⁰ While other studies have found larger effects, the most recent research from the United States and the United Kingdom also finds little evidence that immigration has had adverse effects on native workers in these countries.⁴¹ Cross-country evidence in Europe has found more negative effects in countries with more rigid labor markets, which restrict hiring and firing, with the effect greater for young men. As a result, youth immigration into Denmark, Switzerland, and the United Kingdom, which have fairly flexible markets, has less effect on native workers than immigration into France, Germany, Italy, and Spain, which have higher business entry costs and more labor market restrictions.⁴²

The early experience following the accession of eight Eastern European countries to the European Union (EU) shows broadly positive impacts of increased migration for the receiving countries. Twelve of the EU15 member countries elected to maintain restrictions on migration from these new member states during a transitional period, while Ireland, Sweden, and the United Kingdom allowed immediate free movement of workers. The majority of workers moving under this scheme were young: 83 percent of new registered workers from the accession countries in the United Kingdom were 18–34, and 44 percent were 18–24.⁴³ Initial assessments have concluded that the main impact of these flows was to increase output and employment, relieving labor market shortages and having little impact on native workers.⁴⁴

A second concern of receiving countries is the potential difficulties associated with assimilation of migrants from different cultural backgrounds. This is an area of active policy debate in many developed countries, and is largely beyond the scope of the developing country focus of this Report, except to note that youth migrants generally are able to assimilate more easily, and that acquisition of the host country language is widely found to be of fundamental importance in allow-

ing permanent migrants to integrate. This provides a further reason for bringing global languages into the curriculum in developing countries with high outmigration (chapter 3). Temporary and seasonal work programs offer one avenue for receiving countries to reap many of the benefits of more youth migration while lessening the perceived costs of assimilating migrants. Many youth in developing countries express a desire to migrate for a short period (see figure 8.5), allowing them to save money to buy a house, open a business, or achieve other goals in their home countries.

Several temporary worker programs are youth-specific. The Seasonal Agricultural Workers Scheme in the United Kingdom allows full-time students ages 18 and over who live outside the European Economic Area to work for six months in seasonal agricultural work. Participants can apply to take part again after three months out of the country. The Working Holidaymaker Scheme in the United Kingdom allows 17- to 30-year-olds from Commonwealth countries to work for up to 12 months of a two-year stay.⁴⁵ Australia, Canada, and New Zealand also employ working holiday schemes open to 18- to 30-year-olds, but these cover only a few middle-income countries. Such schemes provide some opportunities for youth migration, but requiring participants to be full-time students or have enough funds to support themselves for their first few months of “holiday” limits poor, less-skilled youth from participating.

The main concern of developed countries is whether temporary workers will return home at the end of the work period. Experience is mixed, and further policy experimentation is needed. One of the key factors appears to be whether workers can return with a reasonable expectation of being able to work again in a subsequent year. Canada’s seasonal agricultural workers’ program is a possible model, with employers free to request the same workers again the next year.⁴⁶ Of the 15,123 workers who entered in 2004, only 1.5 percent went absent before the end of the contract, and almost all are estimated to have returned home. In contrast, the previous version of the United Kingdom’s seasonal agricultural worker program



did not allow the opportunity to return, and had estimated overstays of 5–10 percent.

Developing countries can maximize the development impact of youth migration through policies that increase the benefits from existing migrants. . . There is considerable scope for policy interventions in sending countries to increase the development benefits from their existing stocks of youth migrants. One area of recent policy focus is the high cost of sending remittances, which reduces the amount received by relatives back home and acts as a disincentive to remit. Because young migrants are more likely to be migrating without the papers to establish bank accounts and have less experience with the financial system, high remittance costs may be even more of a barrier. Only 31 percent of 18- to 24-year-old recent migrants in the United States have bank accounts, compared with 65 percent of 25- to 50-year-old recent migrants.⁴⁷

Policies to lower the remittance costs include providing information to migrants on the costs of using different methods (as with Mexico's consulates in the United States), delivering financial education to migrants before leaving (as in the Philippines), and developing the financial infrastructure for receiving remittances through competition policy and the lack of onerous regulations.⁴⁸ Such policies offer the potential for considerable gains in remittances: a study of Tongan migrants in New Zealand estimated that reducing the cost of sending money to that prevailing in the more competitive world markets would increase their remittances by 28 percent.⁴⁹

Sending countries can also benefit through policies that facilitate the successful return of young migrants. One part of this is sound macroeconomic policy, which can generate expectations of improving conditions. Not surprisingly, youth are more likely to migrate when facing poor domestic labor markets (box 8.2). Many temporary migrants decide to return to enjoy the higher purchasing power at home. Evidence also suggests that the return decisions of some migrants are driven by the desire to achieve a certain target level of savings abroad, which can be used to start businesses on returning home.⁵⁰ Young people find it particularly hard to access

financial institutions and obtain credit for business start-ups, so programs that enhance access to credit can be beneficial.

Several countries have tried to attract back their most highly skilled migrants, with mixed success.⁵¹ Such programs are rarely directed at young migrants, who are less likely to be highly skilled. One broader issue that does affect youth is the difficulty migrants often find in having the qualifications they gained abroad recognized back home. This also affects youth indirectly through their tertiary education systems. For example, Romanian academics often find it hard to get masters and doctoral degrees earned in Germany and the United States recognized, and so are reluctant to return.⁵²

"I am a girl. I can't go working in other cities. My brothers could never tolerate it."

Female, 20, Morocco⁵³

BOX 8.2 *Poor job prospects fuel migration in Morocco*

In the nine communities visited in Morocco for the *Moving out of Poverty* study, youth express great frustration at the difficulty of obtaining good jobs locally. "Graduates are a thousand times more numerous than the existing posts," exclaims a young man from Foug Zaouia, while in the opinion of one young woman from Bir Anzarane, the few good jobs to be had are "via corruption, via mediation, via favoritism, and via closeness." Training or job placement services seem to be far out of reach for most youth, even those with college degrees. As for setting up their own businesses, young men and women express interest but also discouragement due to weak markets, high taxes, complex procedures, the inability to access credit, and the lack of their own funds.

Faced with these conditions, youth widely identify migration overseas as the best, if not the only, means to get ahead. Young men say their goal is "to save regularly to be able to buy a work contract abroad at 60,000 DH [Moroccan dirhams] (more than \$6,550) or to migrate illegally, which costs between 20,000 and 30,000 DH per person." Over 70 percent of Moroccan 18- to 24-year-old migrants in Spain are men, and over half of the women who migrate are married to another migrant.⁵⁴ Young women face more restrictions, saying parents are reluctant to let them work outside the home, let alone in a big city or another country. "The girl is always supervised," explains a young woman from Igourramene-Tizi.

Migration is viewed extremely favorably by adults in these study communities,

who identify migration as one of the main factors helping the best-off households, and a way out of poverty. "The only period of moving up in our life was between 2000 and 2005, and the reason for this was my son's emigration to Spain," says one woman in Foug Zaouia, who now plans to send her other son abroad. If youth feel pushed by their families to migrate, they do not speak of it in those terms, although a joke from Tamessa-Tissyan-Azendo may be revealing on this subject: "A mother sends her son to work in a faraway city. When he comes back after three years, the mother, instead of welcoming and hugging him, says to him: 'Oh! Why do you come back so early, did you forget something?'"

Youth reveal more mixed emotions about migration than adults. Several express uneasiness about having to leave their villages, and the resulting separation of families. Those with insufficient funds to migrate internationally may migrate internally and speak of difficult working conditions in the cities of Morocco. "We suffer and the conditions of work are very hard. Most of us work only in construction yards . . . whatever the job we do, the income is minimal." Even so, others welcome the potential new surroundings, and the escape from family tensions over being out of work and clashes between modern and traditional ways. "What all of us really wish is to go to Europe. Here we can't even communicate with our parents. Also, there is nothing for us to do," says a young man from the village of Bir Anzarane.

Source: Narayan and Petesch (2006).



... through policies that expand the opportunities for other youth to migrate... Despite the benefits from migration, country policies can inhibit the opportunities for young people to emigrate.⁵⁵ One barrier is the cost and time of obtaining a passport, the most fundamental document of legal identity for migrants (chapter 7). Data on passport costs in 127 countries show that one in every 10 charges more than 10 percent of average annual per capita income for a passport. Reducing passport costs by 1 percent of per capita income is associated with a 0.75 percent increase in emigrants per capita. Because young people are likely to have less accumulated savings, high passport costs may be more of a barrier than for older migrants.

Several countries inhibit emigration through legal barriers on the right of women to emigrate, which in some cases apply only to young women (table 8.2). These countries have 5–6 percent fewer migrants per capita than countries with similar levels of income, population, and governance that do not employ such restrictions. Faced with these restrictions, young women who wish to migrate must do so through alternative channels, increasing the risk of trafficking.

In addition to removing restrictive policies, countries can take more active measures to broaden the range of migration opportunities available to youth. The best established example is the Philippines, which in 2005 sent 1 million of its citizens overseas as contract workers. On average, youth ages 18–24 constituted 31 percent

of all female migrants, and 15 percent of all male migrants.⁵⁶ The Philippine government licenses recruitment agencies and markets its workers worldwide, signing 56 bilateral treaties with receiving countries. A network of attachés and welfare officers operates worldwide, acting as resources and advocates for the overseas workers. In addition to broadening opportunities for migration, the government provides pre-employment orientations. Potential migrants are told about cultural differences in the country they are considering—and given information on illegal recruitment, methods for sending money, and phone numbers to use in case of grievances.

... and through policies that mitigate the risks associated with international migration. The risks of trafficking and illegal migration can be mitigated, first, by broadening opportunities for other forms of work, both domestically and abroad. Promoting the entry of disadvantaged youth into the labor force in developing countries can lessen the desire to leave (chapter 4), but large income differentials, missing credit markets, and a desire to experience life in other countries will still provide strong incentives to leave. Providing legal forms of temporary migration thus acts as an alternative to illegality, the only form of migration available to many youth. Second, information campaigns and legal steps can promote the agency of youth, helping them become less vulnerable to the false promises of traffickers and giving them legal recourse when being sold by family members. Third, victims of trafficking can be given a second chance for life back home—by working with developing country governments to ensure that victims are not treated as criminals and can receive help in returning.

Sending countries should lessen the risks of HIV/AIDS affecting their migrants, especially given the potential spread of the disease to the nonmigrant population. The two main policies are to promote information and prevention activities in the sending areas and to work with receiving countries to create an environment for migrants less conducive to the spread of HIV/AIDS. For example, predeparture orientation semi-

Table 8.2 Countries that restrict the right of women to emigrate

<i>Married women require their husband's permission but no restriction on unmarried women</i>	<i>Restrictions on both married and unmarried women</i>
Congo, Dem. Rep. of	Afghanistan
Gabon	Iran, Islamic Rep. of
Uganda (when travelling with children)	Jordan
	Kuwait (unmarried women under 21)
	Libya
<i>Unmarried women require their father's permission but no restriction on married women</i>	Qatar (women under 30)
	Saudi Arabia
Egypt, Arab Rep. of (women under 21)	Sudan
	Swaziland
	United Arab Emirates
	Yemen, Republic of

Source: McKenzie (2005).



THE WORLD BANK

nars in Bangladesh, Indonesia, the Philippines, and Vietnam all inform migrants about HIV/AIDS, while prevention activities in Thailand are held in some of the main sending villages, allowing spouses and other family members to obtain information as well.

The higher risk associated with the separation of migrants and their partners can be reduced by working with receiving countries to enable the spouse or partner to accompany the migrant. While single-sex hostel environments for migrants are the norm in mining and construction in some receiving countries, studies have shown the potential of family housing to dramatically reduce the incidence of HIV.⁵⁷ Cameroon provides an example, with villages built to support immigrants working and living with their families at an oil pipeline construction site.

Youth and the global flow of information and ideas

The first few years of the new millennium saw extremely rapid increases in Internet, mobile phone, and computer use in developing countries. Between 2000 and 2003, the developing world gained more than one-quarter of a billion Internet users and almost half a billion mobile phones. These new technologies are growing much faster than older information and communication technologies (ICTs) such as television, radio, mainline telephones, and newspapers (definition 8.1 and table 8.3). Mobile phones have overtaken mainline phones in coverage in many parts of the world, and there are more Internet users per 1,000 people than there are daily newspapers purchased in every region except South Asia. Even so, Internet use remains low in poorer developing countries, and radios and televisions are much more prevalent.

Rapid growth in ICT use among young people

Although young and old alike watch television and listen to the radio, young people are the main users of the new ICTs, especially the Internet and more advanced features of mobile phones such as text

messaging, also known as short messaging service (SMS). In a typical age pattern, youth were the first adopters of the Internet in the Kyrgyz Republic and account for most of the growth in users between 2001 and 2005 (figure 8.6). Data from surveys in 2005 show that youth accounted for 43 percent of all Internet users ages 15 and older in China, 50 percent in Armenia, 53 percent in Bolivia, 60 percent in Egypt, 61 percent in the Kyrgyz Republic, and 70 percent in Indonesia. These proportions, similar to those for 2002 and 2003, suggest that approximately 130–160 million of the 269 million new Internet users between 2000 and 2003 were ages 15 to 24.

Although youth are more likely than older age groups to use the new ICTs, the use among youth varies dramatically. Across countries surveyed in 2005, the share of 15- to 24-year-olds who have ever used the Internet varies from less than 1 percent in Ethiopia to 12 percent in Indonesia, 13 percent in Ghana, 15 percent in Egypt, 29 percent in Armenia, and 53 percent in China. The digital divide also occurs within

DEFINITION 8.1 ICTs

Information and communication technologies (ICTs) consist of hardware, software, networks, and media for the collection, storage, processing, transmission, and presentation of information (voice, data, text, images), as well as related services. Communication technologies consist of a range of communication media and devices, including print, telephone, fax, radio, television, video, audio, computer, and the Internet.

Source: Neto and others (2005).

Table 8.3 Catching up fast: The rise of new technologies

	EAP	ECA	LAC	MENA	SA	SSA	Low income	Middle income	High income
Usage rate per 1,000 people									
<i>"Old" ICT</i>									
Daily newspapers	60	—	61	—	59	12	44	55	—
Radios	287	447	410	273	112	198	137	344	425
Telephone mainlines	161	228	170	133	39	11	32	177	393
Television sets	314	408	290	205	81	63	78	319	362
<i>"New" ICT</i>									
Internet users	68	161	106	46	10	20	16	117	279
Mobile phones	195	301	246	85	23	51	23	224	785
Personal computers	26	73	67	31	7	12	7	42	284
Annual per capita growth since 2000 (%)									
Internet users	41	59	38	39	20	32	63	46	13
Mobile phones	51	48	27	52	87	42	83	43	17
Personal computers	28	18	17	9	27	11	24	20	12
Telephone mainlines	21	1	5	15	12	3	14	12	0
Television sets	10	—	—	5	5	10	4	5	0

Source: World Bank (2006h).

Note: Data are generally for 2002–03, except for newspapers (2000) and radio (1997). High-income countries are non-OECD high income. — = Not available. EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = the Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.



“The digital divide must be defined as a wider concept than the access to the Internet. Even if you have it, if you do not know how to navigate it you will find nothing in it.”

Young person, Argentina
January 2006

countries (table 8.4). Computer and mobile phone ownership and Internet and SMS usage are highest among youth in urban areas and with more education and higher household incomes. In Indonesia, 59 percent of university students had used the Internet and 95 percent SMS, compared with 5 percent or less among youth with only primary education.

The use of these new ICTs is a more communal experience in developing countries than in developed. Many youth do not have computers in their own homes, and instead access the Internet at school or at

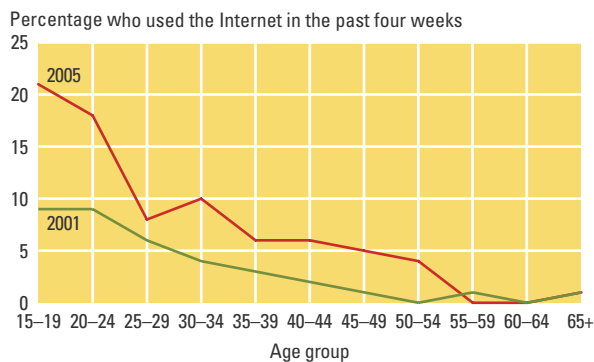
Internet cafés (figure 8.7). Access at school varies considerably across countries. Some richer, developing countries have connected many schools, with Chile having 75 percent of schools online. In contrast, data from six Sub-Saharan African countries reveal that fewer than 1 percent of schools are covered.⁵⁸ Mobile phone use can also be communal, especially in rural areas. Widespread access to phone resellers in many countries has reduced the barrier to access for young people.

In some countries, young women access the Internet less through these public access points than do young men (figure 8.7). In Ghana, 16.5 percent of male youth use Internet cafés, more than twice the 6.6 percent for female youth. Women may not feel comfortable or may be restricted from attending these public points alone or after certain hours. Even at school, girls may find it harder to gain access. In Sub-Saharan Africa, enrollment rates of boys greatly exceed those of girls, so girls compete with a large number of boys for scarce computer resources.⁵⁹ In contrast, young women do not appear to have less access to mobile phones than young men, and may actually use them more in some countries.

Young people are more likely to adopt these new technologies for economic, physiological, and social reasons. As with migration, longer working lives mean that young people have more time to gather the benefits from investing in new technology. The cost of investing in the skills required to learn how to use the new ICTs is also likely to be less for youth, who are better educated than older generations and may receive training through school. Moreover, youth find it easier to acquire complex information-processing tasks. The tendency of youth to use these technologies is amplified by the desire to use these technologies for entertainment, and reinforced through peer learning and network effects: the value of a mobile phone or Internet connection increases when more of one's peers are using it.

As a result of this rapid expansion in ICTs, young people around the world are more able to access information and connect to ideas and people outside their countries. In 2005 it was estimated that there

Figure 8.6 In the Kyrgyz Republic, young people use the Internet more than older people and account for much of its growth



Source: InterMedia national audience surveys.

Table 8.4 The digital divide among Indonesian youth

	Internet use (percent)	Youth with computer in home (percent)	Youth with mobile phone (percent)	SMS use (percent)
All 15- to 24-year-olds	12	5	26	24
<i>Among 15- to 24-year-olds</i>				
Males	16	5	22	22
Females	8	5	31	27
Urban youth	16	7	28	27
Rural youth	6	2	21	18
Primary education or less	3	1	9	5
Secondary education	7	4	19	19
Senior education	20	8	37	35
College or university education	59	28	96	95
<i>Monthly household income</i>				
Above Rp 1,250,000	29	19	57	55
Rp 600,000 to 1,250,000	10	3	33	22
Less than Rp 600,000	5	0	7	7

Source: InterMedia national audience surveys.

Note: Rp = Indonesian rupiah; 1,250,000 Rp is about \$128; 600,000 Rp is about \$61.

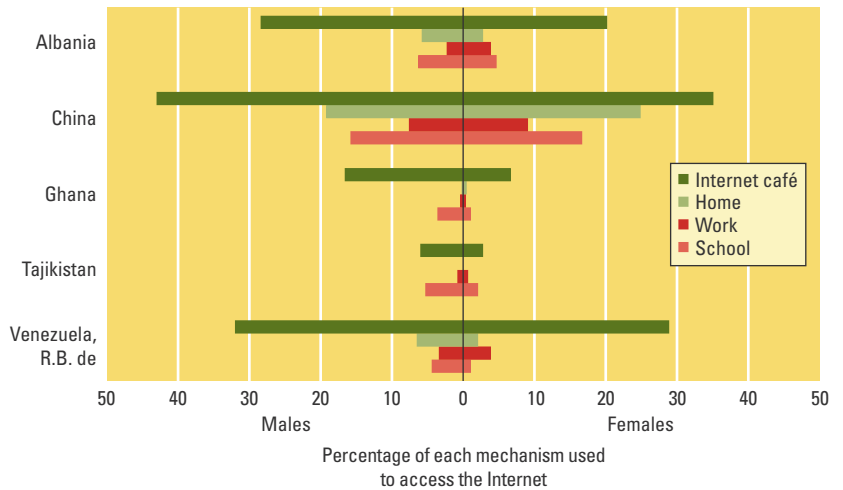
were close to 1 billion Internet users worldwide.⁶⁰ A social experiment involving users in 166 countries measured the number of steps required to connect to designated targets and found that the popular notion of “six degrees of separation” between any two people in the Internet world is not too far wrong: the median number of steps required to connect users in different countries was seven.⁶¹ Surveys for this Report show youth to be more likely than 25- to 50-year-olds to communicate with people in other countries (figure 8.8). A remarkable 44 percent of Romanian youth and 74 percent of Albanian youth reported having communicated with someone abroad in the last month. Telephone is the most common means of communication, but SMS and e-mail are also very popular.

Global connectivity and the youth transitions

Although the main reason for many youth to use computers, the Internet, and mobile phones is entertainment—playing games, downloading music, and talking with friends (table 8.5)—the new ICT technologies are having wide-ranging effects on youth transitions. New opportunities for work and study are opening up, and the interactive and decentralized nature of these new technologies is providing youth with many more opportunities to obtain information outside the traditional channels, enhancing their agency. While the majority of youth in many developing countries still do not use the Internet or mobile phones, the experience of those who do shows the possibilities and potential benefits of increased access. Because the spread of these technologies is very new in many developing countries, much of the impact has yet to be carefully evaluated. Thus, in many cases this Report can describe only how the new ICTs are being used to enhance youth transitions, without providing systematic evidence on the magnitude of the effects. Even so, the rapid and continuing growth of ICTs in developing countries suggests that their importance for youth will increase.

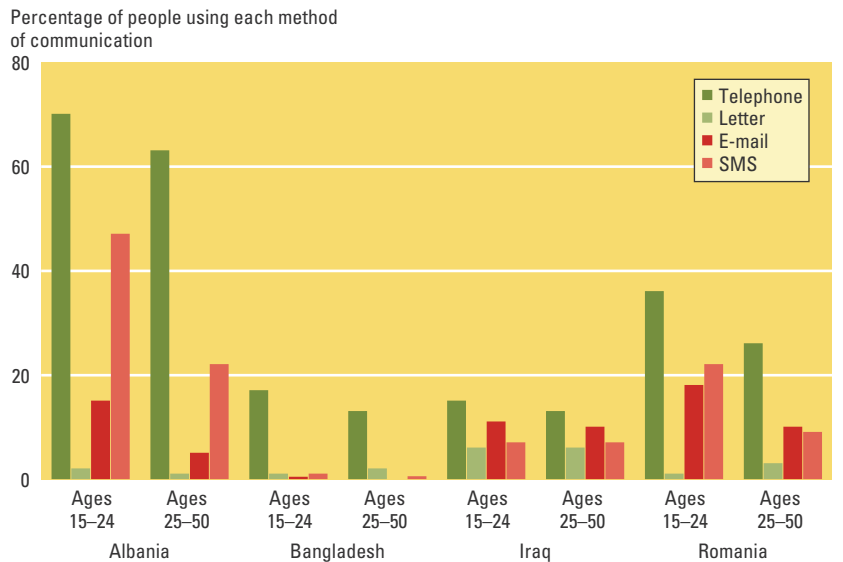
Broadening opportunities and providing second chances for work. Business process out-

Figure 8.7 Public Internet access points are important for young people



Source: InterMedia national audience surveys.

Figure 8.8 Youth are more likely than older people to communicate with people abroad, especially using new technologies



Source: WDR 2007 InterMedia surveys.
 Note: The figure reflects communication with people abroad in the past month.

sourcing employed approximately 695,000 people in India in 2004–05.⁶² One estimate suggests that 11 percent of all service jobs worldwide, amounting to 160 million jobs, could be carried out remotely.⁶³ However, actual offshore employment is predicted to only reach 4.1 million by 2008, suggesting considerable scope for future growth. Such employment acts as an alternative to



Table 8.5 What do youth do online?

Percentage of Chinese Internet users ages 16–25 reporting that they sometimes, often, or always use the Internet to:	
Play games	72
Download music	70
Do general browsing	69
Read news	61
Search entertainment information	61
E-mail	53
Online chat	50
Online study	35
Work	31
Check product information	30
Search for medical information	20
Blog	15
Online professional training	11

Source: The Chinese Academy of Social Sciences Internet Survey taken in five cities, January 2005.⁶⁴

“Go to your nearest ICT building, is it accessible to wheelchair users? Will the blind visitors be able to use at least one of the computers? There may be yes for those from the developed countries but in developing countries especially in Africa it is a BIG NO.”

Ambrose, Uganda
October 2005

migration, allowing workers to sell their labor overseas without having to leave their country.

The average age of a call center employee in India is 23, with employees more likely to be male and urban and to have upper secondary or tertiary qualifications. While wages are much lower than in developed countries, they are high by developing country standards, creating a new generation of young professionals who are often the first in their families to have a debit card, benefits, and to live alone or with roommates. Other jobs created for youth by ICTs include employment as programmers, Internet café workers, local language Web site developers, and village phone operators.⁶⁵

In addition to directly creating jobs, ICTs provide information about non-ICT job openings to youth. Online job databases, such as one run by the Philippines Department of Labor and Employment, offer information to those with Internet access. In poorer developing countries, mobile phones are particularly important for job information. In South Africa and Tanzania, many respondents identified mobile phones as essential for contacting employers and getting contacted about job openings, particularly in remote areas and areas of high crime.⁶⁶ The newer uses of mobile technology are also proving useful for job information. OKN Mobile in Kenya provides a job information service called Kazi560, which sends SMS (text message) job advertisements to job-seekers, who pay a small fee per listing received. The service, with more than 30,000 subscribers, is targeted at poorer workers for whom the cost of job information has been prohibitive—the SMS information is marketed at one-tenth the cost of a newspaper or bus fare into town.⁶⁷

New ICTs also offer the potential for a second chance at work for youth with disabilities, but this promise has yet to be achieved for many disabled youth. Speech synthesizers and text magnifier programs can allow visually impaired youth to use ICTs for work, while e-mail and SMS offer greater flexibility in work-related communication needs for the hearing impaired. Many ICT jobs do not require mobility, and coupled with possibilities for telecom-

muting, this opens options for youth with disabilities.⁶⁸ However, young people with disabilities often have among the least access, due to higher likelihoods of low income and education, and to physical barriers such as Internet cafés that are not wheelchair accessible or equipped with the necessary technologies. One example of a self-sustainable business model providing opportunities for disabled youth is Digital Divide Data (DDD), a data outsourcing center in Cambodia that employs only youth who are orphans, land mine victims, physically disabled, or trafficked, with each of the more than 100 employees receiving vocational training and scholarships to continue their education.⁶⁹

ICTs diversify the range of learning opportunities, but lack of education can be a barrier to their use. Distance education has incorporated television and radio for more than 60 years, and these traditional ICTs are still the most cost-effective ICT educational interventions for secondary schooling in many developing countries, helping to meet the challenge of extending schooling beyond primary (chapter 3). For example, Mexico’s Telesecundaria program gives those finishing primary school in rural areas a way to continue their schooling without having to travel long distances.⁷⁰ More than 1.2 million students in 16,500 locations receive televised lessons, followed by in-class work guided by a teacher. One teacher is used to cover all subjects, rather than the subject matter specialists used in general secondary schools—cutting per student costs in half. But concerns remain about quality, with Telesecundaria students scoring poorly on the international Programme for International Student Assessment tests. The challenge is thus to raise quality while maintaining the low cost.

For tertiary education, the Internet’s capacity for two-way interaction offers the greatest promise for improving access and affordability and for providing flexibility to combine work with further study. Several developing countries already cater to substantial numbers of online students, while developing country students also take online classes from developed country universities

without having to migrate. For example, close to 1 million students are studying online in China, while the U.S.-based University of Phoenix had students from about 90 countries in 2003.⁷¹ Such programs can expand access and save on costs. Mexico's Tec Milenio uses professors from its parent university to deliver online courses to modestly equipped satellite campuses for one-third the original cost, opening access to young working adults. In other countries, however, poor infrastructure, low incomes, and government regulation limit the access of youth to online education. One approach in these circumstances is to create learning centers that combine online classes with local moderators and technology (box 8.3).

Considerable debate surrounds the cost-effectiveness and justification for public provision of specialized classes in computer skills in poor developing countries. Some initiatives, such as the World Links program in Uganda, lessen digital divides in access and have spillover benefits, with 80 percent of secondary school students in the program indicating that they had taught friends or family members some computer skills.⁷² Until costs fall, however, computer provision is unlikely to be financially possible in many poorer developing country educational systems, with the cost of a computer lab amounting to between 2 and 21 times the total discretionary budget per primary student, according to one calculation.⁷³ Even when computers are provided, a lack of infrastructure and trained personnel can inhibit use: in the Dominican Republic computers sat in their boxes for more than four years at some schools because of inadequate or absent electrical capacity.⁷⁴ Using computers already in school for computer-assisted learning can help—a program run by the nongovernmental organization Pratham in India resulted in sizable improvements in mathematics skills.⁷⁵

Although specialized education in ICTs may not be required, a lack of education hampers the use of the new ICTs. A study of mobile phone use in several African countries found that rural uptake of SMS messaging was low because of illiteracy and indigenous language, even though text messages were cheaper than making a call.⁷⁶ The

information gains from Internet searches are naturally less for youth who are unable to read, process, and choose among different sources of information, or even spell the words they are looking for. The difficulties are compounded for many developing country youth by the lack of access to content in their native languages. In 2002, 72 percent of the world's Internet pages were in English; 7 percent in German; 6 percent in Japanese; 3 percent in Spanish; 3 percent in French; 2 percent in Italian, Dutch, and Chinese; and 1 percent or less in any other language.⁷⁷ Education in global languages, especially English, is thus key to expanding access to global content, together with development of local language Web sites.

Facilitating more informed reproductive health decisions. The private and anonymous nature of the Internet offers youth the

"I use ICTs to educate children and adolescents about environmental protection and sustainable development as well as to give a possibility to educators and civil society organizations to share visions, information, experiences, etc. regarding this subject."

Cecilia, Argentina
October 2005

BOX 8.3

Moving in fits and starts with technology—the African Virtual University

Tertiary education in many Sub-Saharan African countries is hampered by limited resources, empty libraries, and excess demand for classes. The African Virtual University (AVU) uses new technologies to help remedy this problem, increasing access to quality tertiary education in the region by tapping into global knowledge and educational institutions. But its experience illustrates the travails of working with evolving technologies and the challenges currently facing online education in developing countries.

The AVU grew out of a World Bank pilot project initiated in 1997. Its rocky start raised concerns about its viability. Because the ICT infrastructure in Africa was in its infancy, the initial delivery approach used digital video broadcasting over satellite networks, which was very expensive and offered only limited interactivity with teachers. Rapid advances in Internet protocol standards during 1998–2001 made online learning feasible—and African Virtual University's 100 percent satellite-based approach outdated and inefficient.

AVU reassessed its technology options in 2001 to reduce costs and improve the connectivity and efficiency of networks. The delivery approach now consists of a mixed mode methodology, incorporating online and satellite video broadcast courses, pre-packaged learning materials on CD-ROMs and DVDs, chat sessions with the lecturer, and

face-to-face in-class sessions with teaching assistants. Supplementary use of the Internet lowered costs significantly, but satellite technology is still needed because of poor telecommunication infrastructure in the region.

The AVU has provided courses to over 24,000 participants. Degree, diploma, certificate, and short-course programs are offered in a range of subjects, including computer science, public health, languages, journalism, accounting, and business administration. Current joint university programs include business studies offered through Curtin University in Australia, and computer science offered through RMIT University in Australia and Laval University in Canada. AVU also provides a digital library, offering access to international journals and e-books, substituting for empty libraries.

The AVU, a work in progress, will need to continue to evolve with technology. African universities still are likely to pay 100 times more for Internet service than institutions in North America. The remaining challenge is finance. The AVU pilot relied too heavily on donor financing and private sector subsidies. The learning centers are now financed through course fees and educational grants from local universities and governments.

Sources: www.avu.org; Halewood and Kenny (2006); International Telecommunication Union (ITU) (2005); and Prakesh (2003).



possibility to discretely access information about reproductive health and sexuality that they may be otherwise too embarrassed to ask or unable to talk about for cultural reasons. One-quarter of young Internet users in Kathmandu, Dakar, and São Paulo reported using the Internet to find information about sex education and health topics (box 8.4).⁷⁸ This is particularly important for young women in traditional societies, who tend to have few other opportunities for obtaining this information. All young women who had access to the Internet through the World Links program in Mauritania reported obtaining information on sexuality, puberty, and HIV/AIDS prevention.⁷⁹ Although developing country evidence is not available, a randomized experiment among young women at family planning clinics in the United States offers evidence that computer-based aids to contraceptive decisions can improve health knowledge, increase take-up rates, and reduce adolescent pregnancies.⁸⁰

Helping migrants stay connected as citizens. New ICTs are lowering the barriers between migrants and their home communities, enabling them to connect with one another

while abroad. High prices for international calls are becoming less of a problem as prepaid phone cards and voice over Internet protocol (VoIP) calls lower the costs of connecting home. Calls to migrant family members are also one of the most common uses for village mobile phones. Online discussion boards and migrant Web sites provide a way for migrants to connect with and meet others from their community and to foster expatriate civic associations. The Haiti Global Village Web site receives 500,000 hits a month, with 80 percent from outside of the country, acting as a central forum for those in the diaspora to discuss community affairs and ways to help their country.⁸¹

What policies enhance the development impact of youth use of ICTs?

Youth use of ICTs matters indirectly for development outcomes through the impacts on youth transitions—and directly through the large youth contribution to overall ICT use. A few transition and newly industrial countries, such as the Czech Republic, the Slovak Republic, Hong Kong (China), the Republic of Korea, and Singapore, have seen economic growth directly driven by the production of ICTs. But for most developing countries, ICT use rather than ICT production is likely to have a much bigger impact on growth. Substantial evidence from developed countries now shows a strong effect for information technology use on productivity and growth, but this occurred only with a substantial lag after the introduction of these technologies.⁸²

The more recent introduction and relatively low use rates in many developing countries suggest that the contribution of ICTs to growth is currently lower than in developed countries,⁸³ but that the rapid current expansion should contribute to future growth. Positive effects are already beginning to be seen. Recent cross-country work has found that access to the Internet spurs the export performance of developing country firms.⁸⁴ At an even more micro level, several studies have documented improvements in prices received by farmers and fishermen, thanks to better access to mobile telephony—fishermen in India, for

BOX 8.4

Staying alive: HIV prevention using ICTs

More widespread use of television and radio makes these older ICTs the main components in widespread information campaigns to prevent the spread of HIV/AIDS. The 2002 global HIV-prevention campaign *Staying Alive* was broadcast on television stations that reached nearly 800 million homes, as well as radio stations in 56 countries. Survey results from three cities suggest that people exposed to the campaign were more likely to talk to others about HIV/AIDS and more likely to understand the importance of using condoms, discussing HIV/AIDS with sexual partners, and getting tested for HIV.

The campaign was particularly effective where adapted to local conditions. Although there was a considerable body of material from the United States, the Senegalese participants decided to localize their content based on the fact that, according to one participant, “[t]he countryside and the clothes were too exotic, the references too westernized [and] the images and the

dialogues far too explicit.” The Senegalese organizers also focused on radio stations rather than cable television—the primary vehicle for the global campaign. Radio is the most popular and widely available electronic medium in Senegal—96 percent of youth surveyed in Dakar have access to radio compared with 39 percent to cable programming. The proportion of surveyed youth who knew about the campaign in Dakar was 82 percent, but less than one-quarter in São Paulo and Kathmandu, where the campaign was limited to cable.

The *Staying Alive* campaign continues to produce content for television and radio, but it has also embraced the new ICTs, providing an online Web site (<http://www.staying-alive.org/>) in 10 languages with information provided in languages and formats designed to appeal to young people, links to a variety of help lines, online discussion boards, and downloads for mobile phones.

Source: Halewood and Kenny (2006).



example, use mobile phones to get information about prices at different ports before deciding where to land their catch.⁸⁵

The most important government policies to foster ICT use are the core elements of any infrastructure policy: sound economic conditions, regulatory policy promoting competition, and complementary infrastructure. Yet uncertain market demand and network externalities may lead the private sector to underprovide access, providing a rationale for further government intervention to serve rural areas. The case is clearest for cellular telephony, due to mounting evidence linking greater access to telephones to several development outcomes.

The Internet is a newer technology, and less evidence is available, making it still too early to recommend direct government provision of Internet infrastructure. However, because the costs of delaying the introduction of ICTs are also difficult to measure, and the development of ICT skills is seen by many to be necessary for workers to take part in the global economy, governments may want to speed the diffusion of this technology. Governments have a mixed record in this area, and those that do choose to directly provide access to underserved areas can learn from countries like Chile, where the Enlaces program combined infrastructure provision with teacher training and decentralized support, leading to widespread use in schools. In the Dominican Republic, however, the provision of computers was not accompanied by complementary infrastructure and personnel, resulting in unused computers in some locations and lack of use for educational purposes in others.⁸⁶

Regardless of their position on direct provision of Internet access, governments can increase the benefits of ICTs for youth. A youth perspective on ICTs reveals that government regulation affecting communal modes of access determine youth access. Regulation can have dramatic effects on the incentives for private entrepreneurs (often youths) to set up Internet cafés. A reform of the licensing process in Algeria made it extremely affordable (\$13) to obtain authorization to provide Internet service. The num-

ber of Internet cafés grew from 100 in 1998 to 4,000 in 2000, dramatically expanding youth access and generating many Internet-related jobs.⁸⁷ Similarly, regulations allowing easy entry for prepaid phone card operators and long distance phone calls over the Internet can have large payoffs for youth.

Regardless of whether the government is involved in Internet provision, governments can help stimulate demand for new services by providing public service content online. Governments can reach youth through the media they use. They can also kick-start local language content, preventing a vicious cycle in which those who do not speak global languages do not use the Internet because of a dearth of content, while the lack of users acts as a disincentive to local-language Web site creation. The government of Tamil Nadu offers one such example, providing seed support to online initiatives and working with the private sector to decide on a standardized Tamil keyboard and Tamil character encoding scheme. As a result, use of Tamil on the Internet was reported to be far greater than any other Indian language.⁸⁸

The current generation of youth is the first experiencing the Internet in many countries, with all the pros and cons. Parents unfamiliar with the new technology and not present when it is being used thus have little ability to protect young people from some of the dangers. This raises issues of how to teach young people to be safe and responsible users of this new technology, protecting them from some of the risks of unfettered access, such as child pornography, hate groups, stalkers, pedophiles, and cyber bullies. In early December 2005, three of the top five search terms on the Internet, and 68 of the top 200, were sexual.⁸⁹ This presents a problem for youth who wish to use the Internet to seek reproductive health information: web-filtering programs can block useful content, while unfiltered searches for teen sex are likely to result in pornographic content. Moreover, parents and society may consider some content appropriate for an 18-year-old but not for a 12-year-old.

Given the vast amount of information available, many youth may be unprepared to sort through and judge what is reliable and what is not. There is thus a need to help

“The use of ICT[s] [has] contributed to the success of community-driven development initiatives by making it possible for project coordinators to source funds . . . through the Internet. ICT[s] ha[ve] also been used in exchange programs, whereby youth exchange ideas on projects that have [been implemented] and projects that are currently being carried out.”

Thomas, Zimbabwe
October 2005



youth become safer and more effective users of the Internet. The natural place for this is in schools, but in many countries access to the Internet is available only out of school. So experimentation is needed with alternative mechanisms for teaching youth how to use these new ICTs safely, perhaps through government partnerships with telecenters. Little is known about what works in this area.

Young people are extremely active participants in the global flows of migration and information. What then should be the priorities for governments to take full advantage of this involvement? Table 8.6 provides some first steps. Developing country governments can try to increase the opportunities for their existing migrants by allowing them to retain citizenship links with their home countries, making it easier and cheaper for them to send money home, and removing barriers to their return. But the main priority is for sending countries to work together with receiving countries to work out bilateral arrangements that expand opportunities for

youth to migrate—in a way that is beneficial for both countries and for the migrants themselves. Temporary worker programs offer one promising avenue. Governments also need to experiment more with programs to prevent trafficking, and carry out careful evaluations of these policies.

The main ICT priority for governments is to ensure a good investment climate that allows private companies to serve the growing demand for ICT services, by enacting regulations that provide for easy entry and competition. For youth it is particularly important to also provide good regulatory conditions for modes of communal access, such as village phones and Internet cafes. Governments also need to experiment with ways to provide youth with the skills needed to best take advantage of new technologies, through teaching global languages, providing support for local language content development, and developing ways to teach youth responsible and safe use. Rigorous evaluations of such policies are needed to find out what works and to share lessons across countries.

Table 8.6 Policies for youth in a global world

	Proven successful	Promising but unproven	Unlikely to be successful
Opportunities			
<i>Expanding opportunities for developing country youth to migrate</i>	Bilateral agreements (the Philippines)	Temporary worker programs (Canada's seasonal agricultural workers program)	Skill-based points systems (Australia and Canada) ⁹⁰
<i>Increase opportunities for existing migrants</i>	Regulations that allow open entry and competition (multiple countries)	Absentee voting and dual citizenship (Mexico, Mozambique, and others)	Tax incentives to encourage migrant return (Malaysia)
<i>Enhancing access to information and communications</i>	Easy licensing of communal access provision (Internet cafés in Algeria)	Government support for local language content (Tamil Nadu government, India)	Equipping schools with computers without incorporating them into the curriculum (Dominican Republic)
<i>Creating new opportunities to work and study in developing countries</i>	Teaching global languages (India)	Online tertiary education (China and Tec Milenio in Mexico) SMS and online job listings (OKN Mobile, Philippines and Sri Lanka online job listings)	
Capabilities			
<i>Improving knowledge and context surrounding HIV/AIDS</i>	Family housing for young male migrants (Cameroon oil pipeline project)	Pre-orientation seminars for migrants (the Philippines, Thailand) Computer-based contraceptive decision making (U.S. family planning clinics)	Strong censorship of sexual content on the Internet
<i>Creating responsible Internet users</i>		Working with telecenters on education programs	
Second chances			
<i>Preventing trafficking and help victims</i>		Information campaigns and rehabilitation of victims (GTZ program against trafficking in women, BMZ, Germany)	Restrictions on young women's right to exit (Sudan and the Republic of Yemen)
<i>Providing work opportunities for disabled youth</i>		Use of ICT to provide jobs for disabled youth (DDD in Cambodia)	

